St. Mary's Law Journal

Volume 15 | Number 4 Article 5

12-1-1984

The Doctrine of Crashworthiness in Texas: Movement toward a Workable Solution Procedure Forum - Comment.

G. Franco Mondini

COMMENT

The Doctrine of "Crashworthiness" in Texas: Movement Toward a Workable Solution

G. Franco Mondini

I. INTRODUCTION

Robert Turner was driving his 1969 Chevrolet Impala hardtop sedan on a farm-to-market road in Texas.[1] He was behind a truck which pulled to the right shoulder of the two-lane road.[2] Turner attempted to pass the truck at about fifty to sixty miles an hour, but as he caught up with the truck it started to make a left-hand turn.[3] Turner, in attempting to prevent

1. *See* Turner v. General Motors Corp., 514 S.W.2d 497, 499 (Tex. Civ. App.—Houston [14th Dist.] 1974, writ ref'd n.r.e.).
2. *See id.* at 499.
3. *See id.* at 499.

a collision, veered to the right and went off the road.[4] As he tried to return to the road, Turner's vehicle overturned and landed on its roof.[5] The right-front quadrant of the roof collapsed and struck Turner's head, leaving his hands and legs paralyzed.[6]

Turner filed suit against General Motors alleging that the automobile was defectively designed since the roof could not support the weight of the overturned car.[7] In essence, Turner was not suing General Motors for a defect which caused his accident, but for one which enhanced his injuries.[8] Turner's cause of action was premised on a doctrine variously known as "crashworthiness," enhanced injury, or second-collision.[9] This cause of action provides that a vehicle manufacturer may be liable for a defective design which enhances injuries but which does not cause the accident itself.[10] This area of products liability, which will be referred to as the

---

4. *See id.* at 499.

5. *See id.* at 499. Turner stated he was driving between 20 to 30 miles per hour before he overturned. *See id.* at 499.

6. *See id.* at 499.

7. *See id.* at 500. Turner called an expert witness who testified that since the automobile lacked a roll bar through its roof, the roof was simply cosmetic and "unreasonably dangerous." *See id.* at 500. The expert further added, however, that the Impala's roof was not different from other mass-produced automobile roofs in the United States. *See id.* at 500.

8. *See id.* at 499. The trial judge concluded that Texas law did not encompass the liability of a manufacturer of a defective product when the defect enhances the plaintiff's injuries but does not contribute to the cause of the accident. *See id.* at 500.

9. *See id.* at 499. Turner's expert witness defined the term "crashworthiness" as the ability of an automobile "to withstand normal hazard conditions." *Id.* at 499. The expert categorized "crashworthiness" to include: "the structural integrity of the car's shell; the elimination of sharp or protruding objects in the interior; passenger restraint devices; and the elimination of post-crash fire." *Id.* at 499. The Motor Vehicle Information and Cost Savings Act defines "crashworthiness" as "the protection that a passenger motor vehicle affords its passengers against personal injury or death as a result of a motor vehicle accident." Motor Vehicle Information and Cost Savings Act, 15 U.S.C. § 1901(14) (1982). The doctrine has also been defined as "the relative ability of an automobile to protect its passengers during the second collision." Comment, *Liability for Negligent Automobile Design,* 52 IOWA L. REV. 953, 958 (1967). "Crashworthiness" is also defined as the imposition of "common law liability upon the automobile industry for injurious consequences of automobile collisions despite the fact that no defect or malfunction in the vehicle causes the mishap." Hoenig & Werber, *Automobile "Crashworthiness": An Untenable Doctrine,* 1971 INS. L.J. 583, 583. The "crashworthiness" doctrine has also been applied to cases against manufacturers of airplanes. *See* Meil v. Piper Aircraft Corp., 658 F.2d 787, 790 (10th Cir. 1981) ("crashworthiness" applicable to products liability case against aircraft manufacturer).

10. *See* Hoenig, *Resolution of "Crashworthiness" Design Claims,* 55 ST. JOHN'S L. REV. 633, 633-36 (1981). "Crashworthiness," "second collision," and "enhanced injury" are synonomous terms in which a cause of action is based on defective conditions present in a vehicle during a crash, rather than a cause of action in which the defect actually causes the accident. *See id.* at 633-36. One commentator has expressed that a conceptual distinction may be

"crashworthiness" doctrine, is an area of torts which lacks uniform treatment in the United States.[11] Texas has contributed to this chaotic state by adopting the doctrine without clarifying or even addressing many of its complex components.[12]

One of the doctrine's components in need of clarification and insight is the extent of a manufacturer's liability. Is liability to be limited to only those injuries attributable to the defect or should there be liability for all injuries arising from the accident? Another related problem is which side should carry the burden of proving and apportioning the extent of enhanced injuries. This comment will attempt to familiarize the reader with two major views regarding the "crashworthiness" doctrine and present a viable construction of the doctrine which is in line with contemporary Texas tort law and which will contribute to a growing uniformity of opinion in this field.

II. HISTORY OF THE DOCTRINE OF "CRASHWORTHINESS": *LARSEN V. GENERAL MOTORS CORP.*

In the 1968 case of *Larsen v. General Motors Corp.*,[13] the Eighth Circuit held for the first time that a manufacturer would be liable for enhanced injuries caused by defects even when those defects did not cause the accident.[14] The plaintiff in *Larsen* sustained injuries in a head-on collision that thrust the vehicle's steering control into his head.[15] Courts prior to *Larsen* would not have recognized a cause of action against the manufacturer because the accident itself was not attributable to a defect in the automobile.[16] Earlier courts reasoned that a collision or accident was not an

---

drawn between "second collision" and "crashworthiness" since the former involves an actual subsequent impact with a specific part of the vehicle, while "crashworthiness" is based on a more generalized complaint that a vehicle was unsafe during a foreseeable collision. *See* Foland, *Enhanced Injury: Problems of Proof in "Second Collision" and "Crashworthy" Cases,* 16 WASHBURN L.J. 600, 606-07 (1977).

11. *Compare* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1206 (8th Cir. 1982) ("crashworthiness" defendant may be held jointly and severally liable) *with* Huddell v. Levin, 537 F.2d 726, 737-38 (3d Cir. 1976) (plaintiff must meet strict three-part test to recover) *and* Pattillo v. Cessna Aircraft Corp., 379 So. 2d 1225, 1227 (Miss. 1980) (doctrine not recognized).

12. *See* Turner v. General Motors Corp., 584 S.W.2d 844, 848 (Tex. 1979). In adopting the doctrine, the court merely asserts that the rules of strict liability apply. *See id.* at 848.

13. 391 F.2d 495 (8th Cir. 1968).

14. *See id.* at 502.

15. *See id.* at 497. The plaintiff alleged that the steering mechanism was defective since its position required it to receive the initial unabsorbed force of a collision, which would in turn be transmitted to the driver's head. *See id.* at 497 n.2.

16. *See, e.g.,* Evans v. General Motors Corp., 359 F.2d 822, 825 (7th Cir. 1966), *expressly overruled in* Huff v. White Motor Co., 565 F.2d 104, 109 (7th Cir. 1977) (manufac-

intended use of a vehicle and, thus, no liability could be imposed on the manufacturer.[17] The *Larsen* court, however, reasoning that a collision was an almost inevitable occurrence for an automobile, imposed a duty upon a manufacturer to protect against an unreasonable enhancement of injuries from that accident.[18] The majority of other jurisdictions have gradually followed the Eighth Circuit's reasoning in *Larsen* and have recognized a duty in a manufacturer to use reasonable care in the designing of vehicles in order to control an unreasonable risk of enhanced injuries in the event of a collision.[19]

While *Larsen* dramatically increased the duties owed by manufacturers, it also sought to keep this new liability within reasonable bounds.[20] The *Larsen* court asserted in its decision that:

> Any design defect not causing the accident would not subject the manufacturer to liability for the entire damage, but the manufacturer should be liable for that portion of the damage or injury caused by the defective design *over and above* the damage or injury that probably would have occurred as a result of the impact or collision absent the defective design.[21]

---

turer not liable when defect does not cause accident); Willis v. Chrysler Corp., 264 F. Supp. 1010, 1011 (S.D. Tex. 1967) (manufacturer not liable for collision injuries when defect not cause of accident); Hatch v. Ford Motor Co., 329 P.2d 605, 607 (Cal. Dist. Ct. App. 1958) (manufacturer not liable for injuries when another vehicle collides with parked vehicle).

17. *See, e.g.,* Evans v. General Motors Corp., 359 F.2d 822, 825 (7th Cir. 1966), *expressly overruled in* Huff v. White Motor Co., 565 F.2d 104, 109 (7th Cir. 1977) (intended purpose of car does not include collision); Shumard v. General Motors Corp., 270 F. Supp. 311, 312 (S.D. Ohio 1967) (collision not intended purpose of automobile); Schemel v. General Motors Corp., 261 F. Supp. 134, 135 (S.D. Ind. 1966) (vehicle not manufactured to participate in collisions), *aff'd,* 384 F.2d 802 (7th Cir.), *cert. denied,* 309 U.S. 945 (1967).

18. *See* Larsen v. General Motors Corp., 391 F.2d 495, 502 n.4 (8th Cir. 1968). The opinion included 1966 statistics showing that, in one year, 52,500 automobile accidents occurred in which 1.9 million Americans died or sustained disabling injuries. *See id.* at 502 n.4.

19. *See, e.g.,* Polk v. Ford Motor Co., 529 F.2d 259, 266 (8th Cir. 1976) (applied Missouri law in accepting doctrine); Perez v. Ford Motor Co., 497 F.2d 82, 84-85 (5th Cir. 1974) (follows *Larsen* liability extension), *cert. denied,* 390 U.S. 1003 (1967); Turcotte v. Ford Motor Co., 494 F.2d 173, 181 (1st Cir. 1974) (expands manufacturer's liability); *see also* Comment, *Apportionment of Damages in the "Second Collision" Case,* 63 VA. L. REV. 475, 477 n.13 (1977) (lists at least twenty-five jurisdictions which have followed *Larsen).*

20. *See* Larsen v. General Motors Corp., 391 F.2d 495, 503 (8th Cir. 1968). The court held that, while manufacturers are not insurers, they should be held to a duty of designing a reasonably safe car in which to travel. *See id.* at 503.

21. *Id.* at 503 (emphasis added). While this statement has been considered dictum it has been closely followed in the majority of jurisdictions. *See, e.g.,* Higginbotham v. Ford Motor Co., 540 F.2d 762, 774 (5th Cir. 1976) (manufacturer liable for enhanced injury only); Huddell v. Levin, 537 F.2d 726, 738 (3d Cir. 1976) (manufacturer's liability extends only to enhanced injury); Yetter v. Rajeski, 364 F. Supp. 105, 109 (D.N.J. 1973) (extent of liability is

Under *Larsen* "crashworthiness," a manufacturer would not be liable for those damages or injuries caused by the initial collision between the plaintiff's vehicle and another object.[22] A manufacturer's liability under the "crashworthiness" doctrine would only arise for those injuries enhanced in the *second* collision between the plaintiff's body and a defective part of the automobile.[23] In effect, *Larsen's* reasoning precludes a court from holding a manufacturer defendant jointly and severally liable for all the damages or injuries stemming from an accident, since this would extend a manufacturer's liability to a degree much greater than the *Larsen* court desired.[24] While the *Larsen* decision clearly indicated that damages in a "crashworthiness" case were to be apportioned[25] between those injuries caused by the accident and those caused by the defective lack of "crashworthiness," the decision was silent regarding which side should carry the difficult burden of apportionment.[26] The question left unanswered by the unprecedented decision resulted in varied interpretations and applications of the "crashworthiness" doctrine throughout the United

---

enhanced injury); *see also* Comment, *Apportionment of Damages in the "Second Collision" Case,* 63 VA. L. REV. 475, 477 n.13 (1977) (lists courts that have cited *Larsen* apportionment language extensively).

22. *See* Larsen v. General Motors Corp., 391 F.2d 495, 503 (8th Cir. 1968). Since the court stressed that liability would extend to those injuries that would not have occurred absent the defect, the first-collision injuries, which are not related to the defect, would not subject the manufacturer to liability. *See id.* at 503. In *Larsen,* the initial collision occurred between the plaintiff's van and a telephone pole. *See id.* at 502; *see also* Casenote, 80 HARV. L. REV. 688, 688 (1967) (injuries often arise in "second collision" between occupant and vehicle).

23. *See* Larsen v. General Motors Corp., 391 F.2d 495, 503 (8th Cir. 1968). In its extension of a manufacturer's liability the court recognized the foreseeability of the "second collision" of the passenger with an interior part of a vehicle, a risk which would have to be reasonably reduced. *See id.* at 502.

24. *See* Comment, *Apportionment of Damages in the "Second Collision" Case,* 63 VA. L. REV. 475, 478 (1977) (*Larsen* impliedly excludes jointly and severally liable defendant manufacturers); *see also* Comment, *Automobile Design Liability: Larsen v. General Motors and Its Aftermath,* 118 U. PA. L. REV. 299, 303 (1969) (manufacturer's liability limited to enhanced injury only).

25. *See* Larsen v. General Motors Corp., 391 F.2d 495, 503 (8th Cir. 1968). The *Larsen* court, after stating the new extension of liability, recognized that apportioning the damages would be a difficult burden. *See id.* at 503. The court held, however, that "the obstacles of apportionment are not insurmountable" and are done regularly in cases involving comparative negligence. *See id.* at 503.

26. *See id.* at 503. Although the court did not assert which side would carry the burden, it strongly intimated that the defendant would since it addressed the manufacturer's complaint that assessment of damages would be difficult. *See id.* at 503; *see also* Comment, *Automobile Manufacturers — A New Liability for Design Defects,* 49 B.U.L. REV. 167, 175 (1969) (*Larsen* places burden on manufacturer); Comment, *Apportionment of Damages in the "Second Collision" Case,* 63 VA. L. REV. 475, 479 (1971) (*Larsen* court intimated defendant would carry burden).

States.[27]

III. Two Major Approaches to Apportioning Damages Under the Doctrine of "Crashworthiness"

A. *Placing the Burden on the Plaintiff: Huddell v. Levin*

With the exception of *Larsen,* the 1976 Third Circuit case of *Huddell v. Levin*[28] has been the most influential case in guiding the development of the "crashworthiness" theory.[29] *Huddell* asserted strongly the position that the plaintiff carries the burden of distinguishing those injuries attributable to the collision from those injuries attributable to the manufacturer's defect.[30] In this landmark case, the facts involved Huddell's Chevrolet Nova which ran out of gas and came to stop on a bridge.[31] While he was sitting in the car, it was rammed by another automobile traveling between fifty to sixty miles per hour.[32] The collision's impact thrust Huddell into the vehicle's head restraint.[33] This second collision contributed to a fatal fracture of his skull.[34] The head restraint was alleged to be defective since it did not have enough protective cushioning to prevent an unreasonable enhancement of injuries.[35]

In addressing the burden of apportioning damages in a "crashworthiness" case, the court, as in *Larsen,* asserted that a manufacturer's liability would be limited to those injuries in excess of what would have occurred

---

27. *Compare* Fox v. Ford Motor Co., 575 F.2d 774, 787-88 (10th Cir. 1978) (plaintiff's burden limited to proving that defect was proximate cause of injury) *with* Higginbotham v. Ford Motor Co., 540 F.2d 762, 774 (5th Cir. 1976) (implies plaintiff carries burden of apportionment) *and* Richardson v. Volkswagenwerk, A.G., 552 F. Supp. 73, 83 (W.D. Mo. 1982) (defendant carries burden of apportioning injuries).

28. 537 F.2d 726 (3d Cir. 1976).

29. *See, e.g.,* Caiazzo v. Volkswagenwerk, A.G., 647 F.2d 241, 251 (2d Cir. 1981) (plaintiff carries burden of proof); Stonehocker v. General Motors Corp., 587 F.2d 151, 158 (4th Cir. 1978) (plaintiff must apportion to recover); Higginbotham v. Ford Motor Co., 540 F.2d 762, 774 (5th Cir. 1976) (intimates plaintiff has burden); *see also* Hoenig, *Resolution of "Crashworthiness" Design Claims,* 55 St. John's L. Rev. 633, 700 n. 291 (1981) (lists additional cases following *Huddell).* The weight of authority in "crashworthiness" doctrine cases follow *Huddell* in holding that the burden of apportionment falls on the plaintiff. *See id.* at 692.

30. *See* Huddell v. Levin, 537 F.2d 726, 738 (3d Cir. 1976).

31. *See id.* at 732.

32. *See id.* at 732.

33. *See id.* at 732. It was estimated that Huddell's head hit the head restraint at about ten miles per hour. *See id.* at 732.

34. *See id.* at 732.

35. *See id.* at 732. The plaintiff presented evidence that in the event of a rear-end collision the head restraint would "expose the rear of the head to a relatively sharp, unyielding metal edge, covered by two inches of soft foam-like material." *Id.* at 731-32.

absent the defective design.[36] The court then proposed an unprecedented three-part test which it believed would enable a jury to distinguish those damages attributable to the collision from those attributable to the design defect, a distinction which the *Huddell* court regarded as the essence of the "crashworthiness" doctrine.[37] The court required that a plaintiff seeking recovery under the doctrine must first "offer proof of an alternative, safer design, praticable under the circumstances . . . ."[38] "Second, the plaintiff must offer proof of what injuries, if any, would have resulted had the alternative, safer design had been used . . . .[39] Third, . . . the plaintiff must offer some method of establishing the extent of enhanced injuries attributable to the defective design."[40]

The *Huddell* court was aware that the three-part test necessary for recovery was a burden on the plaintiff consisting of an "invariably difficult presentation" of proof.[41] The court reasoned, however, that since the unique essence of "crashworthiness" liability is that the manufacturer is liable only for enhanced injuries due to the product's defect, the burden of proof should not be placed on the manufacturer.[42] The court further intimated that since the plaintiff had chosen to bring a cause of action based on products liability under the "crashworthiness" doctrine, the plaintiff, not the defendant, introduced the issue of divisibility into the action.[43] Thus, di-

---

36. *See id.* at 738. The court stated: "The crashworthiness or second collision theory of liability is a relatively new theory, its contours are not wholly mapped, but one thing, at least, is clear: the automobile manufacturer is liable only for the enhanced injuries attributable to the defective product." *Id.* at 738.

37. *See id.* at 737-38.

38. *See id.* at 737. The court held that this prong had been satisfied by proof of safer head restraints on the market. *See id.* at 737.

39. *See id.* at 737. The court based this facet of the test on a 1973 New Jersey District Court opinion. *See* Huddell v. Levin, 537 F.2d 726, 737 (3d Cir. 1976), *citing* Yetter v. Rajeski, 364 F. Supp. 105, 109 (D.N.J. 1973). The *Yetter* court stated that "it is absolutely necessary that the jury be presented with some evidence as to the extent of injuries, if any, which would have been suffered . . . had the plaintiff's hypothetical design been installed. . . ." Yetter v. Rajeski, 364 F. Supp. 105, 109 (D.N.J. 1973).

40. *See* Huddell v. Levin, 537 F.2d 726, 738 (3d Cir. 1976). The court reasoned that, since the second part of the test had not been met, the third part could not either. *See id.* at 737. Plaintiff's expert witnesses had testified that Huddell would have survived the accident in a properly designed car, but the court required evidence of the injuries Huddell would have still received had he survived. *See id.* at 738. The court reasoned that the same accident with a superior head restraint might not have resulted in death but perhaps quadraplegia or paraplegia. *See id.* at 738.

41. *See id.* at 737; *see also* Larsen v. General Motors Corp., 391 F.2d 495, 503 (8th Cir. 1968) (court asserted apportionment in "crashworthiness" case would be difficult burden).

42. *See* Huddell v. Levin, 537 F.2d 726, 738 (3d Cir. 1976).

43. *See id.* at 739. The court stated that the plaintiff introduced divisibility into the case by arguing that the accident would have been survivable but for the manufacturer's defective head restraint. *See id.* at 739.

visibility would be made an issue by the plaintiff, for only if there was an injury divisible from that caused by the collision itself could a manufacturer possibly be liable under "crashworthiness."[44] Despite the seemingly harsh burden the *Huddell* approach places on the plaintiff, it has been adopted by the majority of jurisdictions which have incorporated the "crashworthiness" doctrine into their tort policy.[45] Even though this position is the majority view, many jurisdictions are still searching for applications of the doctrine which lead to different results than the *Huddell* approach.[46]

B. *Placing the Burden on the Defendant: Mitchell v. Volkswagenwerk, A.G.*

An approach quite contrary to *Huddell* has been asserted by the Eighth Circuit Court of Appeals, the same court which introduced the doctrine of "crashworthiness."[47] In the 1982 case of *Mitchell v. Volkswagenwerk, A.G.*,[48] the plaintiff's automobile had unexplainably veered into an em-

---

44. *Cf. id.* at 739. The *Huddell* court rebuked the plaintiff's contradictory attempt to argue that death was an indivisible injury in order to prevent General Motors from having the damages apportioned, while simultaneously arguing that death was a divisible injury for the purpose of establishing the defendant's liability under the "crashworthiness" doctrine. *See id.* at 739. The court thus stressed the importance of divisibility to a "crashworthiness" case. *See id.* at 738. The court further stated that without proof of apportionment of damages the jury "could not have properly assessed responsibility against G.M. for the death of Dr. Huddell." *Id.* at 738; *see also* Comment, *Second Collision Liability: A Critique of Two Approaches to Plaintiff's Burden of Proof,* 68 IOWA L. REV. 811, 818 (1983) (assessment of enhanced injury necessary step in *Huddell* "crashworthiness").

45. *See, e.g.,* Caiazzo v. Volkswagenwerk, A.G., 647 F.2d 241, 250 (2d Cir. 1981) (follows *Huddell);* Stonehocker v. General Motors Corp., 587 F.2d 151, 158 (4th Cir. 1978) (plaintiff carries *Huddell* burden); Higginbotham v. Ford Motor Co., 540 F.2d 762, 774 (5th Cir. 1976) (suggests plaintiff prove extent of injury).

46. *See, e.g.,* Fietzer v. Ford Motor Co., 590 F.2d 215, 218 (7th Cir. 1978) (trier of fact must determine injury indivisible before defendant may avoid joint and several liability); Huff v. White Motor Corp., 565 F.2d 104, 109 (7th Cir. 1977) (implies both enhanced and original injury are one event); Richardson v. Volkswagenwerk, A.G., 552 F. Supp. 73, 80 (W.D. Mo. 1982) ("crashworthiness" case defendant jointly and severally liable when indivisible injury exists); *see also* Hoenig & Goetz, *A Rational Approach to "Crashworthy" Automobiles: The Need for Judicial Responsibility,* 6 SW. 1, 2-44 (1974) (discusses various courts' interpretations of "crashworthiness").

47. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199 (8th Cir. 1982).

48. 669 F.2d 1199 (8th Cir. 1982). The analysis of *Mitchell* closely resembles Judge Rosenn's concurring opinion in *Huddell* which analogizes a "crashworthiness" case defendant to a concurrent tortfeasor who must carry the burden of proving apportionment in order to limit the liability. *Compare id.* at 1206 ("crashworthiness" no different than when one passive party and one active party cause an injury) *with* Huddell v. Levin, 537 F.2d 726, 744 (3d Cir. 1976) (Rosenn, J., concurring) (defendants in "crashworthiness" case are concurrent tortfeasors).

bankment and overturned.[49] The plaintiff, Mitchell, was ejected from the automobile.[50] As a result of the auto accident, Mitchell was left a paraplegic.[51] Mitchell subsequently filed a suit against Volkswagen under the doctrine of "crashworthiness," alleging that a defective door latch caused him to be ejected, thus enhancing his injuries.[52]

The *Mitchell* court recognized *Larsen's* assertion that a manufacturer was responsible only for enhanced injuries.[53] The *Mitchell* court, however, interpreted *Larsen* as requiring only that the plaintiff show that a design defect "was a *substantial factor* in producing damages over and above those that were probably caused as a result of the original impact or collision."[54] The court further stated that the extent of the manufacturer's liability would depend on whether or not the damages could clearly be distinguished between those attributable to the defect and those attributable to the original accident.[55] The manufacturer defendant would carry the burden of proving that the damages were apportionable or distinguishable.[56] The trial court would then ascertain if the injuries were of an ap-

---

49. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1201 (8th Cir. 1982). The plaintiff's automobile then struck an embankment and rolled over at least once. *See id.* at 1201.

50. *See id.* at 1201.

51. *See id.* at 1201.

52. *See id.* at 1201. While both parties agreed that an arm injury occurred outside the automobile, the plaintiff contended that the other paralysis injuries occurred outside the automobile and the defendants asserted that the paralysis was incurred inside the car during the roll-over, prior to the plaintiff's ejection. *See id.* at 1201.

53. *See id.* at 1205. The court quoted the portion of *Larsen* which extends liability to enhanced injuries only and stated that the court's statement in *Larsen* was made out of a "concern over the possible unfair ramifications of liability." *Id.* at 1205.

54. *See id.* at 1206 (emphasis added). The "substantial factor" test requires only that the plaintiff show that the defect was at least one of the causes of injury. *See* RESTATEMENT (SECOND) OF TORTS § 434(1)(a) (1965). *See generally* W. PROSSER, HANDBOOK OF THE LAW OF TORTS §§ 41-42, at 240-48 (4th ed. 1971).

55. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1206 (8th Cir. 1982). The *Mitchell* court stated that an injury such as death or paraplegia would be considered an indivisible injury. *See id.* at 1206. The *Huddell* court expressly rejected the argument that an injury such as death would deny the manufacturer the opportunity of limiting liability to enhanced injury only. *See* Huddell v. Levin, 537 F.2d 726, 739 (3d Cir. 1976). The court in *Huddell* stated that the "plaintiff may not argue that the ultimate fact of death is divisible for the purposes of establishing G.M.'s liability and then assert that it is indivisible in order to deny to G.M. the opportunity of limiting damages." *Id.* at 739. In a "crashworthiness" case involving death, the Fifth Circuit stated that the fact that the plaintiff based its suit against the manufacturer on enhanced injury indicates that the injury must be of an apportionable nature. *See* Higginbotham v. Ford Motor Co., 540 F.2d 762, 774 (5th Cir. 1976).

56. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1207-08 (8th Cir. 1982). In disagreeing with the *Huddell* approach of placing the burden of apportionment on the plaintiff, the court likened "crashworthiness" to a situation in which there are two consecutive acts which produce an injury and the burden of apportionment is placed on the defendants.

portionable nature.[57] If not, the issue of apportionment would not even be presented to the jury and the manufacturer would be left jointly and severally liable for all of the plaintiff's injuries.[58] In *Mitchell,* the court determined that the paraplegic condition of the plaintiff constituted an indivisible injury and the manufacturer was held jointly and severally liable.[59] Thus, once the court determined indivisibility of the plaintiff's injuries, the "crashworthiness" doctrine would not be distinguishable from a strict liability cause of action in which a manufacturer's defect contributed to the initial accident.[60] The manufacturer would be liable for all of the plaintiff's injuries from the initial and second collision even though the manufacturer only slightly enhanced the injuries in the second collision.[61]

Undoubtedly, the conflicting interpretations of *Larsen* are based on the policy reasonings of the respective jurisdictions. *Huddell,* which is advantageous to the manufacturer because of the strict burden placed on the plaintiff, exemplifies a desire to control an expansion of liability as well as an acute sensitivity to the liability-limiting language of *Larsen.*[62] On the other hand, the *Mitchell* court discourages any type of limitations on a plaintiff's recovery and adheres to a strict liability type of recovery conveniently designed to make an injured plaintiff whole at the manufacturer's expense.[63]

See id. at 1208; *see also* Mathews v. Mills, 178 N.W.2d 841, 845 (Minn. 1970) (Minnesota court adopts Restatement rule of placing burden on defendant in concurrent negligence case).

57. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1207-08 (8th Cir. 1982); *see also* RESTATEMENT (SECOND) OF TORTS § 433B(3) (1965) (defendant carries burden of apportioning damages due to tortious conduct of two or more actors).

58. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1208-09 (8th Cir. 1982).

59. *See id.* at 1206; *see also* RESTATEMENT (SECOND) OF TORTS § 433A(2) comment i (1965) (death not considered divisible injury).

60. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1206 (8th Cir. 1982).

61. *See id.* at 1207. The court likened the burden of apportionment to cases in which a doctor inflicts additional injuries to a patient through negligent treatment. *See id.* at 1207. Even though the doctor who played no part in causing the original injury is liable only for the injury due to negligent treatment, the court stated that the doctor would be treated as a jointly and severally liable tortfeasor for the entire injury if that injury were considered indivisible. *See id.* at 1207; *see also* Gilson v. Mitchell, 205 S.E.2d 421, 425 (Ga. Ct. App. 1974) (negligent doctor treated as joint tortfeasor for entire injury). The *Mitchell* approach of analogizing "crashworthiness" to concurrent injury has been criticized for ignoring the unique components of enhanced injury. *See* Comment, *Second Collision Liability: A Critique of Two Approaches to Plaintiff's Burden of Proof,* 68 IOWA L. REV. 811, 828 (1983) (under *Mitchell* defendant can only limit liability by proving product is not defective).

62. *See* Huddell v. Levin, 537 F.2d 726, 739 (3d Cir. 1976). "We simply do not accept the proposition that suing for wrongful death suffices to convert limited, second collision, enhanced injuries' liability into plenary liability for the entire consequences of an accident which the automobile manufacturer played no part in precipitating." *Id.* at 739.

63. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1208 (8th Cir. 1982) (*Hud-*

IV. HISTORY OF CRASHWORTHINESS IN TEXAS

Prior to the Houston Court of Appeals' adoption of the "crashworthiness" doctrine in the 1974 case of *Turner v. General Motors Corp.*,[64] Texas courts refused to recognize a manufacturer's liability for injuries when a defect in the automobile did not cause the accident.[65] Texas followed the rationale of *Evans v. General Motors Corp.*[66] which proposed that a manufacturer could not be liable for a design defect which enhances injuries since "the intended purpose of an automobile does not include its participation in collisions with other objects. . . ."[67] In the Houston Court of Appeals' initial adoption of the "crashworthiness" doctrine in *Turner,* the court followed the logic of *Larsen* and recognized that automobile collisions are so commonplace that they are an inevitable consequence of the intended use of an automobile.[68] Thus, the court in *Turner* found that a roof which collapsed, striking Turner's head, was defective due to a lack of ability to withstand a crash, and held General Motors jointly and severally liable for all of Turner's injuries.[69]

Even though the court premised its landmark decision on *Larsen,* it neglected to address the issues of extent of liability or of the burden of proving apportionment.[70] Ironically, the failure to address these issues transformed Texas from a state reluctant to accept the reasoning of *Larsen* into one which adopted an extreme application of *Larsen.*[71] In the Texas

---

dell approach would generally result in complete exoneration of manufacturer leaving injured plaintiff "little more than a traffic statistic").

64. 514 S.W.2d 497, 503 (Tex. Civ. App.—Houston [14th Dist.] 1974, writ ref'd n.r.e.).

65. *See, e.g.,* Willis v. Chrysler Corp., 264 F. Supp. 1010, 1012 (S.D. Tex. 1967) (no liability to design car to withstand collision); Kahn v. Chrysler Corp., 221 F. Supp. 677, 679 (S.D. Tex. 1963) (manufacturer not liable when not contributing to collision); Muncy v. General Motors Corp., 357 S.W.2d 430, 435-36 (Tex. Civ. App.—Dallas 1962, no writ) (collision not intended use of car).

66. 359 F.2d 822 (7th Cir. 1966), *expressly overruled in* Huff v. White Motor Co., 565 F.2d 104, 109 (7th Cir. 1977).

67. *See id.* at 825.

68. *See* Turner v. General Motors Corp., 514 S.W.2d 497, 503 (Tex. Civ. App.—Houston [14th Dist.] 1974, writ ref'd n.r.e.).

69. *See id.* at 507.

70. *See id.* at 505. The court of appeals stated that, in order to prevent a manufacturer from becoming an insurer, a plaintiff should prove at least an unreasonably dangerous defect as well as causation. *See id.* at 505. Most jurisdictions require at least this proof for all products liability actions. *See* Rheingold, *Proof of Defect in Product Liability Cases,* 38 TENN. L. REV. 325, 326 (1971); Comment, *The Proper Perspective in "Crashworthy" Cases,* 53 J. URB. L. 27, 44 (1975).

71. *See* Turner v. General Motors Corp., 584 S.W.2d 844, 848 (Tex. 1979). In its adoption of the "crashworthiness" doctrine, the Texas Supreme Court stated there is no "valid distinction" between a manufacturer's defect causing an accident and one causing an injury. *See id.* at 848.

Supreme Court's adoption of "crashworthiness" in *Turner,* the court made no mention of the concept that a manufacturer should be liable for only the enhanced injury.[72] On the contrary, the court merely required that the plaintiff prove that a defect was a producing cause of the plaintiff's injuries.[73] In essence, Texas assertively regarded "crashworthiness" as simply as expansion of strict products liablity and extended a manufacturer's liability to cover *all* injuries incurred in an accident in which a defective lack of "crashworthiness" exists.[74]

V. PRESENT APPLICATION OF THE "CRASHWORTHINESS" DOCTRINE: *DUNCAN V. CESSNA AIRCRAFT CO.*

Since *Turner,* Texas has indirectly made changes in its implementation of the doctrine of "crashworthiness."[75] These changes, however, were due to a restructuring of strict liability law in general rather than a study of the unique nature of "crashworthiness."[76] In the 1983 Texas Supreme Court case of *Duncan v. Cessna Aircraft Co.,*[77] the plaintiffs sued Cessna Aircraft Co. for the death of a family member in an airplane crash.[78] The plaintiffs alleged that the airplane's seats were defective in disengaging upon the plane's collision with the ground ultimately leading to the decedent's fatal injuries.[79] The plaintiffs, however, did not assert that a defect in the aircraft caused the accident.[80] Thus, although the doctrine of "crashworthiness" was not specifically mentioned at the Supreme Court level, it was

---

72. *See id.* at 848.

73. *Cf. id.* at 847 (rules of strict liability apply to crashworthiness); *see also* Rourke v. Garza, 530 S.W.2d 794, 801 (Tex. 1975) (plaintiff need only prove product defect was producing cause of injury).

74. *See* Turner v. General Motors Corp., 584 S.W.2d 844, 848 (Tex. 1979). In its adoption of "crashworthiness," the Texas Supreme Court cited a 1977 Seventh Circuit opinion which stated: "the collision, the defect, and the injury are interdependent and should be viewed as a combined event." *See id.* at 848 (quoting Huff v. White Motor Corp., 565 F.2d 104, 109 (7th Cir. 1977)).

75. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 222 (Feb. 15, 1984) (damages may be apportioned in strict liability case although defendant remains jointly and severally liable).

76. *See id.* at 221. The changes brought about in *Duncan* were applicable to all defendants under strict products liability. *See id.* at 221; *see also* RESTATEMENT (SECOND) OF TORTS § 402A (1965) (products liablity law in Texas); McKisson v. Sales Affiliates, Inc., 416 S.W.2d 787, 790 (Tex. 1967) (Texas adopts Restatement in products liability law).

77. 27 Tex. Sup. Ct. J. 213 (Feb. 15, 1984).

78. *See id.* at 213.

79. *See id.* at 213. Plaintiffs alleged that design and manufacturing defects in the cockpit seats caused the seat legs to break during the collision. *See id.* at 213.

80. *See id.* at 213. The plaintiff had alleged that the negligence of the plane's pilot and his employer was the proximate cause of the crash. *See id.* at 213.

this doctrine which allowed recovery.[81] In *Duncan,* the court made an unprecedented change in Texas strict liability law by allowing allocations of the plaintiff's damages based on comparative causation according to proportionate responsibility among the plaintiffs, defendants, and third parties.[82]

Prior to this holding, a strict liability defendant, which, of course, included a manufacturer in a "crashworthiness" case, was not allowed defenses due to a plaintiff's negligence unless such a defense constituted assumed risk or unforeseeable product misuse.[83] In addition, strict liability defendants were not allowed comparative contribution from other tortfeasors.[84] One reason for the court's dramatic changes was stated as

---

81. *Cf.* Willis v. Chrysler Corp., 264 F. Supp. 1010, 1012 (S.D. Tex. 1967) (manufacturer does not have duty to design vehicle to withstand high speed collision). The Texas Supreme Court did not impose liability to manufacturers in cases where the defect in the vehicle caused injuries but not the accident itself until 1979. *See* Turner v. General Motors Corp., 584 S.W.2d 844, 847 (Tex. 1979).

82. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 221 (Feb. 15, 1984). The court stated that "the trier of fact is to compare the harm caused by the defective product with the harm caused by the negligence of the other defendants, any settling tortfeasors and the plaintiff." *Id.* at 221. The court suggested the following jury instructions for allocation:

> If, in answer to Questions __, __, and [__], you have found that more than one party's act(s) or product(s) contributed to cause the plaintiff's injuries, and only in that event, then answer the following question.
>
> Find from a preponderance of the evidence the percentage of plaintiff's injuries caused by:
>
> Product X _____
> Defendant Y _____
> Plaintiff Z _____
> Total 100%

Id. at 221 n.8.

83. *See, e.g.,* General Motors Corp. v. Hopkins, 548 S.W.2d 344, 352 (Tex. 1977) (unforeseeable product misuse complete defense in products liability case), *overruled in part in* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 222 (Feb. 15, 1984); Henderson v. Ford Motor Co., 519 S.W.2d 87, 90 (Tex. 1974) (assumption of risk is defense but not contributory negligence), *overruled in part in* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 222 (Feb. 15, 1984); McKisson v. Sales Affiliates, Inc., 416 S.W.2d 787, 790 (Tex. 1967) (contributory negligence no defense in products liability action), *overruled in part in* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 222 (Feb. 15, 1984); *see also* RESTATEMENT (SECOND) OF TORTS § 402A comment n (1965) (assumption of risk only defense in strict products liability).

84. *See* General Motors Corp. v. Simmons, 558 S.W.2d 855, 862 (Tex. 1977) (no jury apportionment of fault when strict liability defendant involved); International Harvester Co. v. Zavala, 623 S.W.2d 699, 702-04 (Tex. Civ. App.—Houston [1st Dist.] 1981, writ ref'd n.r.e.) (no apportionment among joint tortfeasors when one is strictly liable); *see also* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 220 (Feb. 15, 1984) (court recognized Texas statute does not allow apportionment and common law remedy would be necessary).

follows: "in the absence of apportionment according to relative fault, often manufacturers either bear the total expense of accidents for which others are partly to blame or totally escape liability even though they have sold defective products."[85] In addition, the court noted that by making strict liability absolute liability the manufacturers become insurers "who ultimately absorb the loss through price setting."[86]

While the *Duncan* court made apportionment of liability possible, it still failed to address one of the paramount distinctions of "crashworthiness," namely the manufacturer's liability for enhanced injuries only.[87] Even the opposing viewpoints of *Huddell* and *Mitchell* recognized that a manufacturer should be liable only for enhanced injuries.[88] *Huddell* contended that the plaintiff has the burden of proving the extent of enhanced injuries,[89] while *Mitchell* held that it is the defendant's burden provided the injuries are determined divisible by the court.[90] Unlike *Duncan,* however, joint and several liability on a manufacturer was not unconditionally imposed;[91] in *Huddell* it was strongly rejected, and in *Mitchell* it was acceptable only for an indivisible injury.[92]

---

85. Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 218 (Feb. 15, 1984). The court cited authorities which criticized the "all or nothing" defenses of assumption of risk and unforeseeable product misuse as "undesirable doctrinal throwbacks." *See id.* at 218; *see also* Sales, *Contribution and Indemnity Between Negligent and Strictly Liable Tortfeasors,* 13 ST. MARY'S L.J. 323, 364 (1980) (Texas system inequitable); Special Project, *Texas Tort Law in Transition,* 57 TEXAS L. REV. 381, 490 (1979) (lack of apportionment cost inefficient); Sales, *Assumption of the Risk and Misuse in Strict Tort Liability--Prelude to Comparative Fault,* 11 TEX. TECH L. REV. 729, 776-77 (1980) (strict liability defenses inadequate).

86. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 218-19 (Feb. 15, 1984). The court also noted that the failure to apportion accident costs in proportion to the parties' relative abilities to prevent or to reduce those costs is inefficient because it does not impose responsbility on the parties according to their abilities to prevent the harm. *See id.* at 218-19; *see also* Special Project, *Texas Tort Law in Transition,* 57 TEXAS L. REV. 381, 490 (1979) (damages must be apportioned among tortfeasors for efficiency).

87. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 222 (Feb. 15, 1984) (each defendant shall be held jointly and severally liable).

88. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1207 (8th Cir. 1982) (court recognized that wrongdoers are jointly and severally liable only when injury indivisible); Huddell v. Levin, 537 F.2d 726, 738 (3d Cir. 1976) (manufacturer liable for enhanced injury only).

89. *See* Huddell v. Levin, 537 F.2d 726, 738 (3d Cir. 1976).

90. *See* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1206 (8th Cir. 1982).

91. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 222 (Feb. 15, 1984). The *Duncan* court asserted that if defendant properly apportions damages it would still be jointly and severally liable. *See id.* at 222.

92. *Compare* Huddell v. Levin, 537 F.2d 726, 738 (3d Cir. 1976) (manufacturer clearly liable for enhanced injury only) *with* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1206 (8th Cir. 1982) (only if injury indivisible, defendant must be jointly and severally liable).

In *Duncan,* joint and several liability still remained an unavoidable burden on the "crashworthiness" manufacturer defendant.[93] As in previous Texas decisions, the *Duncan* decision failed to distinguish a "crashworthiness" case from other products liability cases in which a defect actually contributes to the accident.[94] Since the distinction was not made, a manufacturer will always be subjected to paying for injuries it could neither have caused nor prevented.[95] For example, with the recent allowance of apportionment, a manufacturer could successfully prove that 95% of a plaintiff's injuries were caused by a third party's negligence which resulted in the initial injuring collision.[96] It could consequently prove that only 5% of the plaintiff's injuries were caused by the manufacturer's defective lack of "crashworthiness" which ultimately resulted in enhanced injuries in the second collision.[97] Under the *Duncan* approach, however, the manufacturer would still be jointly and severally liable for 100% of the damages.[98]

---

93. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 222 (Feb. 15, 1984). Under the *Duncan* rationale, a manufacturer could only escape joint and several liability for all of the plaintiff's damages by proving that it did not even slightly enhance the plaintiff's injuries, which, in essence, is proving the product was not defective. *Cf.* Comment, *Second Collision Liability: A Critique of Two Approaches to Plaintiff's Burden of Proof,* 68 IOWA L. REV. 811, 828 (1983) (by removing ability to apportion damages, defendant must prove lack of defect in order to escape total liability).

94. *Compare* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 223 (Feb. 15, 1984) (case was treated as if the manufacturer's defect was responsbile for the initial accident) *with* Turner v. General Motors Corp., 584 S.W.2d 844, 848 (Tex. 1979) (no distinction between "crashworthiness" and case in which product defect causes initial accident).

95. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 223 (Feb. 15, 1984). Under *Duncan's* rationale the manufacturer of the plane would still be jointly and severally liable for all the injuries which would have been incurred by the plaintiff even if the seats were not defective. *See id.* at 223. These injuries which are the result of the collision which in turn were due to the pilot's negligence would still fall under Cessna's liability. *See id.* at 223. It is this situation which prompted the *Huddell* court to place a necessary burden of apportionment on the plaintiff. *See* Huddell v. Levin, 537 F.2d 726, 738 (3d Cir. 1976); *see also* Comment, *Second Collision Liability: A Critique of Two Approaches to Plaintiff's Burden of Proof,* 68 IOWA L. REV. 811, 825 (1983) (fear of potential extension to all injuries from accidents led *Huddell* to formulate three-part test). The *Duncan* majority stated: "When a defendant is insolvent, the goal of allocating the loss among those responsible cannot be achieved. Nevertheless, joint and several liability in such cases furthers the fundamental policy of tort law to compensate those who are injured." Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 222 (Feb. 15, 1984).

96. *Cf.* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 220-21 (Feb. 15, 1984) (damages may be apportioned according to each party's causation).

97. *See* Larsen v. General Motors Corp., 391 F.2d 495, 503 (8th Cir. 1968). *Larsen* indicated that the injuries successfully apportioned by the defendant would consist of those injuries enhanced by the manufacturer's defect. *See id.* at 503.

98. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 223 (Feb. 15, 1984). The *Duncan* majority held that the defendant retains joint and several liability even though damages may be apportioned among the other defendants and plaintiff. *See id.* at 223.

This situation would be intolerable under *Huddell,* unlikely under *Mitchell,* and unfounded under *Larsen.*[99]

By allowing the manufacturer in a "crashworthiness" case the opportunity to prove and be liable for enhanced injuries only, Texas courts would ultimately conform to the policies recognized in *Duncan.*[100] First of all, the manufacturer would truly no longer be an "insurer" which the *Duncan* court acknowledged as an undesirable effect of the lack of apportionment.[101] The manufacturer would be liable only for the injuries that were caused due to its breach of a duty.[102] With the present application of "crashworthiness" in Texas, a manufacturer must build an automobile or plane which is not only incapable of causing accidents but one which is completely unable to enhance injuries even slightly in order to avoid potential liability for the entire damages of an accident.[103] The present system, in effect, utlimately makes the manufacturer an insurer who must pass the excessive costs to the consumer, and an insurer[104] who provides

---

99. *Compare* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1208-09 (8th Cir. 1982) (manufacturer will be jointly and severally liable only if damages considered indivisible by court) *with* Huddell v. Levin, 537 F.2d 726, 738 (3d Cir. 1976) (manufacturer liable for only those injuries proven and apportioned by plaintiff) *and* Larsen v. General Motors Corp., 391 F.2d 495, 503 (8th Cir. 1968) (manufacturer liable for only enhanced injury).

100. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 218 (Feb. 15, 1984) (apportionment allows fairness to plaintiffs, defendants, and public which ultimately absorbs loss through price setting). *See generally* Comment, *Apportionment of Damages in the "Second Collision" Case,* 63 VA. L. REV. 475, 486-501 (1977) (limiting liability to enhanced injuries only balances interests of plaintiff, manufacturer and public).

101. *See* Hoenig & Werber, *Automobile "Crashworthiness": An Untenable Doctrine,* 1971 INS. L.J. 583, 594 (unlimited liability under "crashworthiness" will make automobile industry insurers for any injury); *see also* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 218 (Feb. 15, 1984) (without apportionment manufacturers fully liable); Huddell v. Levin, 537 F.2d 726, 739 (3d Cir. 1976) (failure to apportion damages extends manufacturer's liability to injuries it played no part in precipitating). *See generally* Comment, *Apportionment of Damages in the "Second Collision" Case,* 63 VA. L. REV. 475, 486-87 (1977) (no apportionment of damages transforms manufacturer into insurer).

102. *See* Higginbotham v. Ford Motor Co., 540 S.W.2d 762, 774 (5th Cir. 1976) (once breach of manufacturer's duty discovered, liable for enhanced injury only).

103. *Cf.* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 222 (Feb. 15, 1984) (once damages apportioned defendant remains jointly and severally liable). Cessna could only have been immune from joint and several liability for the total injuries due to the accident if it had in no way contributed to the plaintiff's enhanced injuries. *See id.* at 222.

104. *See id.* at 218. The *Duncan* court recognized that imposing liability on a manufacturer not responsible for enhanced injury results in inflated consumer prices. *See id.* at 218; *see also* Sales, *Assumption of the Risk and Misuse in Strict Tort Liability — Prelude to Comparative Fault,* 11 TEX. TECH L. REV. 729, 777-78 (1980) (joint and several liability for injuries manufacturer could not prevent results in transfer of costs to consumers). Since a negligent third party defendant's limited insurance coverage will not adequately cover huge judgments, the jointly and severally liable manufacturer will bear the burden of paying for the injuries clearly caused by the third party. *See* Comment, *Apportionment of Damages in*

the most careless driver with a "deep-pocket" for his victim.[105]

VI. THE "CRASHWORTHINESS" DOCTRINE IN LIGHT OF *DUNCAN:* A POSSIBLE SOLUTION

In *Duncan,* Texas has attempted to mold a products liability policy into one which prevents a manufacturer from becoming an insurer.[106] In its desire for justice, the State now allows a manufacturer rights of contribution and apportionment.[107] Texas, however, has still not recognized the unique nature of "crashworthiness" which has been scrutinized by the majority of jurisdictions.[108] If Texas recognized that a manufacturer in a "crashworthiness" case should be liable for only enhanced injuries, the State, in light of *Duncan,* would achieve an application of the "crashworthiness" doctrine which avoids the opposing extremes of *Huddell* and *Mitchell.*[109] As does *Huddell,* Texas would extend a manufac-

---

the "Second Collision" Case, 63 VA. L. REV. 475, 475 (1977) (auto accident victim will try to sue manufacturer since other driver's liability insurance will only compensate plaintiff for "fraction" of loss). Texas requires liability insurance to provide $10,000 for any one injured individual and $20,000 maximum payment for all bodily injuries resulting from any single automobile accident. *See* TEX. REV. CIV. STAT. ANN. art. 6701h (Vernon 1977). The majority of states also require the same insurance liability from drivers. *See* M. WOODROOF, J. FONSECA & A. SQUILLANTE, AUTOMOBILE INSURANCE AND NO-FAULT LAW §§ 3.1-3.8, at 77-78 (1974). The extent of liability required from Texas drivers would necessitate the jointly and severally liable manufacturer to pay the majority of damages in a "crashworthiness" case. *Cf.* Turner v. General Motors Corp., 584 S.W.2d 844, 846 (Tex. 1979) ($1,140,000 damages awarded by trial court); Duncan v. Cessna Aircraft Co., 632 S.W.2d 375, 378 (Tex. App.—Austin 1982) ($1,200,000 damages), *rev'd on other grounds,* 27 Tex. Sup. Ct. J. 213 (Feb. 15, 1984).

105. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 218-19 (Feb. 15, 1984). The *Duncan* court recognized that a failure to apportion damages results in a failure to impose responsibility on the parties according to their respective abilities to control injuries. *See id.* at 218-19; *see also* Special Project, *Texas Tort Law in Transition*, 57 TEXAS L. REV. 381, 490 (1979).

106. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 218-19 (Feb. 15, 1984).

107. *See id.* at 220-21.

108. *See, e.g.,* Caiazzo v. Volkswagenwerk, A.G., 647 F.2d 240, 250 (2d Cir. 1981) (plaintiff must carry burden of proving enhancement in order to make manufacturer liable for enhanced injuries); Fox v. Ford Motor Co., 575 F.2d 774, 783 (10th Cir. 1978) (manufacturer liable only for enhanced injury if it can successfully prove divisibility); Higginbotham v. Ford Motor Co., 540 F.2d 762, 774 (5th Cir. 1976) (applying Georgia law) (intimates defendant liable for only enhanced injuries).

109. *See* Comment, *Apportionment of Damages in the "Second Collision" Case,* 63 VA. L. REV. 475, 497 (1977) (optimal solution is allowing apportionment in order to avoid joint and several liability and placing burden on defendant); *see also* RESTATMENT (SECOND) OF TORTS § 433B (1965). The Restatement favors a defendant's proof of apportionment of damages in order to limit liability:

> (2) Where the tortious conduct of two or more actors has combined to bring about harm to the plaintiff, and one or more of the actors seeks to limit his liability on the

turer's liability only to enhanced injuries.[110] Consequently, apportionment of those damages would be a necessary element of a "crashworthiness" case.[111] Unlike *Huddell,* however, Texas would not place the difficult burden of apportionment on the plaintiff since *Duncan* has already placed the burden on the manufacturer-defendant.[112] With this burden placed on the defendant, the State would be in accord with *Mitchell.*[113] But, contrary to *Mitchell,* the opportunity to apportion damages would not be conditional on a court's finding of divisible injuries.[114] Since *Duncan* recognized that damages could be apportioned in a products liability case involving even death, apportionment would clearly not be a conditional right.[115]

VII. CONCLUSION

Should Texas choose to follow the basic premise of *Larsen* that a manufacturer in a "crashworthiness" case is liable for only enhanced injuries, the State, in light of the *Duncan* decision, will be a forerunner in an application of "crashworthiness" which successfully compromises the extremes of *Huddell* and *Mitchell.* This application would involve the allowance of apportionment of damages with the burden placed on the defendant. Consequently, a manufacturer would not be jointly and severally liable for all the injuries of an accident. Finally, this application would conform to the policy considerations asserted in *Duncan.* No longer could a manufacturer be liable for the "total expense of accidents for which others are partly to blame. . . ."[116] Even more importantly, however, no longer could a manufacturer be liable for the expense of accidents for which others are *fully* to blame.

---

ground that the harm is capable of apportionment among them, the burden of proof as to the apportionment is upon each such actor.

Id.

110. *See* Huddell v. Levin, 537 F.2d 726, 739 (3d Cir. 1976).

111. *Compare id.* at 738 (plaintiff's recovery requires allegation of apportionment of enhanced injuries due to defect) *with* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 220-21 (Feb. 15, 1984) (plaintiff's damages may be allocated among defendants).

112. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 213 (Feb. 15, 1984).

113. *Cf.* Mitchell v. Volkswagenwerk, A.G., 669 F.2d 1199, 1208 (8th Cir. 1982) (defendant carries burden of apportionment).

114. *Compare id.* at 1208 (damages may only be apportioned if court recognizes indivisible type of injury) *with* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 221 (Feb. 15, 1984) (jury question to apportion liability even for death).

115. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 221 (Feb. 15, 1984) (although plaintiff suing for wrongful death, liability could be apportioned); *see also* Higginbotham v. Ford Motor Co., 540 F.2d 762, 774 (5th Cir. 1976) (fact that cause of action for lack of "crashworthiness" has been brought proves injury must be divisible).

116. *See* Duncan v. Cessna Aircraft Co., 27 Tex. Sup. Ct. J. 213, 218 (Feb. 15, 1984).