ADVANCED TRAFFIC MANAGEMENT SYSTEMS

TORT LIABILITY ISSUES

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I. INTRODUCTION

Traffic management systems, such as metering lights, ramp signals and stop signs and lights, have been in use for so many years that drivers now take them for granted. The planned introduction of Advanced Traffic Management Systems ("ATMS") will have a profound impact on the driving environment. It will give drivers access to a vast array of real time information about traffic, highway conditions and safety tips that will allow for more efficient travel and improved safety, and permit drivers to respond to dynamic road conditions. Yet, while drivers will have much greater access to information about the roads on which they travel, they will retain full control over their vehicles and, like today, in most accidents will be primarily responsible.

Existing tort law consequently will be a minor impediment to the introduction of ATMS, even though, as discussed below, suppliers of information may face exposure under existing tort law claims for negligence, fraud and negligent misrepresentation, and manufacturers and designers of ATMS products may face similar or even broader potential tort liability. In the final analysis, since drivers will remain primarily responsible for the results of their driving, it is unlikely that liability exposure will be great enough to discourage implementation of ATMS. In any event, to' the extent liability is imposed, there are a variety of legislative changes to tort law that could drastically diminish any potential tort liability, such as preemption of state law, limitations on tort liability, and mandatory alternative dispute resolution, which will be discussed.

. II. THE WORLD OF ADVANCED TRAFFIC MANAGEMENT SYSTEMS (ATMS)

Many areas of the United States experience severe traffic congestion at peak use hours. The purpose of ATMS is to improve the efficiency and use of the highways by increasing traffic flow1/ and providing real time means for traffic managers to monitor traffic conditions, communicate with drivers, adjust traffic conditions, and respond quickly to traffic incidents. ATMS represents the next step in the development of a functioning intelligent vehicle highway systems (IVHS) by acting as the communication link between "smart highways" and "smart vehicles." 2/ It will provide various services, such as automated toll collection and commercial vehicle weighing. In fact, vehicles may be equipped with automated identification devices for automated toll collection. While some forms of ATMS are already being used, we expect that in the future expanded use and availability of ATMS to disseminate information to motorists will revolutionize driving.3/

1/ IVHS America, *Strategic Plan For Intelligent Vehicle-Highway Systems in the United States,* Report No. IVHS-AMER-92-3. III-8; Transportation Research Board, *Special Report232 Advanced Vehicle and Highway Technologies,* 21 (1991); P. Rothberg, Intelligent Vehicle Highway Systems (IVHS): *Challenges, Constraints, and Federal Programs, CRS 5-6* (February 18, 1992).

2/ *Id.*

3/ R. Maki, D. DeVaughn, *Guidelines For Implementing Advanced Traffic Management Systems (ATMS),* IVHS America Annual Meeting, 635 (1992).

ATMS will rely on advanced detection devices, such as video imaging and microwave detectors, to monitor traffic density. These devices will work in conjunction with other sources (e.g. police reports, drivers, and automated surveillance), and with incident detection technology that will supply data to a computerized traffic management centers4/ In this way, information can be gathered at various monitoring locations to control surface street signals and freeway ramp metering, and to coordinate transit and emergency vehicle response. 5/ In addition, ATMS will be able to communicate to motorists existing traffic conditions, parking and possible alternative routes, will manage road demand, and will recommend when to travel.6/ Drivers also will be informed about construction and other activities which could divert or affect traffic.

Other monitoring and informational devices will be available to commercial vehicle operations (CVO) and advanced public transportation systems (APTS). The proposed products for CVOs will encompass automated vehicle identification, classification and weigh-in-motion devices. APTS will include mass transit and ride sharing information and services, preferential traffic signal timing and separate lanes for high occupancy vehicles and advanced fare payment devices to facilitate the on-loading and off-loading of passengers.7/ APTS vehicles may also serve as probes for supplying and updating traffic data that is being input into the traffic management system with the use of video imaging, sensors and on-board computers.8/

Presently a number of ATMS models are either operational or in the developmental stages. INFORM in Long island, New York, TRANSCOM from New Jersey into the metropolitan New York area and the SMART corridors in Los Angeles are three such projects.9/

ATMS holds the potential of greatly increasing traffic flow, easing delays and hopefully reducing accidents. 10/ Like all products, ATMS products may malfunction at one time or another. Likewise, inaccurate information may be relayed to drivers. Since accidents may result from defective ATMS products or misinformation,

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4/ MHS America, Strategic *Plan For Intelligent Vehicle-Highway Systems* at III 9-10; M. Cheslow, S. Hatcher, *A Comparative Evaluation of Alternative ATMS/ATIS Architectures for Intelligent Vehicle Highway Systems,* Transportation Research Board Annual Meeting (1993); P. Michalopoulos, R. Jacobson, C. Anderson, J. Baresso, *Integration of Machine Vision And Adaptive Control In The Fast-Trac IVHS Program,* Transportation Research Board Annual Meeting (1993).

5/ *Id.;* A. Santiago, *ATMS Technology What We Know and What We Don't Know,* IVHS America Annual Meeting, 654 (1992); C. Seidel, T. Dayharsh, *The Traffic Operations Center Of The Future,* IVHS America Annual Meeting, 672 **(1992).**

6/ *Id.*

7/ IVHS America, *Strategic Plan For Intelligent Vehicle-Highway* Systems at III 13, III 44-68; P. Rothberg, *Intelligent Vehicle Highway Systems (IVHS): Challenges, Constraints, and Federal Programs* at CRS 7-12.

8/ *Id.*

9/ P. Rothberg, *Intelligent Vehicle Highway Systems (IVHS): Challenges, Constraints and Federal Programs,* Appendix I.

10/ Additional information on contemplated programs may be found in the *National Program Plan for Intelligent Vehicle-Highway Systems (IVHS),* October 15, 1993 Draft.

we turn now to considering the possible tort liability of ATMS manufacturers, retailers, designers and information-providers, and of the federal government, if lawsuits are filed.

III. POTENTIAL TORT LIABILITY

A Potential Product Liability: Negligence And Strict Liability

Although ATMS products might malfunction or provide drivers with inaccurate information, the driver will still be in control of the vehicle and in most situations will be able to avoid serious accidents. Consequently, if an accident occurs, it is likely that the driver, rather than the manufacturer of the product (or others in the chain of distribution), would be primarily liable. Still, if any liability can be imposed, those considering involvement in ATMS should evaluate the magnitude of the risk.

Three legal theories subject the manufacturer, designer, and distributor of unsafe products to potential tort liability: negligence, strict liability, and breach of warranty. As the following discussion demonstrates, all three theories pose a threat -- however small -- of tort liability for those involved in ATMS products.

1. Negligence Is Based On Defendant's Breach Of Its Duty Of Care

Liability for negligence has long been predicated on a failure to exercise the appropriate level of due care to ensure that a product or service does not subject the user to unreasonable risk.1 1/ In order to recover damages, the injured victim has the burden of proving the existence and breach of a duty of care, proximate cause, and damages. Duty of care is commensurate with the risk of danger involved, and requires a balancing of the likelihood of harm and gravity of possible harm against the burden of effective precautions. 12/ This balancing of interests reflects a policy decision which renders the manufacturer liable for failure to prevent a foreseeable accident, but does not transform the manufacturer into the absolute insurer of the users of its products or services.13/ In the case of automobiles, courts generally do not require manufacturers to design cars that are incapable of crashing or otherwise inflicting harm.14/

a. The Duty Of Due Care

Manufacturers must exercise due care in designing a product,15/ in selecting materials, 16/ in the production process, in performing reasonable tests and

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11/ *Rest. Torts* 2d § 282.

12/ See, *Rest.* Torts 2d § 395, comment d; Micallef v. Miehle Co., 39 N.Y.2d 376,384 115,N.Y.S.2d 348 N.E.2d 571, 577-78 (1976). Pabon E.g., Ulwelling v. Crown Coach Corp., 206 Cal.App.2d 96, 105, 23 Cal. Rptr. 631 (1962); *v. Hackensack* Auto Sales, *Inc.. 63* N.J. Super. 476, 164 A.2d *773* (1960); *Schneider v. Chrysler Motors Corp.,401 F.2d 549, 557 (8th Cir. 1968).*

13/ *Fox v. Ford Motor Co., 575* F.2d 774, 783 (10th Cir. 1978).

14/ *Dulin v. Circle F Industries, Inc., 558* F.2d 456. 467 (8th Cir. 1977).

15/ *Pouncey* v. *Ford* Motor Co., 464 F.2d 957, 961 (5th Cir. 1972) (liability imposed for utilizing Steel which was subject to premature metal fatigue).

16/

inspections,17/ and in warning of any dangers.18/ Moreover, a manufacturer that utilizes component parts supplied by third parties has an obligation to conduct reasonable inspections and tests of those parts and, where appropriate, warn of possible dangers.19/ Although manufacturers generally cannot rely on government inspections or tests, if the government tests a product, that can be evidence that the manufacturer exercised due care.20/ All the entities involved in providing ATMS services, such as Traffic Management Centers that disseminate traffic information, will owe a duty of care to all foreseeable users of those services. Those selling ATMS products will owe a duty of ordinary care to ascertain through appropriate inspections and tests that the product is safe,21/ although typically not to determine the safety of the design itself,22/ or to discover latent defects.23/

Moreover, private entities may operate the traffic control systems under contract with public agencies. Municipalities and public entities have been held liable for the failure to repair defective or malfunctioning traffic signals which proximately caused a traffic accident. For instance, in Keyworth v. State,24/ an accident occurred where a traffic signal displayed a green light on all four sides of an intersection. The state had known about the problem but had failed to remedy it. The court found that the state was responsible for the maintenance of the traffic light and could be held liable for its negligence.25/ Similarly, private entities who maintain metering lights and other traffic control devices can expect to be held liable if accidents are caused by negligent failure to maintain those devices in good working order.

The duty of all of the entities involved with ATMS is to use the standard of care of a reasonable similarly situated entity. Proof of the custom and practice in the industry is admissible to show not only what that defendant actually knew about the potential hazard, but what it should have known. Although failure to comply with industry custom and practice is evidence of negligence,28/ in the majority of jurisdictions compliance with industry custom does not conclusively establish ordinary care.27/

17/ *E.g., Treadwell Ford, Inc. v. Campbell,* 485 So.2d 312, 316 (Ala. 1986) (negligent failure to inspect defective used truck), *appeal dismissed,* 486 U.S. 1028, 108 S.Ct. 2007, 100 L.Ed.2d 596 (1988).

18/ *E.g., King v. Ford Motor Co., 597* F.2d *436, 444* (5th Cir. 1979); *Brocklesby v. United States, 767* F.2d 1288, 1297 (9th Cir. 1985) (applying California law), *cert. denied sub nom., Jeppesen & Co.* v. *Brockelsky,* 474 U.S. 1101, 106 SCt. 82, 88 L.Ed.2d 918 (1986); *Downing v. Overhead Door* Corp., 707 P.2d 1027, 1032 (Colo. App. 1985) (applying Colorado law).

19/ *Morris v. American Motors Corp.,* 142 Vt. 566,459 A.2d 968,972 (1982); *Rest. Torts* 2d § 395 comment m.

20/ *Paolinelli v. Dainty Foods Mfgrs., Inc.,* 322 Ill.App. 586, 508, 54 N.E.2d 759 (1944).

21/ *Cassels v. Ford Motor Co.,* 10 N.C.App. 51, 178 S.E.2d 12, 15 (1970).

22/ *Wagner v. Larson, 257* Iowa 1202,136 N.W.2d 312,325 (1965).

23/ *Genera/ Motors Corp. v. Davis,* 141 Ga.App. 495,233 S.E.2d 825, 828-29 (1977); *Rest. Torts* 2d § 402.

24/ 20 App.Div. 2d 836,247 N.Y.S.2d 897 (1964).

25/ *See* also, *Tucker v. Okolona. 227* So.2d *475* (Miss. *1969); Arizona State Highway Dept. v. Bechtold,* 105 Ariz. 125, 460 P.2d 179 (1969).

26/ *Gordon* v. Aztec *Brewing* Co., 33 Cal.2d **514, 517. 203** P.2d 522 (1949).

27/ *E.g., Brown v.* Clark *Equipment Co., 62* Haw. *530.* 618 P.2d 267,272 (1980); *Smith v. Godfrey,* 155 Ga.App. 113,270 S.E.2d 322, 324 **(1980).**

The applicable standard of care will be heavily influenced by any promulgation of federal or state statutes or regulations. Such statutes and regulations are admissible to show compliance (or lack thereof) with the standard of care.28/ Promulgation of safety standards governing ATMS products would diminish liability in some states where compliance with applicable laws or generally recognized standards provides a rebuttable presumption that a product is not defective or the defendant was not negligent.29/ However, not all states provide that compliance with federal safety standards will preclude liability for negligence, particularly where a reasonably prudent manufacturer should have taken other measures.30/

On the other hand, evidence that a manufacturer violated a federal or state statute, regulation or even ordinance is admissible to prove negligence.31/ Indeed, where the statute or regulation provides an applicable unambiguous minimum standard of care, the violation of that statute or regulation may give rise to a conclusive finding of negligence.32/ Thus, should the federal government promulgate safety standards governing ATMS it should be careful to make them as clear as possible. Alternatively, the government could absolve ATMS manufacturers and others from such conclusive negligence by indicating in the statute or regulation that the law is not intended to affect the civil liability of entities governed by the law.33/

Manufacturers, distributors and sellers of ATMS products, as well as providers of ATMS services, could be jointly and severally liable for the damage caused by their respective negligence and, if one is unable to pay, the others will be required to compensate the victim fully.34/ Unless altered by statute, a retailer with only one percent of the liability might be required to pay all of the judgment.

Providers of ATMS services face potential liability for other scenarios. For instance, ATMS may allow Traffic Management Centers to track commercial vehicles carrying hazardous substances to give them special services. If the communication device malfunctions, or if misinformation is relayed to the drivers, an accident could result which not only damages the commercial vehicle, but also releases hazardous materials that could threaten surrounding communities. A commercial vehicle carrying such substances could be directed onto an icy road after being told the road is safe. Negligence in providing defective products or misinformation therefore could result in significant liability.

28/ E.g., Fabian v. E.W. *Bliss* Co., 582 F.2d 1257, 1261 (10th Cir. 1978).

29/ *E.g., Kan. Stat. Ann. §* 60-3304(a); *Ky. Rev. Stat. Ann. §* 411.310(2); N.D. Cent. Code § 28-01 .I-05(3); Utah Code Ann. § 78-15-6(3).

30/ Welsh v. *Century* Products, *Inc.,* 745 F.Supp. 313, 319 (D. Md. 1990) (negligent design of car seat): *Ellis v. K-Lan Co., 695* F.2d 157, 174 (5th Cir. 1983).

31/ *Seese v. Volkswagenwerk A.G., 648* F.2d 833.84647 (3d Cir. 1981) cert. *denied, 454* U.S. 867, 70 L.Ed.2d 168, 102 S.Ct. 330 (1981).

32/ Dougherty v. *Santa* Fe *Marine,* Inc., 698 F.2d. 232.234-35 (5th Cir. 1983) (Coast Guard regulation did not establish clear minimum standard of care).

33/ *Minichello v. U.S. Industries, Inc., 756* F.2d 26, 29 (6th Cir. 1985).

34/ See discussion of contribution and indemnity, *infra,* at pp. 36-40.

b. Res Ipsa Loquitur

Many jurisdictions permit plaintiffs to prove negligence by showing that the particular character or nature of the product-related accident is such that it could only have been caused by the defendant's negligence. This method of proving liability -- called res ipsa *loquitur* -- applies where the defendant had exclusive control of the product at the time the negligent act occurred {rather than at the time of the accident), and there was no alteration of or tampering with the product.35/ Automobile manufacturers have been held liable if the plaintiff negates possible causes of the accident other than a product defect, and shows that the automobile was defective.36/ Evidence that the product was repeatedly in need of repair can support an inference that the product was defective at the time it was purchased.37/ The mere fact of an accident, however, is not enough under most states' laws. Res ipsa loquitur will not be a potent theory in the ATMS context since it will be difficult to show that ATMS was the only possible cause of the accident.

2. . Strict Liability

a. Introduction

Strict liability is an invention of modern law, created to redress the harm consumers suffer which could not be redressed under breach of warranty theories due to a lack of privity.38/ First developed to remedy injuries caused by unwholesome foods, it was expanded steadily to include other hazardous products.39/ As Justice Traynor of the California Supreme Court explained, the purpose of the doctrine of strict liability "is to insure that the cost of injuries resulting from defective products are borne by themanufacturers that put such products on the market rather than by the injured persons who are powerless to protect themselves." 40/ The public policy rationale underlying the theory is the belief that manufacturers and sellers can best absorb the cost of defectively dangerous products because they can spread the cost of accidents among the many purchasers of their products.41/ That rationale is still accepted today.42/

Rather than focusing on the conduct of the defendant, strict liability focuses on the defectiveness of products. Under the definition adopted by the Restatement of Torts Second,43/ strict liability is imposed where a product is sold in a

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35/ *See, Calabretta v. National Airlines, Inc.,* 528 F.Supp. 32, 34-35 (E.D. *N.Y.* 1981); *Watkins v. S.C. Johnson* & Sons, *Inc.,* 16 Ohio Misc.2d 11,477 N.E.2d 479,461 (1984); Rest. Torts 2d § 328D, comment g.

36/ *Hall v. General Motors* Corp., 647 F.2d 175, 178 (DC. Ct. App. 1980); *Pouncey v. ford Motor* Co., 464 F.2d 957, 959 (5th Cir. 1972) (applying Alabama law).

37/ *Willis v. Floyd Brace Co., 279 S.C. 485, 309* S.E.2d 295,299 (1983).

36/ Prosser & Keeton on Torts, supra, § 98 at 692-693.

39/ *Greenman v. Yuba Power Products,* Inc., 59 Cal.2d 57, 62, 27 Cal.Rptr. 697 (1963).

40/ *Id.* at 63.

41/ Prosser & Keeton on Torts, supra, § 98 at 693.

42/ *Cares v. Sears, Roebuck & Co., 928* F.2d 679,684 (5th Cir. 1991).

43/ *Rest. Torts* 2d § 402A.

defective condition, making it unreasonably dangerous, and, without having been substantially altered, the product causes bodily injury to the user or consumer or damages to the user or consumer's property. Strict liability is applicable not only to purchasers of defective equipment, but also to non-purchasers who use the product.

Furthermore, all those in the chain of distribution are potentially strictly liable: the designers, manufacturers, assemblers, distributors, wholesalers and retailers44/ It is not difficult to understand why the designer, manufacturer or assembler should be held strictly liable if its product is defective; it is less apparent why wholesalers and retailers should also be held responsible. The courts have reasoned, and the Restatement has proclaimed, that certain public policies justify imposing liability upon the seller: (1) "by marketing his product for use and consumption, [the seller] has undertaken and assumed a special responsibility toward any member of the consuming product who may be injured by it;' (2) the public expects reputable sellers to stand behind their goods; (3) the burden of accidental injuries caused by products should be borne by retailers rather than by the injured consumer: (4) the seller can obtain insurance to bear the cost of such accidents: and (5) the seller can exert pressure on the manufacturer to sell safe products.45/

While the potential for being held strictly liable consequently will impact all entities who manufacture, design or sell ATMS products, as discussed below, given the fact that ATMS does not transfer control from the driver, it is unlikely that the threat of strict liability will deter private entities from participating in ATMS.

b. Products Compared With Services

Whereas a provider of a service can be held responsible for its negligence (see discussion above), strict product liability does not apply to services, only to products. The dividing line is often difficult to draw. Public roads and the guard-rails and bridges associated with them generally are not considered to be products.46/ For instance, in *Van lderstine v. Lane Pipe Corp.,* 47/ a father and his infant son sought compensation from the county for injuries sustained when their car hit a guardrail. The court upheld summary judgment in favor of the defendant on the grounds that the erection of a guardrail was a service rather than a product. The court noted that the public policies underlying the imposition of strict liability were absent. Although the plaintiffs could easily identify the designer and assembler of the guardrail, the desire to spread the risk to the defendant was deemed inappropriate where the government was providing a service.431

44/ *Rest. Torts* 2d. §402A, comment f.

45/ *Id.; Vandermark v. Ford* Motor Co., 61 Cal.2d 256, 262-263, 37 Cal.Rptr. 896 (1964); *Mead v.*

46/ *Warner Division Pruyn , 57 A.D.2d 340, 394 N.Y S.2d 483(App.Div. 1977). Edward M. Chadboume, Inc. v. Vaughn,* 491 So.2d 551, 553 (Fla. 1986) (roadway contractor not strictly liable for erosion of public road surface).

47/ 89 459,455 N.Y.S.2d 450,452

48/ Accord, Fisher v. Morrison Homes, Inc., 109 Cal.App.3d 131,138,,167Cal.Rptr.A.D.2d (1982).Id. at 452-63. 133 (1980) (design of pedestrian pathway not a product).

Our research found no cases in which the provider of traffic information or weather conditions was held strictly liable for providing inaccurate information. In *Miller v. Rand McNally & Company,* 49/ a truck driver was injured while utilizing a highway map. He sued the map publisher, claiming that the map was defective in incorrectly depicting the intersection of two highways, and alleged strict liability. The Supreme Court of Alabama dispensed with this argument expeditiously, finding that the plaintiff failed to prove that the map was defective. The court did not discuss, however, whether the map was a product or merely a service. Logically, courts probably will consider the traffic regulation systems, parking management, and construction management envisioned as part of ATMS to be services, and permit liability only for negligence. However, signal control devices have been considered to be products in at least one state,50/ so that if an accident is proximately caused by a malfunctioning metering light or other traffic control device, strict liability could be an issue.

C. "Unreasonably Dangerous" Product

Assuming that a product is at issue, to establish strict liability the plaintiff must prove that the product was defective. In the majority of states which have adopted the Restatement approach, the plaintiff also must show that this defect created an unreasonably dangerous condition which proximately caused plaintiff's injury.511

Some states do not consider a product unreasonably dangerous if the defect or risk is patent or openly obvious. 52/ For instance, if a driver suddenly encounters a snowstorm, the fact that ATMS failed to warn of snow conditions may not create an unreasonably dangerous condition as the snowstorm is obvious. Driver information systems usually will provide information that the driver will be able to verify (e.g., if an alternative route has less traffic), thus making most hazards encountered obvious.

However, many states consider the obviousness of the danger to be merely one of the factors to be considered by the jury rather than an absolute defense.531 Only where the obviousness of the danger to the particular victim is so great that he can be said to have assumed the risk do these courts absolve the manufacturer of liability. 54/ Moreover, since the obviousness of the danger is a question of fact, which can turn on the knowledge, age, experience, intelligence and

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49/ 595 So.2d 1367 (Ala. 1992).

50/ See Percle v. *Oubre, 564* So.2d 352 (La. App. 1990); *Smith v. Zimmer, 553* So.2d 919 (La. App. 1989).

51/ *Rest. Torts* 2d § 402A; Roysdon v. R.J. Reynolds Tobacco Co., 623 FSupp. 1189, 1191 (E.D. Tenn. 1985), *aff'd, 849* F.2d 230 (6th Cir. 1988).

52/ *Scoby v. Vulcan-Hart* Corp., 2Ill Ill.App.3d 106. 155 Ill.Dec. 536,569 N.E.2d 1147, 1149 (1991) (danger of open deep-fat fryer obvious), *appeal denied,* 141 Ill.2d *560* (1991); *Hagans v. Oliver Machinery Co.,* 576 F.2d 97, 102 (5th Cir. 1978) (unguarded table saw not unreasonably dangerous); *Brech* v. *J.C. Penney Co.,* 532 F.Supp. 916,922 (D. S.D. 1982) (danger of exposing cotton clothing to flame is obvious), *aff'd, 698* F.2d 332 (8th Cir. 1983).

53/ E.g., Moorer v. *Clayton Mfg. Corp., 128* Ariz. 565. 627 P.2d 716, 719 (1981) *cert. denied, 454* U.S. 866,70 L.Ed.2d 167,102 S.Ct. 328 (1981); Banks v. Iron Hustler Corp., 59 Md.App. 408,

54/ 475 A.2d 1243, 1252 directed verdict for(1984) (reversing defendant). McMurray v. Deere & Co., Inc., 858 F.2d 1436, 1440 (10th Cir. 1988).

training of the driver,55/ ATMS manufacturers may not obtain resolution of the issue short of a full-blown trial. Even states which consider open dangers to be a complete defense do not necessarily follow that rule in cases in which the plaintiff claims the automobile could have been designed to prevent certain "enhanced' injuries.561

Industry-wide standards, industry custom, or government standards are admissible in some states to show that a product is not unreasonably dangerous, but generally do not automatically absolve the manufacturer of liability.57/ Some states have enacted statutes establishing the effect of compliance with governmental standards. For instance, Washington state mandates complete absolution of liability if the injury-causing aspect of the product was in compliance at the time of manufacture with a specific mandatory government contract specification relating to design or warnings.58/ In Tennessee, the manufacturer or seller's compliance with federal or state statutes or administrative regulations prescribing standards for design, inspection, testing, manufacture, labeling, warning or instruction at the time of manufacture raises a rebuttable presumption that the product was not unreasonably dangerous.591 This statute consequently places a higher burden on the plaintiff to recover on a strict liability theory. Colorado likewise applies a rebuttable presumption in favor of the manufacturer where government codes or standards are followed, but also places a rebuttable presumption in favor of the plaintiff if compliance is not shown.60/

3. Manufacturing And Design Defects

Product liability laws impose liability on manufacturers and sellers if the plaintiff was injured or his properly damaged as the result of defects in design or manufacture. When liability is imposed on the basis of negligence there must be proof that the manufacturer or seller negligently designed or manufactured the product: when strict liability is imposed, proof that the product is unreasonably dangerous typically substitutes for proof of negligence. However, since the difference between the two theories can be more semantic than substantive, they will be discussed together.

Manufacturing defects arise from a failure in the manufacturing process. Depending on the product, manufacturing defects can be minimized by careful quality control methods at factories. Most of the litigation will center on whether a product is defectively designed.

55/ *Banks v. Iron Hustler Corp, supra, 475* A.2d at 1252-53.

56/ *Comacho v. Honda Motor* Co., 741 P.2d 1240, 1243 (Colo. 1987) cert. *dismissed, 485* U.S. 901, 99 L.Ed.2d *229,* 108 SCt. 1067 (1988); *compare McWilliams v. Yamaha Motor Corp USA, 780* F.Supp. 251,258 (D. N.J. 1991) (failure to provide leg protection on motorcycle open danger and an absolute defense) *aff'd in part, rev'd in part, 987* F.2d 200 (3rd Cir. 1992).

57/ *E.g., Dentson v. Eddins* & Lee Bus *Sales, Inc.,* 491 So.2d 942, 944 (Ala. 1986) (failure of state law to require seat belts in school bus shows lack of design defect); *Thibault v. Sears, Roebuck & Co.,* 118 N.H. 802,395 A.2d 843,850 (1978).

58/ Rev. Code Wash. § 7.72.050 (1991).

59/ Tenn. Code. Ann. § 29-28-104 (1992).

60/ Colo. Rev. Stat. § 13-21-403 (1993).

Design defects are problems with the design of the product itself, such as the failure to include adequate safety features. Design defects include concealed hazards,61/ failure to provide a reasonably required safety device or mechanism, failure to utilize a safer design which was both feasible and available,62/ and failure to use material which is suitable for its intended use. A design may be considered defective and the manufacturer negligent even where the danger is open and obvious.63/ However, a manufacturer is not required to design the best possible product, nor to design one which is incapable of injury if the very nature of the product is such that the reasonable purchaser does not expect the product to incorporate a particular aspect of design.64/ For instance, since motorcycles intentionally provide unencumbered maneuverability, motorcycle manufacturers are not required to design a motorcycle which encloses the legs of the passengers or drivers.65/

Various tests have been formulated to determine whether a product is defectively designed. Under the consumer expectation test a product is defectively designed if at the time it left the seller's hands it exposes the user or consumer to a risk of harm to an extent beyond that contemplated by the objectively ordinary consumer who purchases the product with the ordinary knowledge about the product's characteristics.66/ To determine the reasonable expectations of the ordinary consumer, the court may examine the potential for harm, the knowledge of the consumer, the cost of the product, and the cost and feasibility of correcting the defect.67/ While many products are deemed defective under this test, sometimes no reasonable consumer could have expected a product to have the safety feature at issue. For instance, a 1974 Pinto automobile without airbags was not defectively designed because at that time no reasonable consumer could have expected an airbag to pop out of the dashboard.68/ Cigarettes and gasoline are examples of other products which courts have found to meet consumer expectations.68/

61/ Failure to warn the user of the concealed hazard can result in liability. *Hasson v. Ford* Motor Co., 32 Cal.3d 388, 402-403, 185 Cal.Rptr. 654, 650 P.2d 1171 (1982) (Ford failed to warn users that brake fluid should be replaced frequently), *cert. dismissed, 459* U.S. 1190, 103 S.Ct. 1167, 75 L.Ed.2d 442 (1983).

62/ Suggested safety devices which are untried or present other hazards may not satisfy this element. International Harvester *Corp. v. Hardin,* 264 Ark. 717, 574 S.W.2d 260 (1978).

63/ For instance, in *Forrest City Machine* Works, *Inc. v. Aderhold,* 273 Ark. 33,616 S.W.2d 720,723 (1981), a manufactuer of a grain cart was held liable for negligent design even though the rotating shaft in which the plaintiff's leg was caught was obviously dangerous.

64/ *Sexton By And Through Sexton* v. Bell Helmets, *Inc., 926* F.2d 331, 336-337 (4th Cir. 1991) (motorcycle helmet manufacturer met consumer expectations), cert. *denied,* U.S. ___ 112 SCt. 79, 116 L.Ed.2d 52 (1993).

65/ *McWilliams v. Yamaha Motor* Corp. *USA, 780* F.Supp. at 258.

66/ Rest. Torts Second §402A, comments g and i; *Nettles v. Electrolux Motor AB, 784* F.2d 1574, 1577 (11 th Cir. 1986) (applying Alabama law).

67/ *Lovell v. Marion* Power *Shovel* Co., *Inc.,* 909 F.2d 1088 (7th Cir. 1990) (applying Indiana law).

68/ *Hughes* v. *Ford Motor* Co., 677 F.Supp. 76, 85 (D.Conn. 1987) (applying Connecticut law) See *also, Lamke v. Futorian Corp., 709 P.2d 684 (Okla. 1985) (ordinary consumer would not expect* sofa to be flame retardant).

69/ *Roysdon v. R.J. Reynolds Tobacco* Co., 623 F.Supp. 1189 (D. Tenn. 1985) (cigarettes): *Donnelly v. Kerr-McGee Refining Corp.,* CCH Prod. Liab. Rptr. fi 13,213 (D. Okl. 1992) (gasoline).

The risk/utility test balances the utility of the product's design with the risk of harm. As explained by the California Supreme Court in the seminal case of *Barker v. Lull Engineering,* 70/ the risk/utility test permits recovery where the consumer expectation test would not, such as when the ordinary consumer would not know how safe the product could be made. Under the risk/utility test, the trier of fact may consider the gravity of the danger posed by the product's design, the likelihood of injury, the feasibility of a safer design, the financial cost of a safer design, and the adverse consequences to the product and consumer resulting from an alternative design.71 / In states such as California the burden of proof shifts to the manufacturer to prove that the product is not defective once the plaintiff makes a *prima facie* showing that the injury was proximately caused by the product.72/

4. Failure To Warn

In addition to imposing strict liability for manufacturing or design defects, courts impose liability if the manufacturer or seller failed to warn adequately of a particular danger in using the product. Failure to warn can sound in either negligence or strict liability. A warning is considered adequate if it is calculated to inform a reasonably prudent user of the product's danger and the extent of that danger. Much litigation has been spawned over the factual question of whether a particular warning was adequate. For instance, in *Goins v. Clorox Co.,73/* one plaintiff died and the other was injured after inhaling fumes caused by pouring both Liquid Plumr and Sani-Flush into a clogged sink. The warning stated: "Do not use with toilet bowl cleaners . . . release of hazardous gases may occur." Although the plaintiffs claimed this language was inadequate because they were not apprised of the particular nature and severity of the risk (death or serious lung injury), the court found as a matter of law that the warning was sufficient.74/ By contrast, the sale of heavy equipment which did not include emergency instructions as to the function of the hydraulic brake system, but did warn against coasting downhill, was found not to inform the ordinary user of the specific risk of harm from rolling downhill.75/

Providing warnings in installation manuals or other booklets is risky, as the user may fail to read them, and the courts may absolve the victim of responsibility for the accident. For instance, a Nebraska court declined to bar a suit against a manufacturer of a portable electric heater even though the cause of the accident (the use of an extension cord), was preventable if the plaintiff had bothered to read the instruction manual which warned against using extension cords.76/

70/ *20 Cal.3d 413,425, 143 225Cal.Rptr. (1978).*
71/ *Id.* at 431. *See also, Roach v. Kononen, 269* Ore. 457,525 P.2d 125 (1974).
72/ *Barker v. Lull 20 Cal.3d at 431.Engineering,*
73/ 926 F.2d 559 Cir.(6th 1991).
74/ *Id.* at 561-62.
75/ *Huffman v. Tractor Co., 908 F.2d 1470,Caterpillar 1479-80(10thCir.1990).*
76/ *Meisner v. Patton Elec. Co.,* 781 FSupp. 1432, 1442 (D. Neb. 1990).

In some jurisdictions, there is no duty to warn a user about a particular danger when the user is already aware,77/ or is so sophisticated as reasonably to be aware,78/ of the danger. This defense most often arises in the context of industrial accidents. The manufacturer contends that the employer knew of the potential hazard, and given its level of sophistication, the employer should bear total responsibility for failing to warn its employees of the danger.79/ This defense presumably leaves the injured victim without a civil remedy, as most employers are shielded from liability to employees by workers' compensation statutes. Commercial vehicle drivers utilizing ATMS might be deemed "sophisticated." However, ordinary consumers utilizing ATMS are unlikely to be deemed 'sophisticated users" obviating any duty to warn. The defense consequently will be of marginal use to ATMS manufacturers.

Failure to warn does not seem to be the most likely approach of injured victims who blame ATMS, primarily because it is difficult to fathom what warnings possibly could be expected when providing travelers with information on preferable routes and traffic conditions. Nevertheless, creative attorneys undoubtedly will contend that some warnings should have been provided, and ATMS entities will be wise to engage "human factor" experts to assist them in drafting warnings which adequately apprise users of risks the manufacturers identify. Even with advance planning, there is no assurance that juries across the country will reach consistent conclusions as to the necessity or adequacy of any particular warning. The only way to assure that ATMS manufacturers will be absolved from liability would be for the federal government to mandate the warning language to be used and preempt states from imposing liability on the basis of failure to warn. As a practical matter, however, the prospect of liability from failure to warn in the ATMS context is slim, and thus preemption probably is unnecessary.

5. Evidentiary Issues

Depending on the jurisdiction, various types of evidence may be admissible to prove a product defect or failure to warn, including expert testimony, the past occurrence of other accidents,80/ defects in similar products, and subsequent measures to remedy the problem, such as product recalls, repairs, alterations, or withdrawals of the product.81/ Complaints by users of the same product, while

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77/ *Hagans v. Oliver Machinery Co., 576* F.2d 97, 102-03 (5th Cir. 1978) (no strict liability where plaintiff knew of risk from sawing knotted wood).

78/ The defense has been applied to both negligence and strict liability claims. *Mozeke v. International Paper* Co., 933 F.2d 1293, 1297 (5th Cir. 1991) (applying Louisiana law).

79/ *E.g., Singleton* v. Manitowoc Co., 727 F.Supp. 217, 226 (D. Md. 1989) (crane manufacturer relieved of duty to warn employee of industrial user): *Goodbar v. Whitehead Bros.,* 591 F.Supp. 552, 559 (W.D. Va. 1984) (silica supplier could rely on knowledge of employer to warn employee), *aff'd sub nom., Beale v. Hardy, 769* F.2d 213 (4th Cir. 1985).

80/ *Braniff Airways v. Curtis.+ Wright Corp.,* 411 F.2d 451, *453* (2d Cir. 1989), *cert. denied, 396* U.S. 959, 124 L.Ed.2d 423,90 S.Ct. 431 (1969).

81/ Most states exclude evidence of remedial measures undertaken after the accident in question as irrelevant or more prejudicial than probative of the defendants negligence. E.g., *Grenada Steel Industries, Inc. v. Alabama Oxygen* Co., 695 F.2d 883, 888 (5th Cir. 1983). But the rule is not universal. *Herndon* v. *Seven Bar flying Service,* 716 F.2d 1322, 1331 (10th Cir. 1983), cert.

generally inadmissible to prove that the incidents complained of actually occurred, may be admissible to show the manufacturer's notice of the alleged defect.82/

One issue upon which the various states do not agree is the admissibility in strict liability cases of evidence of the "state of the art" at the time the product in question was designed or manufactured. Jurisdictions which permit state of the art evidence to be introduced allow the defendant to offer expert testimony of the feasibility of using other materials, incorporating certain safety devices or alternative designs, or testing at the time of manufacture.83/ Other courts have reasoned that an examination of what the defendant "should have" been able to know injects a negligence standard into strict liability actions, and thus have precluded the introduction of such evidence.84/

Whether or not state of the art evidence is admissible, product liability cases typically involve a war of experts, and a failure of the plaintiff to put forward credible expert testimony explaining the alleged defect can be fatal. For instance, in *D'Olier v. General Motors Corp.,*85/ the plaintiffs expert presented an untenable theory as to how the steering system on a 1978 Buick Regal supposedly locked as the plaintiff changed lanes, admitting that it was unlikely that foreign parts could have entered into the steering system or that the steering fluid was contaminated during manufacture. Convinced by General Motors' expert that the plaintiffs theory was improbable, the judge entered a judgment in favor of GM, taking the case from the jury. On the other hand, where juries hear from opposing experts, liberal rules permitting expert testimony may result in substantial verdicts. For example, a two million dollar jury award against Chrysler to a young adult rendered a quadriplegic in an automobile accident was affirmed based on the testimony of an expert who had no experience in designing ball joints -- the part of the steering mechanism which supposedly caused the loss of steering control.86/

6. Defenses To Strict Liability And Negligence Claims

a. Contributory And Comparative Negligence

Several decades ago any amount of contributory negligence on the part of the plaintiff could defeat the claim.87/ Today, comparative negligence is the operative

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denied sub nom., Piper Aircraft Corp. v. Seven Bar Flying Service, Inc., 466 U.S. 958, 104 S.Ct.
82/ 2170, 80 L.Ed.2d 553 (1984).

Babb v. *ford Motor Co.,* 41 Ohio App.3d **174,** 535 N.E.2d 676, 679-80 (1987) (defective cruise
83/ control).

Norton v. Snapper Power Equip., Div. Of Fuqua Ind., Inc., 806 F.2d 1545, 1549 (11 th Cir. 1987) (applying Florida law): *Bruce v. Martin Marietta Corp., 544* F.2d 442, 447-48 (10th Cir. 1976);
84/ *Reed v. Tiffin Motor Homes, Inc., 697 F.2d 1192, 1196-97 Cir.(4th 1982).*

E.g., Carrecter v. Colson Equipment Co., 346 Pa.Super. 95, 499 A.2d 326, 330 (1985);
85/ Gelsumino v. E.W. Bliss Co., 10 664, 295 N.E.2d 113III.App.3d 110, (1973).
86/ 145 Ill. 543, 99 Ill.Dec. 305, 495 N.E.2d 1040App.3d (1986).
87/ Caprara Chrysler Corp., 251,417 545, 548-49 (1981).v. 52 N.Y.2d 114,436 N.Y.S.2d N.E.2d Hinkamp v. American Motors Corp., 735 F.Supp 176 (E.D. N.C. 1989) (contributory negligence bars recovery), *aff'd, 900* F.2d 252 (4th Cir. 1990).

standard in most states, whereby plaintiffs recovery is merely reduced by the proportion to which his negligence contributed to the accident.88/

Much confusion has arisen as to whether contributory or comparative negligence should apply to strict liability actions. The Restatement of torts89/ and some states have held that contributory or comparative negligence is not a defense in strict liability actions, since the fundamental principle underlying strict liability is that the fault of either party is irrelevant where a product is sufficiently defective that society wishes to shift the risk to the party best able to bear the cost -- the manufacturer.90/ Other states, by case law or statute, have permitted comparative negligence to be asserted as a defense in strict liability actions, if the plaintiffs negligent use of the product was a substantial cause of the accident.91/ Under this theory the fact that a thirteen year old dirt bike rider crashed head-on into another bike rider because he looked away was not a defense because there was no evidence that he negligently used the helmet which the defendant manufactured.92/

Comparative negligence probably will be a useful defense in most product liability actions alleging ATMS defects or failures. For instance, in *Percle v. Oubre,93/* the plaintiff alleged that the Louisiana Department of Transportation and Development . was negligent for failing to install a left turn signal and for designing defective left turn lanes which allowed oncoming left-turning vehicles to obstruct the visibility of opposing left-turning vehicles. Despite expert testimony offered to support this theory, the court was not impressed. It found that the plaintiff was able to see the oncoming truck and that his negligence, rather than the State's highway design, caused the accident. Similar logic is likely to be employed in ATMS cases. For example, where a defect in an ATMS ramp metering light is blamed for an accident, there is probably at least some negligence on the part of the driver since the driver should have seen the other vehicle and could have braked, swerved, or otherwise avoided the accident. Only in extreme situations -- such as a total system breakdown -- will comparative negligence be a weak defense.

88/ Thus, if the plaintiff is deemed to be 25 percent at fault, his judgment is reduced by one quarter. However, comparative negligence standards vary across the country and take three primary forms: pure comparative negligence, modified comparative negligence, and slight-gross comparative negligence. A detailed description of each of these forms is beyond the scope of this paper.

89/ Rest. Torts 2d § 402A, comment n.

90/ *E.g., Dillinger v. Caterpillar, Inc.,* 959 F.2d 430, 437 (3d Cir. 1992) (applying Pennsylvania law): *McDonald v. General Motors* Corp., 784 F.Supp. 486,497 (M.D. Tenn. 1992) (applying Tennessee law).

91/ E.g., Colo. Rev. Stat. § 13-21-406 (permitting trier of fact to reduce damages in proportion to plaintiff' s comparative fault): *Fiske v. MacGregor, Div. of Brunswick, 464* A.2d 719, 727 (R.I. 1983); Kafhios *v. Genera/ Motors Corp.,* 862 F.2d 944, 947 (1 st Cir. 1988) (applying New Hampshire law).

92/ *Sexton By And Through Sexton v. Bell Helmets, Inc., 926* F.2d 331,339 (4th Cir. 1991), cert. *denied US 112 S.Ct. 79, 116 L.Ed.2d 52 (1991).*

93/ *supra,* 564 So.2d 352.

b. Assumption Of The Risk

The common law also recognized an absolute defense where the plaintiff, with knowledge of the defect in the product and the inherent risk, nevertheless assumes the risk, voluntarily proceeds to utilize the defective product and is injured. Unlike contributory negligence, this "assumption of risk" defense involves the subjective knowledge of the plaintiff.94/ Since comparative negligence became the predominant standard, the viability of assumption of risk as a defense to negligence actions has been in question.95/ Some states have considered the defense merged into that of comparative negligence.96/ Even in those states which continue to employ the defense,97/ it is unlikely to apply to ATMS products since drivers are unlikely to rely on information-supplying products they know are defective.

c. Product Modification Or Misuse

The manufacturer, distributor, or retailer of ATMS products generally will not be liable for injury caused by unforeseeable misuse, intentional misuse, or use in violation of safety standards. For instance, there might not be liability for an accident where a driver purposefully disconnects an ATMS device on a vehicle.98/

However, misuse is not a defense unless it is both the proximate cause of the accident and unforeseeable. Thus, Hertz Corp. was not absolved of liability where the plaintiff overheated the car by driving with the emergency brake engaged. Since warning lamps which would advise the driver of the hazard were available, the defendant knew of this possible misuse.99/ Similarly, failure to wear a seat belt is not necessarily misuse of an automobile because such conduct is reasonably foreseeable.100/ This limitation often eviscerates the effectiveness of the defense.

The manufacturer or seller will not be strictly liable if the product was substantially modified by the user or a third party, provided that alteration caused the accident in question and was not reasonably foreseeable.101/ For example, General Motors obtained a directed verdict in its favor where the evidence showed that the plaintiff and other previous owners of the Chevrolet in question had replaced the lug

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94/ *Kuiper v. Goodyear Tire & Rubber Co., 207* Mont.37, 673 P.2d 1208, 1220 (1983).

95/ E.g., Conn. Gen. Stat. §52-572h (abolishing defense): *Salinas* v. *Vierstra,* 107 Idaho 984, 695 P.2d 369, 374 (1985) (not an absolute bar to recovery unless governed by express contract); compare N.C. Gen. Stat. § 99B-4(2) and S. C. Code § 15-73-20 (permitting defense). See, *also, Milwaukee Elec. Tool* Corp. v. *Superior Court,* 15 Cal.App.4th 547, 19 Cal.Rptr.2d 24 (1993) (applying "secondary" assumption of risk to product liability actions): Rutter v. *Northeastern Beaver County School District, 496* Pa. 590,437 A.2d 1198, 1209 (1981).

96/ *Briney v. Sears, Roebuck* & Co., 782 F.2d 585, 589 (6th Cir. 1986) (applying Ohio law).

97/ *E.g.. Austin v. Raybestos-Manhattan, Inc.,* 471 A.2d 280,286 (Me. 1984).

98/ See, *Muniga* v. *General* Motors, 102 Mich.App. 755, 762, 302 N.W.2d 565 (1980) (upholding jury verdict for GM).

99/ *Knapp* v. Hertz Corp., 59 Ill.App.3d 241. 17 Ill.Dec.65,375 N.E.2d 1349, 1355 (1978).

100/ *Melia* v. *Ford* Motor Co., 534 F.2d 795, 799-800 (8th Cir. 1976); LaHue v. *General Motors* Corp.716 F.Supp. 407,413-14 (W.D. Mo. 1989); *Ellithorpe v. FordMotor Co., 503* S.W.2d 516, 521 (Tenn. 1973).

101/ Rest. Torts 2d § 401 A(l)(b).

nuts and wheels of the car, absolving General Motors from liability for injuries sustained when one of the wheels flew off the vehicle.102/

Consequently, if a driver alters an ATMS product in a vehicle which leads to an accident, strict liability might not attach. This might occur where one driver disables an ATMS which others are relying upon and an accident occurs. However, the number of instances in which misuse will be a strong defense are likely to be few.

In sum, strict liability potentially is a viable claim in accidents where ATMS has been utilized. As a practical matter, however, strict liability will be an available theory of liability in relatively few instances, and thus should not be a deterrent.

B. Breach Of Express And Implied Warranty

1. Express Warranty

Express warranties are those oral or written promises made by the manufacturer or the seller of goods that the goods shall conform to an affirmation or promise which became a part of the basis of the bargain.103/ If injury results from the products failure to conform to the express promise, the injured party (the buyer, another user, or a third party beneficiary) may sue for a contractual breach of warranty. While this theory is technically one of contract, it is typically coupled with claims of negligence and strict liability. Affirmation of the safety of a product is an express warranty which may subject the manufacturer or seller to an action for breach of that warranty in addition to claims of negligence or strict liability.104/ A design defect may also constitute a breach of an express warranty if the manufacturer or seller warranted that the product was free of defects. 105/ Express warranties may be created by an explicit promise, an advertisement, a description, or display of a sample that possesses certain characteristics.106/

Of all the potential theories of liability, breach of express warranty is the least likely to inhibit development of ATMS. The private sector entities who choose to market ATMS can control what warranties they make, and thus can avoid breaching a warranty.

102/ Cox v. *General Motors* Corp., 514 S.W.2d 197,200 (Ky.App. 1974).

103/ U.C.C. § 2-313(l)(a). Some states also require a showing that the buyer purchased the goods in question in reliance on the express warranty. *Fogo v. Cutter Laboratories, Inc.,* 68 Cal.App.3d 744, 760, 137 Cal.Rptr. 417 (1977); *Overstreet v. Norden Laboratories, Inc., 669* F.2d 1286, 1290 (6th Cir. 1982) (applying Kentucky law). *Compare Winston Industries, Inc. v. Stuyvesant Ins. Co.,* 55 Ala.App.525, 317 So.2d 493, 496 (1975) (not requiring reliance). An injured non-purchaser generally only has to show reliance by the purchaser. *Anderson v. Heron Engineering* Co., 198 Colo. 391, 604 P.2d 674, 676 (1979).

104/ *Hauter* v. Zogarts, 14 Cal.3d 104, 115, 120 CaLRptr 681, 534 P.2d 377 (1975) (golf training device purported to be totally safe); *Collins v. Uniroyal, Inc.,* 126 N.J. Super. 401, 315 A.2d 30, 34 (1973) (statement that a tire was guaranteed against blow out constituted express warranty), *aff'd, 64* N.J.260, 315 A.2d 16 (1974).

105/ *Blue v. United Air Lines, Inc., 98* N.Y.S.2d 272 (1950).

106/ *E.g., Neville Constr. Co. v. Cook Paint And Varnish Co.,* 671 F.2d 1107 (8th Cir. 1982); *Transamerica Oil Cop* v. *Lynes, Inc.,* 723 F.2d 758,762 (10th Cir. 1983).

2. Implied Warranties

In addition to express warranties, the law imposes certain implied warranties which may expose sellers of ATMS products to liability. The implied warranty of merchantability and the implied warranty of fitness for a particular purpose, while originally based on contract, are now available to most victims due to the relaxation of strict privity requirements.

a. Implied Warranty Of Merchantability

This warranty covers the buyer's reasonable expectation that goods purchased from a merchant will be free of significant defects and will perform in the way goods of that kind should perform.107/ It arises automatically in every sale of goods by one who is a merchant in those goods,108/ and is breached if the product is defective to a normal buyer making ordinary use of the product, causing injury to a person or to property.109/ Unlike a claim for breach of express warranty, no reliance on the implied warranty is necessary. 110/ Goods must be fit for their ordinary purpose, which means they should not break frequently or be unsafe for normal foreseeable uses.111/ Design defects112/ and failures to warn, particularly in the instruction manual or in advertisements, also can form the basis for a breach of implied warranty claim.113/ In contrast to a strict liability action, the plaintiff usually need not show that the product was unreasonably dangerous.114/

Manufacturers and merchants can disclaim the warranty of merchantability if they do so at the time of sale and the disclaimer is sufficiently conspicuous.115/ For instance, in *H.B. Fuller Co. v. Kinetic Systems, Inc.,116/* a warranty disclaimer printed in capital letters on a sales proposal was deemed sufficiently conspicuous to be enforceable. By contrast, a warranty also written in capital letters in seven point unbolded type was too inconspicuous to be enforced.117/

Although some have likened the breach of the implied warranty of merchantability to a strict liability cause of action, the implied warranty is not likely to impact the growth of ATMS. In most states, manufacturers and sellers of ATMS can

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107/ U.C.C. § 2-314.
108/ *Abraham v. Volkswagen of America, Inc., 795* F.2d 238,249 n.10 (2d Cir. 1986).
109/ *E.g., Peterson v. Bendix Home Systems, Inc.,* 318 N.W.2d 50, 53 (Minn. 1982).
110/ *Daniell* v. Ford Motor Cc., 581 FSupp. 728, 731 (D. N.M. 1984).
111/ *E.g., Huebert v. Federal Pacific Electric Co., 208* Kan. 720, 494 P.2d 1210, 1214 (1972); *Bollmeier* v. *Ford* Motor Co., 130 Ill.App.2d 844, 265 N.E.2d 212,216 (1970).
112/ *Ethicon, Inc. v. Parten, 520* S.W.2d 527, 532 (Tex. App. 1975).
113/ *Westric Battery Co. v. Standard Electric Co., 482* F.2d *1307,* 1314 (10th Cir. 1973); *Reddick v. White Consolidated Industries, Inc., 295* FSupp. 243, 250 (S.D. Ga. 1968).
114/ *See First* Nat. *Bank* v. *Regent* Sports Corp., 619 F.Supp. 820,822 (N.D. Ill. 1985); Presser, *The Fall of the Citadel (Strict Liability* To *The Consumer), 50* Minn. L. Rev. 791, 804 (1966).
115/ *Hunter v. Texas Instruments, Inc., 798* F.2d 299, 303 (8th Cir. 1986).
116/ 932 F.2d 681,689 (7th Cir. 1991).
117/ *Sierra Diesel Injection Service, Inc. v. Burroughs Corp., Inc., 890* F.2d 108, 114 (9th Cir. 1989). *Compare, Richard O'Brien Companies v. Challenge-Cook* Bros,, *Inc.,* 672 F.Supp. 466,470 (D. Colo. 1987) (unbolded type deemed conspicuous).

disclaim any warranty by so informing buyers in capital letters and bold type, possibly requiring consumers to sign or initial that they read the disclaimer.

b. Implied Warranty Of Fitness For A Particular Purpose

The implied warranty of fitness requires proof that (1) the seller was informed of the purpose for which the article was purchased, (2) the buyer relied on the seller's skill and judgment, (3) the sold good was defective and unfit for that particular purpose, and (4) this defect proximately caused the plaintiff damage.118/ Should this implied warranty apply, it is no defense that the seller was unaware of the product's defect and could not have discovered it or corrected it.119/ However, this risk can be allocated to the manufacturer by contractual indemnity provisions.

Unlike the warranty of merchantability, this implied warranty requires that the buyer purchase the good for a particular, as opposed to an ordinary, purpose.120/ It consequently should be of very limited application to sale of ATMS products, which generally will be purchased for their ordinary use, such as to gather information, unless the product is sold for a particular purpose which it fails to meet.

c. The Elusive Privity Requirement

Whether privity of contract is a necessary element of a breach of an implied warranty claim depends on the jurisdiction. The Uniform Commercial Code provides three alternatives, varying in their restrictivity. The majority of states have adopted Alternative A, which extends a seller's express or implied warranty to any natural person who is in the household of the buyer or a guest in his home if it is reasonable to expect such person to be affected by the goods.121/ The precise meaning of this language, however, has been the subject of much dispute, and accordingly a hodgepodge of rules has developed. Some states have abolished the requirement that the injured party sue the seller for what is essentially a manufacturing defect,122/ but others still preclude suits against the manufacturer. 123/

In states where privity of contract is a required element, guests of the buyer who may be injured in an automobile related accident as the result of a malfunction in ATMS products may be unable to obtain redress under this theory of liability. However, the modern trend is against requiring privity.

118/ *E.g., E.I. Du Pont de Nemours & Co. v. Dillaha,* 280 Ark. 477, 659 S.W.2d 756,757-58 (1983);

119/ Scittarelli v. Providence Gas Co., §415 A.2d 1040, 1046 n.4 U.C.C. 2-315.(RI. 1980);

120/ Ontai v. Straub Clinic Hospital, & Inc., 66 Haw. 237, 659 P.2d 734, 744-45(1983).

121/ U.C.C. § 2-315, comment *2. See, Weir v. Federal Ins. Co.,* 8ll F.2d 1387, 1393 (10th Cir. 1987) (use of clothes dryer to dry clothes is its ordinary rather than particular purpose).

122/ E.g., § Compiled § 6Ariz. Rev. Stat. 47-2318; Ill. Stat. ch. 810 5/2-318; Penn. Stat. Tit. 13§2318. *Hemphill* v. *Sayers,* 552 F.Supp. 685, 690 (S.D. Ill. 1982) (applying Illinois law): *Reid v. Volkswagen of American, Inc.,* 512 F.2d 1294 (6th Cir. 1975) (applying Michigan law).

123/ *Lamb v. Georgia-Pacific* Corp., 194 Ga.App. 848. 392 S.E.2d 307,309 (1990) (no privii between plaintiff and manufacturer): *Eastern Refractories Co, Inc.. v. Forty Eight Insulations, Inc., 658* F.Supp. 197,201 (SD. N.Y. 1987) (applying Florida law to require privity).

C. False Or Nealiaent Advertising

In addition to product liability actions, manufacturers and sellers of ATMS could face other types of tort claims, including false or negligent advertising, fraud and negligent misrepresentation. Manufacturers and sellers of ATMS products (but not services) may be liable in tort if their advertisements are false or misleading.124/ Section 4028 of the Restatement of Torts Second provides as follows:

> One engaged in the business of selling chattels who, by advertising, labels, or otherwise, makes to the public a misrepresentation of a material fact concerning the character or quality of a chattel sold by him is subject to liability for physical harm to a consumer of the chattel, caused by justifiable reliance upon the misrepresentation, even though (a) it is not made fraudulently or negligently, and (b) the consumer has not bought the chattel from or entered into any contractual relation with the seller.125/

Under the Restatement rule even an innocent "misrepresentation" could give rise to liability. The Restatement imposes strict liability for physical harm to a consumer resulting from a misrepresentation about the character or quality of the product sold, and it has been adopted in several jurisdictions.126/ The rationale "is that losses to society created or caused by an enterprise, or, more simply, by an activity, ought to be borne by that enterprise or activity."1 27/

Not only is neither negligence nor fraud required, but, unlike normal strict liability, false advertising does not require a defective condition which renders a product unreasonably dangerous. However, there must be a misrepresentation about the character or quality of the product that causes physical injury. In essence, it is a public assurance of quality through advertising or other means that renders a manufacturer or seller liable.1281

124/ This paper will only address false advertising claims that are brought by consumers or buyers of products and not those claims that could be brought by a competitor for unfair competition (e.g., under the Lanham Act) or competitive injury resulting from false advertising. See, e.g., Lanham Trademark Act of 1946, § 43(a), 15 U.S.C. § 1125(a).

125/ *See Baughn v. Honda Motor* Co., 107 Wash.2d 127,727 P.2d 655,667 (1986) (discussing elements of cause of action).

126/ See, e.g., *Hauter V. Zogarts,* 14 Cal.3d 104, 116, 120 Cal.Rptr. 681, 534 P.2d 377 (1975); *American Safety Equipment Corp. v. Winkler, 640* P.2d 216,222 *(Colo. 1982); Rozny v. Marnul,* 43 Ill.2d *54, 250* N.E.2d *656,* 661 (1969); *Rifler v. Michael Reese Hospital, 92* Ill.App.3d 739, 47 Ill. Dec. 942,415 N.E.2d 1255, *1258* (1980); *Klages v. General Ordinance Equipment Corp., 240* P.A. Super. *356, 367* A.2d *304,310* (1976); *Crocker v. Winthrop Laboratories, Division of Sterling Drug, Inc.,* 514 S.W.2d 429,431 (Tex. 1974). This paper will focus on the general rule adopted by the Restatement rather than any specific state statutes. On the effect of state false advertising statutes, see, e.g., *Wright v. Carter Products, Inc., 244* F.2d 53, 61-62 (2d Cir. 1957).

127/ *2 American Law of Products Liability 3d, § 26:* 1 (1987); *Werkmeister v. Robinson Dairy, Inc., 669* P.2d 1042, 1045 (Colo. App. 1983).

128/ *See,* Sales, *The Innocent Misrepresentation Doctrine: Strict Tort Liability Under Section 402B, 16 Houston L. Rev. 239,252* (1979).

The liability contemplated by the Restatement applies to manufacturers, wholesalers, retailers and distributors who actually sell the product.129/ Generally, a seller will be liable even though the consumer has not bought the product in question from that seller or entered into a contractual arrangement with the seller.130/ In the ATMS context, this will extend liability to those consumers who actually purchase a product and those who may be expected to use it.

A warning about a product may have the effect of nullifying an alleged misrepresentation and relieving a manufacturer from liability, although warnings are not required.1311 A seller's disclaimer of liability in a sale contract will not, however, limit liability for claims of misrepresentation about the product's character and quality.132/

The alleged misrepresentation must be made to the public at large with the intent to induce the public to buy the product. Misrepresentations can be made in advertisements, brochures, labels, leaflets or statements about the product, whether written or oral.133/ Even implicit representations may result in liability.134/ Statements made by sales people to individual buyers may not fall within the ambit of the Restatement, however, because it requires representations to the public at large.135/ Also, alleged representations inferred from nondisclosures of fact, such as the absence of a warning, will not create liability.136/

In order for liability to arise under section 402B there must be a misstatement concerning a material fact about the character and quality of the product. Thus, the misrepresentation must be important to the consumer and one on which the consumer might be expected to rely in making the purchase.137/ In general, a fact is material "if a reasonably prudent person under the circumstances would attach importance to it in determining the proper course of action. 138/ A representation that it was unnecessary to have another person present in the cab of a truck while a hydraulic aerial platform on the truck was being operated was held material.139/

129/ Rest. Torts 2d § 4028, comment *e; see Harmon v. National Automotive Parts Assoc., 720* F.Supp. 79, 82 (N.D. Miss. 1989) (applying Mississippi law, a nonprofit corporation that did not design, manufacture, sell or distribute car batteries held not liable).

130/ *See Hauter* v. Zogarts, 14 Cal.3d at 114-15; *Rozny v. Marnul, 250* N.E.2d at 660; see, *also,* Rest. Torts 2d § 4028, comment j.

131/ Rest. Torts 2d § 4028.

132/ *Agristor Leasing v. Say/or, 803* F.2d 1401, 1407 (6th Cir. 1986), *modified, 872* F.2d 1028 (6th Cir. 1986).

133/ See, e.g., Rest. Torts 2d § 4028, comment h.

134/ *See Smith v. American Motor Sales Corp.,* 215 Ill.App.3d 951, 159 Ill. Dec. 477, 576 N.E.2d 146, 152 (1991).

135/ Rest. Torts 2d § 4028, Caveat 1.

136/ *See, e.g., Sherk v. Daisy-Heddon* 285 Pa. Super. 320, 427 A.2d 657, 664-65 (1981), rev'd on other grounds 498 Pa. 594,450 A.2d 615 (1981); for a list of different factual situations in which misrepresentations of material facts have been shown or not shown, see, *2 American Law of Products Liability 3d, supra,* at § 26:11.

137/ *Hoffman v. A.B. Chance* Co., 346 F.Supp. 991,992 (M.D. Pa. 1972); *Toliver v. General Motors* Corp., 482 So.2d 213,214 (Miss. 1985).

138/ 2 American Law of Products Liability, *supra, § 26:11; Hawkinson v, A.H. Robbins Co.,Inc., 595* F.Supp. 1290, 1310 (D. Colo. 1984).

139/ *Hoffman v. A.5. Chance* Co., *Inc.,* 346 F.Supp. at 992.

The Restatement rule does not apply, however, to "sales talk' or "puffing" on the part of the seller. For instance, a representation in a helicopter company's brochure that a buyer was "assured of a safe, dependable helicopter' was puffing and not a statement of material fact.140/ Also, representations that a bus service was "outstanding" 141/ and an advertisement describing a brake-lock device as offering "unprecedented safety" were mere puffery. 142/ On the other hand, courts are reluctant to find that a statement is mere puffing where there is a great potential for harm from a product or where the one making the statement has special knowledge which is relied upon. In those circumstances, there may be a higher standard of care.143/

The Restatement rule only applies to physical harm to a consumer of a product who has used the product and suffered physical injuries.1441 It does not apply to property damage or economic losses from innocent misrepresentations.145/ However, economic losses may be recoverable based on a theory of negligent misrepresentation. 146/ The Restatement does not take a position about whether recovery is permitted where physical harm is caused to an individual who is not a consumer of the product (e.g., a passenger in another vehicle who is injured).147/ This limitation on liability is'significant since ATMS products are unlikely to cause physical injury to users. Accordingly, liability is unlikely.

As with negligence, proximate cause is required for liability.148/ Thus, a plaintiff was not entitled to a judgment notwithstanding the verdict in a case involving a plane crashing into a mountain based on an allegation that a chart allegedly misrepresented its accuracy , since the plane's crew misused the chart and pilot error contributed to the crash.149/ A manufacturer, however, may be liable for representing that a product is safe even if its danger was not foreseen. 150/ In ATMS, drivers will still control the vehicle and will be responsible for being aware of their surroundings.

140/ *Berkebile v. Brantly Helicopter Corp.,* 461 Pa. 83, 337 A.2d 893, 903 (1975).

141/ *Collins* w. *Wayne* Corp., 621 F.2d 777, 786 (5th Cir. 1980) (applying New Mexico law).

142/ *Hoffman* v. *A. B. Chance Co.,* 339 FSupp. 1385.1388 (M.D. Pa. 1972).

143/ See, e.g., *Kociemba* v. G.D. *Searle* & Co., 707 F.Supp. 1517, 1525 (D. Minn. 1989) (finding that "Pharmaceutical salesmen should not have as much leeway in 'puffing' their wares as would a used car salesman").

144/ *See, e.g., Jones & Laughlin Steel Corp. v. Jones-Manville Sales Corp., 626* F.2d 280. 288 (3d Cir. 1980) (applying Illinois law); *Walker Truck Contractors, Inc. v. Crane Carrier Co., 405* F.Supp. 911 (E.D. Tenn. 1975) (no liability under section 4028 under Tennessee law).

145/ *See Moorman Manufacturing Co. v. National Tank* Co., 91 Ill.2d 69, 61 Ill. Dec. 746, 435 N.E.2d 443, 453 (1982) (economic loss not recoverable under theory of innocent misrepresentation); see *also Nelson Distrib., Inc. v. Stewart- Warner Indus. Balancers, Div. of Stewart- Warner Corp., 808* F.Supp. 684, 686 (D. Minn. 1992) (applying Minnesota law).

146/ See, e.g., *Rozny* v. *Marnul, 250* N.E.2d at 660; see Rest. Torts 2d § 552; see, *also,* discussion *infra* at pp. 29-31.

147/ Rest. Tort 2d § 402B, caveat 2.

148/ See, e.g., *Hollebeck* v. *Selectone* Corp., 131 Ill.App.3d 969, 87 Ill. Dec. 44, 476 N.E.2d 746, 747 (1985); *Benco Plastics, Inc. v. Westinghouse Electric* Corp., 387 F.Supp. 772,786 (E.D. Tenn. 1974) (applying Tennessee law).

149/ *Times Mirror Co. v. Sisk,* 122 Ariz. 174, 593 P.2d 924, 929 (1978).

150/ *See, e.g., Crocker v. Winthrop Laboratories,* 514 S.W.2d at 432.

In order for the Restatement rule to apply, there must be justifiable reliance upon a misrepresentation.151/ If the misrepresentation does not induce action, if the plaintiff did not pay attention to it, or if the misrepresentation is not known to the plaintiff, there will be no liability.1 52/ The representation need only be a substantial factor in the inducement, not the sole factor.153/ The issue in determining whether there is justifiable reliance is not what the seller intended, but what the consumer reasonably believed under the circumstances.154/ However, plaintiffs must use reasonable knowledge and intelligence in interpreting the represented facts. Actual knowledge about the quality or condition of a product may defeat justifiable reliance on representations. 155/ Thus, **a** police officer could not justifiably rely upon a representation that the helmet he was wearing could be used as a motorcycle helmet, where he knew that the helmet had been used only for riot control and that another helmet was used for motorcycle duties.156/

The Restatement provides that the required reliance does not necessarily have to be that of the consumer who is injured.157/ The reliance "may be that of the ultimate purchaser of the chattel, who because of such reliance passes it on to the injured consumer who is ignorant of the misrepresentation. Thus, a driver who takes a certain route in reliance on ATMS supplies the element of reliance for all of his passengers, even though they in fact never learn of the statements.1581

Although the Restatement rule provides broad liability, it should be of little concern to ATMS manufacturers and sellers since injury from representations about ATMS is unlikely.

D. Fraud Or Misrepresentation

Manufacturers and sellers of ATMS products and providers of ATMS services also may be held liable for fraud if their representations about the condition or safety of a product are untrue or actively conceal known dangers.159/ Likewise, those who provide information for ATMS may be liable for intentional misrepresentations. Generally, in fraud actions and in product liability actions based on fraud, plaintiffs must

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151/ Rest. Tort 2d § 4028, comment f.

152/ Id., comment j; *see, e.g., Baughn v. Honda* Motor Co., 727 P.2d at 668 (no evidence purchaser of minibike relied on alleged misrepresentations); *Haynes v. American Motors Corp.,* 691 F.2d 1268, 1271 (8th Cir. 1982) (no evidence plaintiff relied on representations and advertisement regarding a Jeep); *Franks v. National Dairy Products* Corp., 282 F.Supp. 528, 533 (W.D. Tex. 1968) (plaintiff did not rely on brochures or other written materials), *aff'd,* 414 F.2d 682 (5th Cir. 1969).

153/ Rest. Torts 2d § 4028, comment j.

154/ *See, e.g., Hauter v. Zogart,* 14 Cal. 3d at 1 14.

155/ *See American Safety Equipment Corp.* v. Winkler, 640 P.2d at 223.

156/ *Id.*

157/ Rest. Torts 2d § 4028, comment j.

158/ *Id.*

159/ *See, e:g., Took . Richardson-Mere/l, Inc.,* 251 Cal.App.2d 689, 706-707, 60 Cal.Rptr. 398 (1967) (concealment of drugs' side effects).

prove that: (1) defendant made a false representation,160/ (2) the representation was made with scienteror knowledge of the falsity of the representation; (3) the representation was made with an intention to induce the plaintiff to act or refrain from action in reliance on the representation,161/ (4) the plaintiff justifiably relied on the representation,162/ and (5) the plaintiff has suffered damage.163/

Fraud is more difficult to prove than negligence or strict liability since the elements usually must be affirmatively established by the higher standard of clear and convincing proof164/ rather than merely by a preponderance of the evidence.165/ While fraud cannot be shown by pointing to circumstances that raise a mere suspicion of fraud, fraud may be shown by circumstantial evidence demonstrating that the defendant had a motive to mislead and that the defendant's conduct before and after the misrepresentation showed an intent to look after his or her own interests.166/

Probably the most difficult element to prove in a fraud action is *scienter* -- the manufacturer's or seller's knowledge that its representation was false or that the representation was made with a reckless disregard of its truth or falsity.167/ Although an innocent false statement mistakenly made will not establish intent to defraud, if it is recklessly made, it may imply an intent to defraud.168/

Privity is not required in a fraud action based on misrepresentations by a seller or manufacturer since fraud is an exception to the privity requirement.169/ A seller or of an ATMS product, who knows or has reason to know that it is likely to be dangerous when used and who makes representations regarding the product's safety, will be liable both'to users of the product who purchase it in good faith reliance upon the representations of the seller or manufacturer and to others who are injured as a result of

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160/ See *BASKO* v. *Sterling Drug, Inc.,* 416 F.2d 417, 428 (2d Cir. 1969) (representations about a drug's side effects).

161/ *See Chambers* v. G.D. *Searle* & Co., 441 FSupp. 377,379 (D. Md. 1975) *aff'd, 567* F.2d 269 (4th Cir. 1975).

162' *See Wennerholm v. Stanford University School of Medicine,* 20 Cal.2d 713, 717, 128 P.2d 522 (1942).

163/ *See Starling v. Seaboard C.L.R. Co., 533* F.Supp. 183, 192-93 (S.D. Ga. 1982).

164/ *See, e.g., Beeck v. Aquaslide 'N' Dive Corp., 350* N.W.2d 149, 155 (Iowa 1984); *Borowicz v. Chicago Mastic Co., 367* F.2d 751, 760 (7th Cir. 1966).

165/ *See, e.g., Price v. High/and Community Bank, 932* F.2d 601, 604 (7th Cir. 1991) (applying Illinois law).

166/ *See Brochu v. Ortho Pharmaceutical Corp.,* 642 F.2d 652,662 (1 st Cir. 1981) (applying New Hampshire law.)

167/ *Chanin v. Chevrolet Motor Co., 89* F.2d *889,* 891 (7th Cir. *1937); Malensky v. Mobay Chemical Corp.,* 104 Or.App. 161, 799 P.2d 683,686-87 (1990). Fraud claims not only impugn a defendant's conduct, but can also give rise to claims for exemplary and punitive damages. See, e.g., Cal. Code Civ. Proc. § 377.

168/ *Aaron v. Hampton Motors, Inc., 240 S.C. 26,* 124 S.E.2d 585,588 (1962); *Beeck, 350* N.W.2d at 155.

169/ *Holmes v. Wegman Oil Co., 492* N.W.2d 107, 112 (S.D. 1992); *Quirici v. Freeman, 98* Cal.App.2d 194, 201-202, 219 P.2d 897 (1950) (privity not required where a manufacturer of a product knew that the product would not perform as intended); *Agristor Leasing v. Say/or, 803* F.2d 1401, 1410 (6th Cir. 1986).

the failure to make and deliver the product in a safe condition.170/ Even representations made to the public at large or to a particular class may, if made with the intent to induce reliance, create liability to those who rely on the misrepresentations.171/

As with false advertising, statements deemed to be "puffing" are not actionable fraud in a product liability case as they are considered to be mere statements of opinion or predictions upon which the consumer has no right to rely.172/ A representation may be construed as fact, however, where the speaker has superior knowledge about the subject matter of the representations and the other party is in a position where he or she may reasonably rely on that superior knowledge or special information.173/ As with false advertising, since ATMS may involve unfamiliar products, consumers are likely to rely on the special knowledge of manufacturers and sellers who make representations about their products.

A manufacturer or seller of an ATMS product or provider of an ATMS service may face liability for fraud for providing inadequate warnings where there are known safety hazards.174/ Also, if the manufacturer's or seller's representations have the effect of contradicting warnings, there may be liability for fraud.175/ ATMS manufacturers and sellers consequently must clearly warn about any known safety hazards and must make sure that those warnings are uncontradicted by other materials supplied to the ultimate consumer of the product. A dealer may also owe a duty to discover defects in unsealed products where the defect would come to the attention of a reasonably prudent dealer and the dealer represents that the product is safe.176/ Similarly, those who provide ATMS information to drivers should notify drivers of any potential inaccuracies so the drivers may act accordingly.

Typically, manufacturers and sellers are not under any obligation to disclose all material facts about a product absent a fiduciary relationship or some other relationship creating a duty to speak, which would render silence akin to fraudulent concealment.177/ Where, however, in a business transaction a seller's deceit prevents

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170/ *See, e.g., Driekosen v. Black, Sivalls & Bryson, Inc.,* 158 Neb. 531, 64 N.W.2d 88, 98 (1954).

171/ *See Starling* v. *Seeboard C.L.R.* Co., 533 F.Supp. 183, 193 (S.D. Ga. 1982) (applying Georgia law).

172/ *Halley v. Central Auto Parts,* 347 S.W.2d 341, 343 (Tex.Civ.App. 1961); *Fincher v. Robinson Brothers Lincoln-Mercury, Inc.,* 583 So.2d 256, 259 (Ala. 1991) (statement that new car would meet buyer's expectations was mere puffery).

173/ *Toole v. Richardson-Merrill, Inc.,* 251 Cal.App.2d 689, 706,60 CalRptr. 398 (1967) (involving drug advertisements and written materials given to doctors): *Rowan County Board of Education v. United States* Gypsum Co., 332 N.C. 1,418 S.E.2d 648,661 (1992) (representations involving asbestos products).

174/ *See, e.g., Hoffman v. Sterling Drugs, Inc., 485* F.2d 132, 141-42 (3d Cir. 1973).

175/ *See, e.g., Miller v. New Zealand Insurance* Co., 98 So.2d 544, 546 (La.App. 1957).

176/ *See, e.g., Johnson v. Ernest G. Beudry Motor* Co., 170 F.Supp. 164, 169 (D. Ga. 1958) (applying Georgia law).

177/ *See, e.g., Daher* v. G. *D. Searle* & Co., 695 F.Supp. 436,440 (D. Minn. 1988); *Pulte Home* Corp. *v. Ply Gem Industries, inc.,* 804 F.Supp. 1471, 1483 (M.D. Fla. 1992) (applying Florida law): *Manning v, Ash/and Chemical* Co., 498 F.Supp. 1382, 1383 (N.D. Ill. 1980) (applying Illinois law); *Brown v. Lumbermens Mutual Casualty Co., 90* N.C.App. 464,369 S.E.2d 367,364-70 (1988) *review denied, 323 N.C. 363,373,* S.E.2d 541, *and review granted, in part, 323* N.C. *363.373,*

a party from making independent inquiry ,178/ or where a party does not have an equal opportunity to discover material facts,179/ there may be fraud. In addition, although a mere failure to volunteer information will not give rise to liability, it may arise where the buyer requests information from the seller which is not truthfully given.180/

The difficulties in proving fraud appear to discourage such product liability cases.181/ In order to avoid liability for fraudulent misrepresentation, ATMS manufacturers and sellers should carefully scrutinize statements about the safety or efficiency of their products before making them. Moreover, when responding to inquiries about their products, they must be sure not to conceal any material information. ATMS providers cannot deliberately mislead drivers or provide knowingly false information. It is unlikely, however, that potential liability for fraud will deter the entities likely to be involved with ATMS since providers of ATMS information, services and products have an incentive to insure the information they provide is accurate.

E. Negligent Misrepresentation

In addition to claims for false or negligent advertising and fraud, misrepresentations of fact may also be actionable negligent misrepresentations, even if the manufacturer or seller believed the representation to be true.182/ Thus, a seller who makes a representation that a product is safe for a certain purpose when in fact the product is dangerous when used for that purpose, is liable.183/

Negligent misrepresentation is established where a seller had a duty to give a buyer accurate factual representations, the seller knew the buyer intended to rely on the representation, the buyer actually and reasonably relies on the seller's statement to her injury, and the seller knew or should have known that the statements were false.184/ There must be some untrue factual representation made. Merely selling a

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S.E.2d 542 (1988) (failure to state claim that vehicle manufacturer fraudulently concealed defective brakes): *Rowan County Board of Education v. United States Gypsum Co.,* 103 N.C.App.288,407S.E.2d860,863, aff'd in part, rev'd in part,332N.C.1,418S.E.2d648(1992).

178/ *Taylor v. American Honda Motor* Co., 555 F.Supp. 59,64 (M.D. Fla. 1982) (applying Florida law -- allegation that motorcycle manufacturer had superior knowledge).

179/ *Town of* Hooksef *School District* ll. *W.R. Grace* & Co., 617 F.Supp. 126, 133 (D.N.H. 1984).

180/ *See, e.g., Berkeley Pump Co. v. Reed-Joseph Land* Co., 279 Ark. 384,653 S.W.2d 128, 134 (1983).

181/ *2 American* Law *Products Liability 3d, supra,* at § 25:2.

182/ See. e.g., Cal. Civ. Code § 1572(2); for the Restatement rules about negligent misrepresentation see Rest. Torts 2d § 311; see *also,* Rest. Torts 2d § 552 (under certain circumstances, a party to a contract may be able to assert a claim for negligent misrepresentation independent of any principle of contract law).

183/ *See Dalrymple v. Sinkoe, 230 N.C. 453, 53* S.E.2d *437,440* (1949); *Rulane Gas Co. v.*

184/ *Montgomery Ward & Co.,* 231 N.C. 270, 56 S.E.2d 689, 693 (1949).
Fieenor v. Erickson, 35 Wash.2d 891,215 P.2d *885,890* (1950); *Osborn v. Irwin Memorial Blood* Bank, 5 Cal.App.4th 234, 250-51, 7 Cal.Rptr.2d 101 (1992) (elements for negligent misrepresentation involving a risk of physical harm); *Makuc v. American Honda Motor Co., 835* F.2d 389 (1 st Cir. 1987).

defective product will not give rise to liability for misrepresentation in the absence of an untruthful representation about that product.185/

The person making the misrepresentation usually must have some reason to know the information given is wanted for a specific purpose, that the recipient intends to rely on the information, and that, if the information is false or erroneous, such reliance might cause injury to person or property. 186/ Even where a seller does not have actual knowledge of a defect, if an assurance of safety regarding the product is given when the seller has been negligent in determining whether the product is defective, and the defect causes an injury, there may be an inference of negligence by the seller.187/ Statements in advertisements, brochures or booklets by ATMS manufacturers and sellers may give rise to liability. 188/ As with fraud and false advertising, there is no liability for mere "sales talk" or puffing 189/ but an expert opinion about an ATMS product may give rise to liability.190/

A failure to warn about a known defect can give rise to a claim of negligent misrepresentation. 191/ For example, the manufacturer of a product has a duty to use an effective, perhaps the most effective, method to warn potential customers of defects.192/ ATMS manufacturers, retailers and service providers should avoid issuing general warnings about potential dangers or risks and instead issue specific warnings to all those in the distribution chain and, wherever possible, to consumers.

As with other kinds of negligence, there must be some causal relationship between the injury or damage that occurs and the representation made. One court found no proximate cause between a representation about the safe use of a gas water heater and an explosion caused by a failure to properly relight the water heater.193/ However, another court found causation where a distributor, who was repeatedly

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185/ *See, Ford Motor Co. v. Puskar, 394* S.W.2d 1, 12 (Tex.Civ.App. 1965) (representation about operation of car if power steering failed was not untrue), *aff'd as modified sub nom., Jack Roach-Bissonet, Inc. v. Puskar,* 417 S.W.2d 262 (Tex. S.Ct. 1967)

186/ *See, e.g., Pabon v. Hackensack Auto Sales, inc.,* 164 A.2d at 784.

187/ *Rulane Gas Co. v. Montgomery Ward & Co., 56* S.E.2d at 693.

188/ *See, Kapp v. Bob Sullivan Chevrolet* Co., 234 Ark. 395, 353 S.W.2d 5, 9 (1962) (no misrepresentation in advertisement regarding quality or performance of seatbelts); *McClanahan v. California Spray-Chemical Corp.,* 194 Va. *842, 75* S.E.2d 712, 725 (1953); *see also Kociemba* v. *G.D. Searle &* Co., 707 F.Supp. 1517, 1525 (D. Minn. 1989)

189/ *See, e.g., Hoffman v. A.B. Chance* Co., 339 F.Supp. 1385, 1388 (M.D. Pa. 1972) (locks advertised to furnish "unprecedented safety"): *see discussion, supra,* at pp. 24,27.

190/ *Pabon v. Hackensack Auto Sales, Inc., 63* N.J. Super. 476, 164 A.2d 773,784 (1960); see, *Kociemba* v. *G.D. Searle &* Co., 707 F.Supp. 1517, 1525 (D. Minn. 1989) (court can consider a representation that would normally be an opinion as one of fact where party making representation has special knowledge relied on by injured party).

191/ *Walker v. Decora, Inc.,* 225 Tenn. *504,* 471 S.W .2d *778, 782* (1971); *see, e.g., Bami v. Kutner,* 45 Del. 550, 76 A.2d 801, 804-805 (1950) (representation that car was of good quality and fitness where car had defective brakes).

192/ *See, Hoffman v., Sterling Drug Co., Inc., 485* F.2d 132, 142 (3d Cir. 1973)

193/ *Rulane Gas Co. v. Montgomery Ward &* Co., 56 S.E.2d at 695; (a person who endorses a product may be liable for negligently failing to determine that the product is dangerous). See *also, Sell v. Volkswagen of America,* Inc., 505 F.2d 953, 955 (6th Cir. 1974).

requested to repair the type of problem that eventually resulted in plaintiff's injury, gave assurances that the equipment was safe to use.194/

The context in which a statement is made may be important. A misrepresentation that is made as part of a business transaction, if relied upon, will give rise to liability.195/ However, a plaintiff does not have to prove reliance upon assurances of safety based on a single specific advertisement or label, as long as the manufacturers' claims of safety came to his attention.196/

Finally, contractual privity generally is not required to state a claim for negligent misrepresentation in a product liability action,197/ although in some states privity of contract may still be required to recover for financial losses.198/ However, where reliance on an alleged misrepresentation is indirect (as where the alleged misrepresentation was made to someone other than the party claiming reliance), privity, a fiduciary relationship, or a limited class, that the speaker knows might rely on the misrepresentation, may be required.199/ An airplane owner had no negligent misrepresentation claim against the plane's manufacturer based on alleged misrepresentations relating to design adequacy and safety the manufacturer made to the FAA.200/

Manufacturers, sellers and providers of ATMS products and services who are careful about the representations they make and provide clear warnings about any potential risks or problems can reduce the chances of liability for negligent misrepresentation. Nevertheless, it may be difficult to predict whether a warning will be sufficient to preclude liability. Also, while parties can attempt to limit liability through contracts, they must use clear contractual language designed to prohibit actions for negligent misrepresentation and to limit reliance on any representations actually made.201/

F. Conversion

ATMS envisions electronic toll collection systems and electronic systems to weigh commercial vehicles and impose charges based on the vehicle's weight. In

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194/ *Sylvestri v. Warner & Swasey Co., 398* F.2d *598,603-604* (2d Cir. *1968) disagreed with on other grounds, Lindsey v. Dayton-Hudson Corp., 592* F.2d 1118 (10th Cir. *1979), cert. denied, 444* U.S. 856, 100 SCt. 116,62 L.Ed.2d *75* (1979) *and disapproved on othergrounds, Walker v. Armco Steel* Corp., 446 U.S. 740, 100 S.Ct. 1978, 64 L.Ed.2d 659 (1980) (applying New York law).)

195/ See, Rest *Torts* 2d § 552 (primary losses recoverable); see, e.g., Holley v. H.L. *Greene Co., 3* Misc.2d 941, 155 N.Y.S.2d. 197, 199 (1956); *Nelson v. Healey,* 151 Kan. 512, 99 P.2d 795,799 (1940) (misstatement about condition of tires to prospective purchaser).

196/ *Wright v. Carter Products, Inc., 244* F.2d 53, 60-61 (2d Cir. 1957).

197/ *Hanberry* v. *Hearst* Corp., 276 Cal.App.2d 680, 685, 81 CalRptr. 519 (1969); *Chitty v. Home-Wilson, Inc.,* 92 Ga.App.716, *89* S.E.2d 816, 818-l *9* (1955); *Lindroth v. Walgreen Co., 329* III.App.105, 67 N.E.2d 595, 604 (1946).

198/ *See, e.g., Pabon v. Hackensack Am Sales, Inc.,* 164 A2d at 784-85.

199/ *Learjet Corp. v. Spenlinhauer,* 901 F.2d 198,202 (1st Cir. 1990) (applying Kansas law).

200/ *Id.*

201/ *Keller v. A.O. Smith Harvestore Products, Inc.,* 819 P.2d 69, 74 (Colo. 1991).

either situation, the electronic systems could malfunction and overcharge the motorists or impose unjustified charges. If so, the motorist or commercial company may have a potential action for conversion.202/

Conversion is the wrongful exercise of dominion or ownership by one person over personal property that belongs to another in denial of, or inconsistent with, the true owner's right to the property.203/ Although a claim of conversion generally will not lie where the property in question is money, exceptions have been recognized when the sum is separate and identifiable.204/ Usually, all that is required is an identification sufficient to determine the rights of the parties, not that the money be specially earmarked.205/ If invoices from the electronic toll collection or fare payment are deemed to constitute commercial paper, then a conversion claim would lie.206/ It is likely **that** with respect to toll collections, the amount of money at issue would be subject to specific determination.

Although conversion suits are possible, it is not likely that many would be filed over disputes regarding toll collection systems. Most people using the systems probably will seek refunds first, and the amount of money involved generally will be small. Also, if the toll collection system is on a road or bridge, the entity running the system may be able to require as **a** condition of using the road or bridge that the driver agree to use binding arbitration to resolve any disputes regarding the collection of tolls or other fees. This could result in a more inexpensive and efficient resolution of what are essentially refund claims.

G. Extent To Which The Federal Government May Be Liable In Tort

1. The Federal Government Is Liable For Negligencs

One of the key issues arising from ATMS is the extent of the federal government's potential tort liability stemming from its involvement in the planning, development, design, implementation, and operation of ATMS. This issue is significant since the federal government will be funding ATMS projects through cooperative agreements and grants, including grants for field evaluations and operational tests of ATMS technologies. While the private sector will have primary responsibility for designing and developing ATMS, the government will develop performance specifications and guidelines. The public sector, including the federal government, will also take an active role in installing, supporting and maintaining traffic control systems. ATMS development and implementation will probably not result in any shift of liability from drivers to the government since drivers will still retain control over their vehicles.

202/ Such electronic systems could include license plate scanners, cards placed by the driver in a machine, or on-board automated identification devices. Drivers may be sent a bill at the end of the month or money may be deducted from prepaid accounts or from debit cards.

203/ *See, e.g., Harrell v. Anderson, 294* F.Supp. 405, *407* (S.D. Ga. 1968); *English v. Ralph Williams ford,* 17 Cal.App.3d 1038, 1046, 95 Cal.Rptr. 501 (1971).

204/ *See, e.g., In Re Thebus,* 108 Ill.2d 255, 91 Ill.Dec. 623,625, 483 N.E.2d 1285, 1260 (1985); *Haigler v. Donnelly,* 18 Cal.2d 674, 681, 117 P.2d 331 (1941).

205/ *See, e.g., Shahood* v. Cavin, 154 Cal.App.2d 745, 748, 316 P.2d 700 (1957).

206/ *Daniels v. Powell, 604* F.Supp. 689,696 (N.D. Ill. 1985).

The Federal Tort Claims Act (" FTCA" or "Act") recognizes, subject to certain exceptions, the general principle that the United States should be liable for the negligence of government employees and federal and other agencies performing government functions when a private individual would be liable under similar circumstances.207/ Thus, if state law would hold individuals liable under similar circumstances, the federal government also can be held liable.208/ Under the FTCA, the federal governmenf could be liable for personal injury and property damage claims sounding in tort and arising from damage caused by ATMS products with which the government is involved in some way.289/ The United States also may be impleaded as a third-party defendant liable for indemnity or contribution if the original defendant claims the United States was wholly or partially responsible for the plaintiffs injury.210/

While the FTCA waives sovereign immunity in actions arising out of negligent tortious conduct, the federal government's liability is strictly limited by the Act.211/ For instance, only actions for money damages are within the FTCA's scope,212/ not punitive damages.213/ Most importantly, since the FTCA does not waive sovereign immunity for strict liability claims,214/ negligence still must be shown even where the United States owns, manufactures or designs the allegedly defective product.215/

2. The Discretionary Function Exception

The FTCA contains a number of exceptions, the most important of which is the discretionary function exception.216/ The theory of the exception is that claims based upon discretionary acts or omissions by government employees are outside the

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207/ 28 U.S.C. §1346(b). Prior to passage of the FTCA, such actions had been barred by sovereign immunity. 14 Wright, Miller & Cooper, Federal *Practice and Procedure, Jurisdiction § 3658* (2d ed. 1985).

208/ *Rayonier, Inc. v. United States,* 352 U.S. 315, 77 S.Ct. 37, 1 L.Ed.2d 35 (1957). Accordingly, state law doctrines such as contributory negligence, assumption of risk, proximate cause and res *ipsa loquitur* apply. See discussion, *infra.*

209/ Pursuant to the FTCA, the United States is liable for the negligent or wrongful acts or omissions of an employee acting in the scope of employment as defined by state *respondeat superior* law. Laird v. *Nelms,* 406 U.S. 797,99 SCt. 1899, 32 L.Ed.499 (1972).

210/ United *States* v. Yellow *Cab* Co., 340 U.S. 543, 71 S.Ct. 399, 95 L.Ed.523 (1951).

211/ The Act contains substantive and procedural limits such as exclusive federal court jurisdiction, non-jury trials only and certain notice of claim requirements. 28 U.S.C. §§ 1346(b), 2401 (b), 2402,2675; 2679(d).

212/ *Hataley v. United States,* 351 U.S. 173,76 S.Ct. 745. 100 L.Ed. 1065 (1956).

213/ 28 U.S.C. § 2674. However, this limitation has been narrowly construed as only barring damage awards intended to punish "egregious misconduct" but not purportedly excessive awards of actual or compensatory damages. Malzof *v. United States,* ____U.S. ___ 112 S.Ct. 711, 116 L.Ed.2d 731 (1992).

214/ *Dalehite v. United States,* 346 U.S. 15, 44-45, 73 S.Ct. 956,97 L.Ed. 1427 (1953); *Laird v. Nelms,* 406 U.S. 797, 99 S.Ct. 1899, 32 L.Ed.499 (1972); *McCay v. United States, 703* F.2d 464, 472 (10th Cir. 1983). The FTCA also does not waive sovereign immunity for cases involving nuisance. *Dalehite* v. United *States, 346* U.S. at 44-45 (1953).

215/ *See, e.g., Watson v. Alexander, 532* F.Supp. 1004, 1006 (E.D. Tex. 1982).

216/ 28 U.S.C. § 2680(a).

Act' s scope and the government is not liable even for negligent or wrongful acts or for abuse of discretion.217/

Since the purpose of the discretionary function exception is to immunize government employees from liability for formulating public policy, the courts examine whether the challenged conduct occurred in the course of making significant policy and political decisions. 218/ The exception prevents judicial second-guessing through tort actions of legislative and administrative decisions based on social, economic and political policies and protects government actions and decisions based on considerations of public policy.219/ The exception also is intended to further national policy effectuated through the discretion exercised by government officials.220/

Until recently courts generally distinguished discretionary functions as involving the planning and initiation of programs as opposed to operational activities.221 / This analysis resulted in a so-called "planning-operational distinction" as the critical factor in determining whether the exception applied. For instance, in *Peterson v. United States,222/* the planning of Air Force training and evaluation missions was a protected discretionary function, but the United States was not exempt from liability for operational negligence.223/

Recently the Supreme Court abandoned this planning-operational distinction in favor of a more flexible approach. In *United States v. Gaubert,224/* the Supreme Court held that discretionary acts involve judgment or choice and that " [d]iscretionary conduct is not confined to the Policy or planning level."225/ In that case, the Court held that decisions made by federal regulators as part of their 'supervision of a savings and loan corporation's day-to-day operations were within the discretionary function exception because they involved an exercise of discretion in furtherance of public policy goals. The Court looked to the nature of the conduct at issue in the case rather than the status of the actor to determine whether the discretionary function applied. 226/ The Court made clear that decisions at both the

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217/ *Id.* The government also is not liable for an act or omission of a government employee, "exercising due care, in the execution of a statute or regulation, whether or not such statute or regulation be valid.' *Id.*

218/ *See, e.g., United States v. S.A. Empresa de Viacao Aerea Rio Grandese (Varig Airlines), 467* U.S. 797,614, 104 S.Ct. 2755, 81 L.EdPd 660 (1964).

219/ *Id.*

220/ *See Smith v. United States, 375* F.2d *243,* (5th Cir. *1967), cert. denied, 369* U.S. 641, 88 S.Ct. 76, 19 L.Ed.2d 106 (1967).

221/ *Dalehite v. United States, 346* U.S. at 35-36.

222/ 673 F.2d 237 (6th Cir. 1962).

223/ *See Smith v. United States,* 546 F.2d 672 (10th Cir. 1976) (decision to leave parts of land undeveloped was discretionary, but decision not to place warning signs was not discretionary).

224/ 499 U.S. 315, 111 S.Ct. 1267, 1275 (1991) (a case involving a challenge to the Federal Home Loan Bank Board's advice to and supervision of a thrift institution; the court held that the Board's actions were within the discretionary function exception).

225/ *Id.*

226/ *Id.;* see United *States v. S.A. Emprea de viacao Aerea Rio Grandense (Varig Airlines), 467* U.S. 797,813, 104 S.Ct. 2755, 2764, 81 L.Ed.2d 660 (1964) ('Varig Airlines').

planning and operational levels could be based on policy and thus be within the discretionary function exception.

Gaubert relied on Berkowitz v. *United* States,227/ where the Court held that: "Conduct cannot be discretionary unless it involves an element of judgment or choice . . . . Thus the discretionary function exception will not apply when a federal statute, regulation or policy specifically prescribes a course of action for an employee to follow. In this event, the employee has no rightful option but to adhere to the directive."228/ The courts therefore should inquire into whether the challenged actions are "controlled" by regulations or statute.229/

The principles identified in Gaubert and Berkowitz can be used to determine whether or not the exception applies to protect certain governmental actions from liability Generally, there is a two-tier analysis used to identify discretionary functions.230/ First, the governmental action must be the product of judgment or choice.231 / This involves consideration of whether the government conduct is specifically prescribed by any mandatory federal statute, regulation, or policy.232/ If so, then the actor must follow the statute or regulation and immunity should exist. Second, if there are no such mandatory statutes or regulations, to be immune the government's conduct must be based on considerations of social, economic or political policy.233/ At least one court has held this second element involves an objective standard.234/

The exception will apply where a statute specifically gives federal employees or agencies discretion to act as they did.235/ On the other hand, the government's failure to follow nondiscretionary statutes or regulations may lead to liability. For instance, where the government issued a license without receiving the data required by federal regulations, no discretionary function was involved and no immunity from suit arose.236/

a. General Application of Exception

The discretionary function exception has been applied in a multitude of cases, some of which are helpful in analyzing how the courts will evaluate governmental liability in the ATMS context. The Supreme Court's relatively recent pronouncement in Gaubert, however, provides the controlling analytical framework.

227/ 466 U.S. 531, 536, 106 S.Ct. 1954, 100 L.Ed.2d 531 (1966).
228/ *Id.* at 536.
229/ *U.S. v. Gaubert,* 111 S.Ct. at 1279.
230/ *Baum v. U.S., 966* F.2d 716, 720 (4th Cir. 1993).
231/ *Id.*
232/ *Id.*
233/ *Id.* at *720; Berkowitz, 466* U.S. at 531, 106 S.Ct. at 1954-55; *Varig Airlines, 407* U.S. at 613; see *Gaubert,* 111 S.Ct. at 1275 n.7 (providing an Informative illustration).
234/ *Baum, 966* F.2d at 720-721.
235/ *See Blaber v. United States,* 212 FSupp. 95 (ED. N.Y. 1962), *aff'd., 332* F.2d 629 (2d Cir. 1964); *see also First National Bank of Effingham,* 565 F.Supp. 119.
236/ *Berkovitz v. United States, 466* U.S. 531, 542-543 (1966).

First, courts consider whether the government's decision to delegate safety responsibility to a private party is a protected discretionary function. Generally, delegation of safety responsibility is within the exception, even if the government retains some right to inspect.237/ Indeed, even the extent of governmental supervision of the safety procedures of private parties is an exercise of "discretionary regulatory authority."238/ In *Varig Airlines,239/* a case arising from a defectively designed plane, the FAA approved the particular design element at issue even though it violated FAA regulations and the FAA failed to conduct an inspection. FAA regulations, however, placed primary testing and inspection responsibility on manufacturers and required the FAA to only spot check test results. This reflected the FAA's decision to balance safety and costs. The Supreme Court held the FAA's decision to place primary safety responsibility on manufacturers was within the discretionary function exception.240/ Similarly, another court found that the FAA's establishment of departure procedures for an airport was also within the exception.241 /

At least one court, however, held that the government cannot delegate responsibility to contractors to discover its own negligent design, construction and maintenance.242/ In that case, the government's agreement to retain safety responsibility militated against the discretionary function exemption applying.243/ Also, where statutes, regulations or policy require the government to be responsible for safety, it cannot delegate that responsibility; although how the government performs that responsibility , if not controlled by regulations, will be within the discretionary function exception.244/

Second, courts have held that the government' s approval of designs and technology is within the discretionary exception.245/ For example, the exemption barred suit against the United States for damages arising from an allegedly inadequately designed traffic separator (approved but not constructed by government) on an interstate highway. 246/ The government also was not liable for the design

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237/ *See Feyers v. United States, 749* F.2d 1222, 1225-1227 (6th Cir. 1984), *cert. denied,* 471 U.S. 1125, 105 S.Ct. 2655, 66 L.Ed.2d 272 (1965) (decision to rely on spot checks is discretionary); *Maltais v. United States, 546* F. Supp. 96, 101 (N.D. N.Y. 1982) (delegation of safety responsibility), *affd, 729* F.2d *1442* (2nd Cir. *1963); see also Varig Airlines, 467* U.S. at 814-821 (discussed below).

238/ *Varig Airlines, 467* U.S. at 819-820.

239/ 467 U.S. at 800-807, 104 S.Ct. at 2757-2761.

240/ *Id.* at 807-821.

241/ *West v. F.A.A., 630* F.2d 1044, 1047-48 (9th Cir. 1987), *cert. denied, 465* U.S. 1007, 108 S.Ct. 1470, 99 L.Ed.2d 699 (1988).

242/ *See Sexton v. United States,* 797 F.Supp. 1292, 1300-01 (E.D. N.C. 1991) (government retained safety responsibilities).

243/ *Id.*

244/ *See Gaubert,* 111 S.Ct. at 1275.

245/ *See First National Bank of Effingham v. United States,* 565 F.Supp. 119 (DC. Ill. 1983) (government approval of a highway design that allegedly violated uniform standards was within the discretionary exception): *see also, Wright v. United States. 566* F.2d 153, 157-l 59 (10th Cir. 1977) (government's adoption and implementation of "plans, specifications, or schedules of operations" for bridge, which state maintained, was within discretionary exception), *cert. denied,.* 439 U.S. 824,99 S.Ct. 94, 58 L.Ed.2d 117 (1978).

246/ *Daniel v. United* States, 426 F.2d 281 (5th Cir. 1970).

defects at issue in *Varig Airlines* even though the government approved the design.247/ Likewise, in *Baum,* the court held that the government's design, construction and maintenance of guardrails on a roadway was within the discretionary function exception.248/ Even where the government actually designs, constructs and maintains a technology or product, its actions may be within the exception if they meet the standards set forth in *Gaubert.249/*

Third, governmental funding of activities and related involvement with parties receiving such funds, states or private parties, often will be within the discretionary function exception. This is true even if the government supervises the activity or gets involved in it. So long as the agencies' actions further policy goals and are not specifically dictated by statute or regulation (or merely involve decisions resting on mathematical calculations), the discretionary function exception will apply.250/

In Miller V. United States,251/ an action was brought against the Department of Transportation ("DOT") under the FTCA for personal injuries resulting from a traffic accident. The plaintiffs alleged, among other things, that the DOT failed to inspect construction plans to assure compliance with government mandated criteria and regulations.252/ The plaintiffs further alleged that the highway "was regulated, inspected, controlled and designed by defendant United States and said defendant United States was charged with the duty of approving, supervising and inspecting the designing and building of [the highway], as well as monitoring safety features, controlling, maintaining, repairing and keeping in safe condition [the highway] for the use of the public.' 253/ The highway had been constructed under the Federal-Aid Highway Act. Colorado received federal funds to construct and maintain the highway, but the United States inspected and approved the project after construction was completed.254/ Under these circumstances, the court of appeals held that the plaintiffs' claims were within the discretionary function exception and were properly dismissed by the district court. The court reasoned that "[t]he statutes and regulations at issue fail to provide a fixed or readily ascertainable standard, and decisions made pursuant to them require more than expert evaluation of a mandatory duty."255/ Similarly, in *Rayford v. United States,* 256/ the district court held: "The relatively passive role of the United States under the Federal-Aid Highway Act is . . . insufficient to bring it within the liability provisions of the Federal Tort Claim Act."257/

247/ See discussion of *Varig Airlines* above.

248/ 986 F.2d at 721-724; see *Bowman v. United States, 620* F.2d 1393, 1395 (4th Cir. 1987) (decision not to place guardrail was discretionary function because "the decision was the result of a policy judgment."

2491 *Baum,* 986 F.2d at 721-724; but see, *Driscoll v. United States, 525* F.2d 136 (9th Cir. 1975) (decision not to use traffic control devices on air force base could lead to liability).

250/ Gaubert, 111 SCt. at 1278.

251/ 710 F.2d 656 (10th Cir.), cert. *denied,* 464 U.S. 939, 104 SCt. 352,78 L.Ed.2d 316 (1993).

252/ *id.* at 657-658.

253/ *Id.* at 658.

254/ *id.* at 659.

255/ *Id.* at 663.

256/ 410 F.Supp. 1051,1052 (D.C. Tenn. 1976)

257/ *Id.* at 1052; *see Mahler v. United Stares, 306* F.2d 713, *cert. denied,* 371 U.S. 923,83 S.Ct. 290, 9 L.Ed.2d 231.

Fourth, while the federal government is not liable for a merely inadequate warning,258/ liability may attach if the government fails to issue any warning of a known hazard.259/ In *Andrulonis* v. *United* States,260/ the Court held that the Center for Disease Control was not immune for failing to warn a researcher performing a study jointly conducted by the Center and the New York Department of Health about the danger of working with a rabies vaccine. In *Lay-ton* v. *United States* the Court held that where there is no regulatory requirement to issue a warning (in that case about the danger of felling trees) the exception shielded the government from liability.261 / The court distinguished *Andrulonis* and other failure-to-warn cases on the basis that those cases involved simple negligence by the government in failing to warn, while in *Layton* there was a "consideration of competing values" implicated in the government's decision.262/ The court noted the Forest Service delegated primary safety responsibility to contractors, was not bound by rules or regulations to issue warnings, and could rely on the expertise of contractors.263/ In Miller v. *United States,* the court also rejected a contention that the government failed to warn of a dangerous condition because the claimed negligence went "to the essence of the Secretary's judgment in fashioning a highway in the best overall public interest," which implicated several public policy considerations.2641

b. Application In ATMS Context

We next turn to whether the discretionary function exception will shield government actions from liability under the FTCA for accidents attributed to ATMS. The private sector will have primary responsibility for designing, developing and integrating the technology and equipment, primarily under contract with state and local governments. The federal government will provide funding and grants, develop performance specifications, and establish guidelines for the evaluation of ATMS. It may also have a role in installing, maintaining and supporting traffic control systems. Government may fund ATMS activities through the use of cooperative agreements and grants rather than procurement contracts. Under these circumstances, the government, through the DOT or other agencies, may be involved in enforcing administrative

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258/ *Jurzec v. American* Motors Corp., 856 F.2d 1116, 1119 (8th Cir. 1988) (no liability for inadequate warning of Jeeps' rollover tendency since decision about nature and content of warning is discretionary); *Smith v. Johns-Manvile* Corp., 795 F.2d 301(3d Cir. 1986) (failure of government to attach warnings to asbestos it sold was discretionary).

259/ *Mandel* v. *United States,* 793 F.2d 964, 967 (8th Cir. 1986) (exception does not apply where Park Service failed to provide warning about submerged rocks in river and failed to comply with previously adopted policy); *Smith v. United States,* 546 F.2d at 872; but see discussion of misrepresentation exception to the FTCA, below.

260/ 924 F.2d 209 (2d Cir.), vacated, — U.S. – 112 S.Ct. 39, 116 L.Ed.2d 18 reinstated, 952 F.2d *652* (2nd Cir. 1991), *cert. denied,* — U.S. – 112 S.Ct. 2992,120 L.Ed.2d 869 (1992); see *Summer v. UnitedStates, 905* F.2d 112 (9th Cir. 1990).

261/ *984* F.2d at 1496, 1505 (8th Cir.), *cert. denied,* — U.S. – , 114 S.Ct. 213, 126 L.Ed.2d 170 (1993).

262/ *Id.*

263/ *Id.*

264/ *Miller,* 710 F.2d at *665-666; see Spillway Marina, Inc. v. United States, 445* F.2d 876 (1 st Cir. 1971); alleged failures to warn in an economic context may also be within the FTCA's misrepresentation exception, discussed below.

requirements, including those in 49 CFR Part 18 or OMB Circular A-l 10. Federal agencies also may provide technical assistance to grant recipients, approve some subgrants and contracts, and provide general program direction.

The government 's use of cooperative agreements and grants to fund ATMS development and the provision of technical assistance and general program direction to the recipients of such grants and funding would be within the discretionary function exception so long as the government's actions involve judgment and choice and are not specifically dictated by statutes, regulations or policies.. In *Layton v. United States,265/* the Court held that selection of contractors for timber-cutting contracts was a discretionary function. So too here, the selection of grantees and contractors is not controlled by regulations and is discretionary. Enforcing the administrative requirements in 49 CFR Part 18 and OMB Circular A-l 10 would not remove the government's activities from the protection of the discretionary function exception, except where specific regulations are violated, since the requirements appear to contemplate the exercise of discretion by regulators. To the extent the government provides technical assistance and "general program direction," it appears those actions would involve judgment and choice, further public policy and not be specifically dictated by regulations. The exception would therefore apply.

The DOT also is required to "establish guidelines and requirements for the evaluation of field and related operational tests carried out pursuant to grants made by DOT to 'non-federal entities,' including state and local governments, universities and other persons, for operational tests relating to intelligent vehicle-highway systems." 266/ We understand that the DOT will, in some cases, award procurement contracts to conduct the evaluations of the operational tests. Operational tests must have written evaluations of both the IVHS technologies investigated and the results of the investigation consistent with the guidelines developed under section 6053(c).267/

Whether the federal government will be liable under the FTCA in the event an evaluation negligently fails to discover a defect in ATMS which has undergone an operational test and evaluation, and which is later incorporated in a deployed system, is an important issue. The relevant statutory provisions apparently leave it to the discretion of the DOT to establish guidelines and requirements and to select "non-federal entities" to perform operational tests and submit written evaluations. Therefore, the content of the guidelines is subject to the discretionary choices and judgments of the DOT.268/ Also, there is nothing in the statutory scheme that mandates certain types of guidelines or requires that the guidelines be specifically geared toward ferreting out certain types of defects in ATMS. Further, the Act does not place a burden on the government to undertake the operational tests or the evaluations or to undertake any independent review of the evaluations prepared by the grantees or contracting parties. Under these circumstances, the exception would immunize the government for any

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265/ 984 F.2d at 1501-02.

266/ Intelligent Vehicle Highway Systems Act of 1991, P.L. 102-240 (1991 U.S. Code Cong. & Admin. News 105 Stat. 2190-2193) §§ 6053(c), 6055(d).

267/ *Id. §* 6055(b).

268/ *Layton, 964* F.2d at 1501-02.

failure to discover a defect which later caused injury,269/ If the guidelines provide for precise inspections or tests to be performed by government employees and those guidelines were not followed, however, the government could be liable.270/

3. Misrepresentation Exception

Of the other exceptions to the FTCA, the most important for purposes of ATMS is the government's immunity from suits for deceit and intentional or negligent misrepresentations, and for the tort of "deceit." 271/ This exception applies to the communication of misinformation upon which a recipient relies which causes economic loss such as lost profits.272/

Some plaintiffs may try to cast a complaint under the FTCA for economic loss (as opposed to personal injury) in the fonn of a negligence action in an attempt to avoid the misrepresentation or deceit exception.273/ The courts have, however, consistently looked behind the allegations and the language used in the complaint to determine the nature of the real cause of action.274/ In *Green v. United States,275/* the plaintiffs alleged the government gave false or misleading information regarding the dangers of its use of DDT on grazing land, resulting in economic loss to the plaintiff cattle owners. The court denied the claim, holding that "[t]he misrepresentation exception precludes liability where the plaintiff suffers economic loss as a result of a commercial decision which was based on a misrepresentation by government consisting either of a false statement or a failure to provide information which it had a duty to provide." The misrepresentation exception also has barred suits based on failure to give a warning to injured parties and suits based on an allegation of implied misrepresentation. 276/

In the ATMS context, where the tort actions against the government will likely focus on personal injury and property damage rather than economic loss, the misrepresentation and deceit exception generally will be irrelevant.277/ However, to the extent there are claims against the federal government based on economic damage

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269/ *Varig Airlines, 467* US. at 814-82).

270/ *Layton, 984* F.2d at 1503; see *also McMichael v. United States, 856* F.2d 1026 (8th Cir. 1988).

271/ 28 U.S.C. §2680(h); *United States* v. *Neustadf,* 366 U.S. 696,81 S.Ct. 1294,6 L.Ed.2d 614 (1961) (exclusion of misrepresentation excludes liability for both negligent and intentional misrepresentations); *United Airlines, Inc. v. Wiener, 335* F.2d 379, 398 (9th Cir. 1964), cert. *denied,* 379 U.S. 951,85 S.Ct. 452, 13 L.Ed.2d 549 (1964).

272/ *Block* v. *Neal,* 460 U.S. 289,295-297,103 S.Ct. 1089,75 L.Ed.2d 67 (1983).

273/ *See, e.g., Mount Homes, Inc. v. United States,* 912 F.2d 352.355-56 (9th Cir. 1990).

274/ *Id.; Preston v. United States, 596* F.2d 232 (7th Cir.), cert. *denied, 444* U.S. 915, 100 SCt. 228, 62 L.Ed.2d 169 (1979) (allegations of complaint amounted only to misrepresentation by implication); see *Lynch v. United States Department Any Corps of Engineers,* 474 F.Supp. 545 (D. Md. 1978), *aff'd,* 601 F.2d 581 (4th Cir. 1979).

275/ 629 F.2d 581, 584-585 (9th Cir. 1980); see *Preston, 596* F.2d at 239.

276/ *See, e.g., City and County of San Francisco v. United States,* 615 F.2d 498,504-05 (9th Cir. 1980); *Preston,* 596 F.2d 238 (necessary to distinguish between claims grounded on tort law of misrepresentation and those only collaterally involving misrepresentations).

277/ *United States v. Neustadt, 366* U.S. at 711 n.26.

resulting from reliance on misinformation or failures to warn associated with ATMS, this exception would apply.

4. Military Exception

Claims by military personnel injured through the use of ATMS which the government operates probably would be barred because they likely will arise out of or in the course of activity incident to military service.278/ Indeed, the right of a third party to recover in an indemnity action against the United States is limited by this doctrine where the injured party was in the service.279/

5. Conclusion

As a general matter, the government's potential tort liability will be diminished by the discretionary function exception so long as its actions involve choice and judgment and are not controlled by statutes and regulations. The Supreme Court in Gaubert gave the discretionary function a broad interpretation that encompasses discretionary actions taken to further policy goals, including actions taken at operational levels. Liability for any economic losses will be diminished by the misrepresentation exception which shields the government from suits for misrepresentation, whether negligent or intentional, and from some suits based on failure to provide information or to warn.

H. Tort Liability Of State And Local Entities

To the extent states and local entities are not immune from suit, they will be liable too if they act as manufacturers, sellers, distributors, designers or operators of IVHS services and products. Their immunity is discussed in a separate paper; this paper discusses the principles applicable if they are not immune.

I. Applicability Of Government Contractor's Defense

Some or all ATMS products may be developed by the private sector according to government plans and specifications. Private contractors who design or build ATMS products in accordance with those specifications may be immune from liability under the government contractor's defense.

This defense was clarified by the Supreme Court in Boyle v. United *Technologies Corp.,280/1* a product liability case brought by the estate of a Marine helicopter pilot who drowned when the military helicopter crashed during a training exercise. The plaintiffs jury award was reversed by the Fourth Circuit, and the Supreme Court affirmed, because of the applicability of the government contractor's defense. The **Court based** this defense on the discretionary function exception to the Federal Tort

278/ *Feres* v. *United States,* 340 U.S. 135, 71 S.Ct. 153,95 L.Ed. 152 (1950); In *re Agent Orange*
279/ *Product ,Liability Litigation, 818 F.2d 200 Cir.194, (2d 1987).*
Stencel Aero Engineering Cop. v. *United States,* 431 U.S. 666, 667, 97 S.Ct. 2054.52 L.Ed.2d *665* (1977).
280/ 487 U.S. 500,108 S.Ct. 2510, 101 L.Ed.2d 442 (1988).

Claims Act, reasoning that contractors held liable for design features which were approved by the government would pass on the costs of liability to the government, resulting in a liability that governmental immunity was supposed to prevent.281/ The Court then resolved a dispute among the circuits when it enumerated the elements necessary to establish the government contractor's defense: (1) the United States approved reasonably precise specifications; (2) the equipment conformed to those specifications; and (3) the supplier warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States.282/

The Soyle formulation immunizes government contractors from design defects, but not manufacturing defects.283/ If the contractor fails to manufacture a product according to the specifications, there is no public policy reason why it should be immune from suit for its malfeasance. The line between manufacturing and design defect, however, may not always be clear. The Eleventh Circuit distinguished between a defect inherent in the product or system that the government has approved and an instance of shoddy workmanship.284/ The issue is governed by federal common law rather than state tort law.285/

Another element necessary to establish the defense is proof that the government approved reasonably precise specifications. The government must do more than simply rubber stamp specifications prepared by private contractors.286/ Proof of discussions between the government and the contractor over the proposed specifications demonstrates the necessary involvement by the government.287/ The specifications need only be "reasonably precise," and can encompass not only the original procurement and contract specifications, but also mock-ups, drawings, and engineering analyses.288/ However, the specifications must be quantitative, not simply utilizing vague qualitative words such as "fail-safe" or "simple."289/

281/ Id. at 510-513. However, as one court noted, had this concern been paramount military contractors would be entitled to a blanket immunity from all state tort liability, as inevitably some if not all of the cost of such suits would be passed on to the government. *In re Joint Eastern & Southern District New York Asbestos Litigation, 697* F.2d 626, 631 (2d Cir. 1990).

282/ *Id.* at 512. The Court with slight modifications adopted the formulations utilized by the Fourth and Ninth Circuits in *Tozer v. LTV Corp., 792* F.2d *403* (4th Cir. 1986), *cert. denied, 487* U.S. 1233, 106 S.Ct. 2897, 101 L.Ed.2d 931 (1986) and *McKay v. Rockwell International Corp., 704* F.2d *444, 449-50* (9th Cir. 1983), *cert. denied,* 464 U.S. 1043, 104 S.Ct. 711, 79 L.Ed.2d 175 (1984), and rejected the Eleventh Circuit's more restrictive approach outlined in Shaw V. *Grumman Aerospace Corp., 778* F.2d *736, 746* (11 th Cir. 1985), cert. *denied, 487* U.S. 1233,106 S.Ct. 2696, 101 L.Ed.2d 930 (1966).

283/ *Harduvel v. General Dynamics Corp., 878* F.2d 1311, 1317 (11 th Cir. *1989), cert. denied, 494* U.S. 1030, llOS.Ct. 1479, 108 L.Ed.2d 615 (1990).

284/ Id.

285/ *Id.*

286/ *Trevino v. General Dynamics Cop., 865* F.2d 1474, 1460 (5th Cir. 1989), cert. *denied, 493* U.S. 935, 110 S.Ct. 327, 107 L.Ed.2d 317 (1969).

287/ *Harduvel v. General Dynamics Corp., 876* F.2d at *1320.*

288/ *Kleeman v. McDonnell Douglas Corp., 890* F.2d *698, 702* (4th Cir. 1989), *cert. denied, 495* U.S. 953, 110 S.Ct. 2219, 109 L.Ed2d 545 (1990). See *also Smith v. Xerox Cop., 866* F.2d 135, 136 (5th Cir. 1969) (listing of specifications sufficient to meet defendants burden of proof).

289/ *Kleeman v. McDonnell Douglas Corp., 890* F.2d at 703.

The government contractor's defense also may bar state law failure to warn claims.290/ Courts have reasoned that conflicting federal contract and state tort law as to the nature and content of required product warnings create the same detrimental impact on the federal government which Soy/e sought to eliminate.291/ However, the defense only applies where the federal government imposed a specific warning requirement upon the contractor. It is not enough for the government merely to reject a caution label proposed by a contractor, since the government did not preclude the contractor from issuing its own warnings.292/

The courts are split as to whether the defense applies to nonmilitary contracts, particularly where a significant conflict between federal interests and state law cannot be shown. The Eleventh Circuit in *Burgess v. Colorado Serum Co.293/* permitted the defense in an action against a drug manufacturer for failing to warn of the dangers of human exposure to brucellosis vaccine. The court reasoned that the defense is an extension of sovereign immunity, and thus should apply to any governmental contractor.294/ A few other courts more recently have followed suit.295/ The Ninth Circuit, on the other hand, limits the defense to military contractors on the basis that Boyle "remain[s] rooted in considerations peculiar to the military."296/

Assuming the government commissions development of ATMS products through government contracts, the government contractor's defense might apply in some courts, but it will not apply in the Ninth Circuit except to military ATMS products commissioned through the military's procurement programs.

J. Contract Specifications Defense

Even if the government contractor's defense does not apply to ATMS products, manufacturers who build ATMS products based on specifications provided by either the government or private entities may be able to assert the contract specifications defense. The rationale for this defense is that a contractor should not be held liable for producing a product whose specifications are beyond its control.297/ This defense is in some respects broader than the government contractors' defense because it is founded on tort law negligence principles rather than government policy, and is

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290/ *In re Joint Eastern & Southern Dist. New York Asbestos Litigation, 697* F.2d at *629-630; Garner v. Santoro, 865* F.2d *629,635* (5th Cir. 1969); *Niemann v. MccDonell Douglas Corp.,* 721 F.Supp. 1019, 1024-25 (S.D. Ill. 1969); *Dorse v. Armstrong World Industries,* 716 F.Supp. 569, 590 (S.D. Fla. 1989) *aff'd., 896* F.2d 1487 (11 th Cir. 1990).

291/ *E.g., In re* Joint *Eastern & Southern District New York Asbestos Litigation, supra, 697* F.2d at 629.

292/ *Id.* at 633.

293/ 772 F.2d 644 (11 th Cir. 1985).

294/ *Id.* at 646.

295/ *In Re Chateaugay* Corp., 132 B.R. 616 (Bankr. S.D. N.Y. 1991).

296/ Nielsen *v. George Diamond Vogel Paint, 692* F.2d 1450, 1454-55 (9th Cir. 1990). See *also In Re Hawaii Federal Asbestos Cases,* 960 F.2d 606 (9th Cir. 1992) (defense inapplicable to asbestos products readily available on the market).

297/ *Brocklesby* v. *United States,* 767 F.2d 1266 (9th Cir.) (applying California law), *ceft. denied sub nom., Jeppesen v. Brockelsby, 474* U.S. 1101,106 S.Ct. 662,66 L.Ed.2d 916 (1986).

available in private contract situations.298/ For instance, the defense barred an action against manufacturers of portions of an automobile assembly line in compliance with the automobile manufacturer's instructions and under the supervision of the automobile manufacturer's engineers. 299/ However, while the government contractors' defense may insulate contractors even when specifications supplied by the government are obviously dangerous, the contract specifications defense will not apply where the specifications are so obviously defective or dangerous that a reasonable contractor would not follow them.300/

Courts applying the contract specifications defense have generally held that where products are manufactured to the order and specification of another, the contractor is not liable for damages resulting from those specifications unless the specifications were so defective and dangerous that a reasonably competent contractor "would realize there was a grave chance that his product would be dangerously unsafe. 301/ Under another variation, the defense applies where an independent contractor follows the plans or specifications strictly and has no knowledge or reason to know they might pose a risk of harm.302/ Where, however, a contractor has special knowledge or expertise, there may be a higher standard of care.3031 In essence, it appears that this defense applies only when the contractor is not negligent under the circumstances.304/

Although the defense has always been applied to protect contractors from negligence claims, the courts are divided as to whether it extends to strict liability theories.305/ Some courts find strict liability suits precluded by the defense. For instance, New York recognizes that where a machine is assembled without a manufacturing defect based on plans and specifications of the buyer, the manufacturer is not strictly liable for an injury caused by the product (manufacturer's defense).306/ In the government contract area, one court found that the defense is based in part on the contractor's entitlement to share in the government's immunity.307/ Thus, because a

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298/ Pelletier, *Liability of a* Manufacturer *for Products Defectively Designed by the Government, 23* Boston College Law Rev. 1025 (July 1982); see Johnson v. *United States,* 568 F.Supp. 351,354 (D. Kan. 1983).

299/ Housand v. Bra-Con *Industries,* Inc., 751 F.Supp. 541 (D. Md. 1990) (applying Maryland law).

300/ *Id.*

301/ Rest. *Torts 2d* § 404, comment a; Johnston v. *United States,568* F.Supp. at 354; Littlehale v. *E.I. Du Pont de* Nemours & Co., 268 F.Supp. 791 (S.D. N.Y. 1966), *aff'd, 380* F.2d 274 (2d Cir. 1966); *Housand v. Bra-Con Industries, Inc.,* 751 F.Supp. 541 (D. Md. 1990) (applying Maryland law); *see Challoner v. Day & Zimmerman, Inc.,* 512 F.2d 77, 82 (5th Cir. 1975), *vacated on* other *grounds,* 423 U.S. 3,96 S.Ct. 197,46 L.Ed.2d 3, (1975); Bynum v. *FMC Corp., 770* F.2d 556 (5th Cir. 1985).

302/ *Dorse v. Armstrong World Industries, Inc.,* 513 So.2d 1265 (Fla. 1987).

303/ *Johnston v. United States,* 568 F.Supp. at 354; *Rest. Torts 2d* § 289(b) & comment m.

304/ *See Johnston v. United States,* 568 F.Supp. at 354.

305/ *See Bynum* v. *FMC Corp.,* 770 F.2d 556, 563 (5th Cir. 1985) (applying contract specifications defense); *Brocklesby v. United States,* 767 F.2d at 1295 (9th Cir. 1985) (California law does not recognize contract specifications defense).

306/ *Munger* v. *Heiden Mfg.* Corp., 90 A.D.2d 645, 646,456 N.Y.2d 271 (1982); *Kern v. Roemer Machine & Welding Co.,* 820 F.Supp. 719,721 (S.D. N.Y. 1992).

307/ *Nielsen v. George Diamond Vogel Paint Co.,* 892 F.2d 1450 (9th Cir. 1990) (applying Idaho law).

strict liability claim could not be brought against the government, the court held that the contractor was entitled to utilize the contract specifications defense in a strict liability action.308/ In the private contract area, one court granted summary judgment dismissing strict product liability claims arising from the allegedly defective design of a machine since it had been assembled free of a manufacturing defect and in accordance with the plans and specifications of the buyer.309/ The court noted that the machine had operated for a number of years without causing serious injury and used that fact to show that the design defect could not have easily been detected.310/

Other courts have held that the contract specifications defense is not available to a manufacturer in an action based on a strict liability theory.311/ These courts reason that since the defense is based on an absence of negligence in following another's contract specifications and negligence is irrelevant to strict liability, the defense is inapplicable to strict liability claims.

In the ATMS context, the contract specifications defense will provide some protection for those who assemble -- as oppose to design -- products that will comprise the ATMS infrastructure. The availability of this defense is not likely, however, to play a significant role in decisions to become involved with ATMS. Even if contractors may be , strictly liable for the negligent designs and specifications provided by others, they probably still will want to work on ATMS projects since the threat of liability from defective products is not prohibitive. In some states vicariously liable tortfeasors in a strict liability action may be entitled to full or partial equitable indemnity.312/ To obtain greater protection, contractors could require by contract that designers completely indemnify them for any damages arising from the product's negligent design, and for costs of defense, in the event a lawsuit is filed. The government has entered into such indemnity agreements with military contractors.313/ Contractors may also require designers to maintain adequate insurance so that they can be sure the designers will have sufficient resources to indemnify them. Contractual indemnity provisions will probably not be that important in the ATMS context because there is not a great potential for large damage awards which could put a company out of business.

As this discussion demonstrates, the tort theories available to persons injured in an automobile accident involving ATMS products are diverse, but not likely to

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308/ *Id., see Sanner* v. *Ford Motor* Co., 144 N.J. Super. 1,364 A.2d *43* (1976), *aff'd* 154 N.J. Super. *407,* 381 A.2d *805, certif. denied, 75* N.J. 616, 384 A.2d 846.

309/ *Kern v. Roemer Machine & Welding* Co., 820 F.Supp. at 721.

310/ *Id.*

311/ *See Challoner v. Day & Zimmerman, Inc.,* 512 F.2d 77, *vacated on other grounds, 423* US. 3, 96 S.Ct. 167, 46 L.Ed.2d 3 (1975); *Lenher* v. *NRM* Corp., 504 F.Supp. 165 (D. Kan. 1980); *Johnston v. United States, supra,* 586 F.Supp. at 354-355 (applying Kansas law); *McLaughlin v. Sikorsky Aircraft* 148 Cal.App.3d 203, 195 Cal.Rptr. 764 (1983) (applying California law); *Brocklesby v. United States,* 767 F.2d at 1295 n.10 (applying California law).

312/ California has a procedure whereby a party who prevails on a claim for implied indemnity may seek recovery of its attorneys' fees provided certain conditions are met. Cal. Code Civ. Proc. § 1021.6; *see Uniroyal Chemical Co. v. American Vanguard Corp.,* 203 Cal.App.3d 285,249 CalRptr. 787 (1988).

313/ *See, e.g., Trevino v. General Dynamics Cop, 865* F.2d 1474, 1489 (5th Cir. 1989).

inhibit development of ATMS. Before considering possible legislative reforms which could decrease potential tort liability, we analyze the impact of contribution and indemnity principles and the availability of insurance coverage on the ability of private entities to absorb the financial impact of tort suits arising from ATMS.

K. Contribution And Indemnification

If ATMS products fail or if misinformation is furnished to drivers and as a result persons or property are injured, all those involved with the product or service face potential tort liability. In many cases, any party with a connection to **a** failing ATMS product (including those who use the products to provide services) may be sued, even though the party bears little or no responsibility for the ultimate failure which caused the damage. In these situations, parties may be expected to try to shift the costs of any loss to other, presumably more responsible, parties in the chain of misconduct. Two distinct concepts, contribution and indemnity, have developed which address the distribution of losses among potentially jointly liable parties.

1. Contribution

Contribution permits a tortfeasor against whom a judgment has been rendered to recover from other liable joint tortfeasors the portion of the total payment that the latter ought to pay or bear, based on equal division of the total payment among all the liable parties.314/ This is a partial redistribution of damages among liable parties who caused the injuries, historically permitted only where the alleged wrongdoing constituted negligence rather than willful or intentional conduct.315/ Although the common-law traditionally disallowed contribution among joint tottfeasors where one had discharged the claim of the injured plaintiff,316/ today most states have adopted some form of statute permitting contribution among joint tortfeasors.317/

Contribution is related to the doctrine of joint and several liability,318/ which entitles the plaintiff to recover her judgment in whole or in part from any jointly liable defendant.319/ This general rule has been eclipsed in several states that have

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314/ See Black's *Law* Dictionary280 (5th Ed. *1979); Dawson v. Contractors Transport Corp., 467* F.2d 727,729 (D.C. Cir. 1972).

315/ *See, Heinrich v. Peabody Int? Corp.,* 139 III.App.3d 289,93 Ill. Dec. 554,486 N.E.2d 1379, 1382 (1985), *affdinpart, rev. in part,* 117 lll.2d 162, 109 Ill. Dec. 821, 510 N.E.2d 889 (1987); Cal. Code Civ. Proc. § 875(d). The United States Supreme Court has been reluctant to find rights of contribution or indemnity among those potentially liable under federal statutes. See *Texas Industries, Inc. v. Radcliff Materials,* 451 U.S. 630, 101 S.Ct. 2061, 68 L.Ed.2d 500 (1981) (no contribution under Clayton or Sherman Acts); *Northwest Airlines v. Transport Workers* Union, 451 U.S. 77, 101 S.Ct. 1571, 67 L.Ed.2d 750 (1981).

316/ *Merryweather v. Nixan,* 8 Term. Rep. 186, 101 Eng. Rep. 1337 (1799).

317/ *Prosser and Keeton On Torts,* Lawyers Edition, § 50 at 337 (5th Ed. 1984).

318/ See, e.g., Cal. Civ. Code § 1430 (obligations may be joint, several or joint and several)

319/ See State Farm Mutual Auto Insurance Co. v Continental Casualty Co., 264 Wis. 493,59 N.W.2d *425, 426-27* (1953); *see, e.g., Conley v. J.L.G. Industry, Inc.,* 97 lll.2d 104, 73 Ill. Dec. 337,454 N.E.2d 197,204 (1983); *American Motorcycle Association v. Superior* Court, 20 Cal.3d 578, 586-590, 146 CaLRptr. 182, 578 P.2d 899 (1978); *Tucker v. Union Oil Co. of California,* 100 Idaho *590,603* P.2d *156, 166* (1979); *Johnson* v. *Billor,* 109 Mich.App. 578,311 N.W.2d 808,810

adopted comparative fault systems which apportion an individual defendant's liability based on that defendant's causal responsibility.320/ However, even in those states, a tortfeasor still may be liable to the plaintiff if the other tortfeasors cannot pay their share.321/ The issue of contribution among tortfeasors thus arises when one defendant pays more than that defendant's share of the common judgment.322/

Courts use two basic methods for determining a party's equitable share. Some courts follow the equality rule, under which damages are apportioned equally among the joint tortfeasors.323/ Other courts use comparative contribution, which seeks to apportion damages according to the party's respective fault.324/

There is much variation in the way different states approach contribution.325/ Some jurisdictions still preclude those who commit intentional torts from recovering contribution,326/ while other states permit contribution.327/ This distinction will probably have little effect in the ATMS context since liability is likely to arise from negligent, rather than intentional, conduct.

There also is the question whether a tortfeasor who has settled with the plaintiff may seek contribution from other tortfeasors. Some statutes refuse to permit contribution unless a judgment has been rendered which fixes both liability and the amount of damages.328/ In other states, a tortfeasor who settles with the plaintiff may sue for contribution, although the settlor may have the burden of proof as to its own liability, the amount of damages and the reasonableness of the settlement.329/ In any event, the defendant must have been a tortfeasor and originally liable to the

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(1981); *Maday* v. Yellow *Taxi Co.,* 311 N.W.2d 849,850 (Minn. 1981); *Wisconsin Natural Gas Co. v. Ford, Bacon & Davis Construction Corp.,* 96 Wis.2d 314,291 N.W.2d 825, 834 (1980).

320/ See, e.g., Kansas Stat. Ann., § 60-258; Ohio Rev. Code § 2315.19(A)(2); Vt. Stat. Ann. Title 12, § 1036; Pa. Stat. Title 42 §7102.

321/ *But* see, Cal.Civ.Code §§ 1431 .1-1431.2 (defendant in personal injury, property damage or wrongful death action is only liable for amount of noneconomic damages allocated to that defendant in accordance with percentage of fault).

322/ *Prosser and Keeton On Torts, supra, § 67* at 476.

323/ *See, e.g., Lincenberg* v. *Issen,* 318 So.2d 386, 393-94 (Fla. 1975); *Sanchez v. City of Espanola,* 94 N.M. 676,615 P.2d 993,995 (App. 1980).

324/ *See, e.g., Tucker v. Union Oil Co. of California, 603* P.2d at 164-165; N.D. Cent. Code § g-10-07; Vernon's Am. Tex. Civ. Stat. Art. 2212a § 2.

325/ The discussion that follows relies heavily on *Prosser and Keeton On Torts, supra, § 50* at 338-339.

326/ *See Anderson v. Local Union 3, Intern. Brotherhood of Electrical Workers, AFL-CIO,* 751 F.2d 546,547-548 (2d Cir. 1984) (contribution not awardable to defendant who violated Title VII of 1964 Civil Rights Act); see *also Turner v. Kirk-wood,* 49 F.2d 590, 595-596 (10th Cir. 1931), cert. *denied, 284* U.S. 635,52 S.Ct.l8,76 L.Ed. 540 (1931).

327/ *See, e.g., Judson v. Peoples Bank& Trust Co. of Westfield,* 17 N.J. 67, 110 A.2d 24,36 (1954), *aff'd, 25* N.J. 17, 134 A.2d 761,770 (1957).

328/ *See, e.g., Harger v. Caputo, 420* Pa. 528,218 A. 2d 108, 111 (1966); *Moris v. Kospelich, 253* La. 413,218 So2d 316, 317 (1969).

329/ *See, e.g., Farmers Mutual Auto insurance Co. v. Milwaukee Auto. Insurance Co., 8* Wis.2d 512, *99* N.W.2d 746,750 (1959); *Clemmons v. King, 265 N.C.* 199,143 S.EPd 83,87 (1965); *Consolidated Coach Corp. v. Burge, 245* Ky. 631,54 S.W.2d 16,18 (1932).

plaintiff.3301 Therefore, where the contributing defendant is not liable, as where an absolute defense applies, that defendant is not liable for contribution.

Third, some states have good faith settlement statutes or procedures which alter the usual rule that a defendant released from liability by virtue of a release or covenant not to sue is not released from contribution. Such statutes usually preclude contribution from a defendant who has settled "in good faith" with the plaintiff.331/ Of course, the remaining defendants should be entitled to a reduction in damages equal to the amount paid by, or the proportional negligence of, the settling defendant.332/

Although the risk of liability for ATMS entities is not g reat, an understanding of the basic principles of contribution is helpful.333/ Should litigation arise, contribution will have a significant impact when the parties consider settlement and litigation strategy. Moreover, by providing for indemnity in contracts (see discussion below) and anticipating issues of how liability should be apportioned before accidents occur, those involved with ATMS may be able to avoid litigating contribution issues.

2. Indemnity

Indemnity is generally defined as an obligation resting on one party, the indemnitor, to make good a loss or damage that another party, the indemnitee, has incurred.3341 Classically, indemnity refers to reimbursement in full of one who has discharged a common liability -- a complete shift of damages.335/ Thus, in product liability situations, product sellers may be indemnified by product manufacturers, because, while the seller is technically a liable party in the claim of distribution, the manufacturer is actively or primarily responsible for the product's defect.336/

330/ *Rees v. Dallas County, 372* N.W.2d 503,505 (Iowa 1985)

331/ *See* Cal. Code Civ. Proc. *§ 877.6; American Motorcycle Association v. Superior Court, 20* Cal.3d at 604; *Tech-Built, Inc.* v. Woodward-Clyde & *Associates,* 38 Cal.3d 488,213 Cal.Rptr. 256, 698 P.2d 159 (1985); *see also Donovan* v. *Robbins,* 752 F.2d 1170 (7th Cir. 1985) (discussing "settlement bar" rule). Good faith settlement statutes and procedures may also preclude seeking implied indemnity from a defendant who settles in good faith. See, e.g., Cal. Code Civ. Proc. § 877.6; *Bay Development Ltd. v. Superior* Court, 50 Cal.3d 1012, 1028-1032, 269 CalRptr. 720, 791 P.2d 290 (1990) (good faith settlement bars claim for implied contractual indemnity but not a claim for express contractual indemnity).

332/ See, e.g., Yost v. State, 640 P.2d 1044, 1048 (Utah 1981); Rogers v. *Spady,* 147 N.J. Super. 274,371 A.2d 285, 287 (1977); *Bartels v. City of Williston, 276* N.W.2d 113, 121 (N.D. 1979).

333/ There are other contribution issues beyond the scope of this paper. For instance, liability insurers who have paid plaintiff's judgment and have become subrogated to the claim can usually sue for contribution. See, e.g., Coble v. *Lacey,* 257 Minn. 352, 101 N.W.2d 594, 600 (1960); *Hudgins v. Jones, 205* Va. 495, 138 S.E.2d 16, 31 (1964).

334/ See *Phoenix Ins.* Co. v. *United States* fire *Ins.* Co., 189 Cal.App.3d 1511, 1526,235 CalRptr. 185 (1987).

335/ *See, e.g., Green v. United States Department of Labor, 775* F.2d 964,971 (8th Cir. 1985); *Hillier v. Southern Towing Co.,* 714 F.2d 714 (7th Cir. 1983); *Pension Benefit Guaranty Corp. v. Oumiet Corp.,* 711 F2d. 1085 (1 st Cir. 1983), cert. *denied,* 664 U.S. 961, 104 S.Ct. 393, 78 L.Ed.2d 337 (1983). indemnity must be distinguished from contribution, which refers to the distribution of loss among tortfeasors.

336/ See for example situations where an employer is vicariously liable for his agent's tort *[Canadian Indemnity Co. v. United States Fidelity & Guaranty Co.,* 213 F.2d *658* (9th Cir. *1954); insurance*

Indemnity may also apply even where a party is not free from fault, as where the party negligently relies on the due care of another.337/ An ATMS manufacturer may have to indemnify a retailer of its goods who incurs liability as a result of negligent reliance upon the manufacturers proper care.

Some courts have described a right to indemnity where the indemnitee is guilty of mere "passive" as opposed to "active" negligence, although it appears that this difficult distinction is being eroded.338/ Indeed, with the advent of comparative fault, this distinction may disappear completely.339/

Indemnity arises from one of two general sources. First, it may arise from an express contractual provision which establishes in one party a duty to hold another party harmless under certain circumstances.340/ Second, it may be implied from equitable considerations involving contractual language not specifically dealing with indemnification or from the equities of a particular case.341/

Generally, if there is a right to indemnity, as where a contract provides for indemnity, contribution rules and statutes will not apply.342/ Thus, ATMS sellers, distributors and information providers may be able to alter contribution rules by including express indemnity provisions in their contracts with manufacturers or others. Contribution rules also would not apply where implied equitable indemnity requires one party to fully reimburse another.

Contribution and indemnity principles will allow the developers, distributors and retailers of ATMS products and services to redistribute much of the cost of lawsuits arising out of those products and services at least as long as the manufacturers have the resources to pay the judgments. To transfer the cost, however, they may still have to incur substantial legal fees (which may not be reimbursable). Accordingly, private entities should anticipate these issues at the contractual stage and include contract provisions providing for express indemnity in situations where another entity will be primarily responsible in the event of any accidents or where one party is in a better position to take the precautions necessary to avoid an accident. Such contractual

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Co. of North America v. State farm Auto. insurance Co., 663 P.2d 953,955 (Alaska 1983)], or where an automobile owner is liable for the drivers wrongdoing. *Fountainebleau Hotel Corp. v. Postal,* 142 So2d 299, 300 (Fla. App. 1962); *Traub v. Dinzler, 309 N.Y. 395,* 131 N.EPd 564, 567 (1955).

337/ *See, e.g., Fireside Motors, Inc. v. Nissan Motor Corp., 395* Mass. 366, 479 N.E.2d 1386, 1390 (1985); *Tromza v. Tecumseh Products Co., 378* F.2d 601 (3rd Cir. 1967) (Distinguishing between primary and secondary liability of two parties each responsible for plaintiffs injury).

338/ *See Heinrich v. Peabody International Corp.,* 510 N.E.2d at 891.

339/ *See* Brochner *v. Western insurance Co., 724* P.2d 1293, 1299 (Colo. 1986).

340/ *See, e.g., General Elevator Co. v. District of Columbia,* 481 A.2d 116, 117 (DC. App. 1984); *Smith v, Clark Equipment* Co., 136 III.App.3d 800, 91 Ill. Dec. 520, 483 N.E.2d 1006, 1009

341/ *giFL:g., Say Development Ltd.,* v. *Superior* Court. 50 Cal.3d 1012, 1032-I 033,269 CalRptr. *720,791* P.2d *290* (1990); *Farmers Cooperative Co. v. Stockdales' Corp., 366* N.W.2d 184, 186 (Iowa 1985).

342/ *See, e.g., Melicha v. Frank, 78* S.D. *58, 98 N.* W.2d *345, 346-47* (1959); *Weis v. A.T. Hipke & Sons,* 271 Wis. 140,72 N.W.2d 715,717 (1955).

provisions will allow the parties themselves to determine how liability should be distributed, including the responsibility to pay the often enormous costs of defense.343/

Not only will clearly drafted contractual provisions permit a rational shifting of costs, but they will allow the parties to proceed with the introduction of ATMS products and services with more certainty and confidence about their exposure to damages for losses and injuries resulting from such products. Equitable indemnity, while still a viable claim in many instances, does not provide the same certainty.

L. Impact Of Insurance Coveraae

Indemnity provisions are only as good as the depth of the indemnitor's pocket, and indemnity contracts are not likely to transfer the liability of manufacturers. Modern product liability jurisprudence assumes that deep pockets such as manufacturers and sellers of consumer goods are able to insure against the risk of product liability judgments and settlements. The availability of reasonably priced insurance for ATMS manufacturers, sellers and information providers will have at least some impact on the willingness of the private sector to develop and utilize ATMS technology.

Comprehensive general liability policies ("CGL") usually provide coverage for negligence and strict liability resulting in "bodily injury" or "property damage," as those terms are defined in the policies. While insurance policies vary, the 1988 form drafted by the Insurance Services Office, Inc. 's344/ defines "bodily injury" as "bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time." Any product liability actions alleging death or any type of bodily injury caused by an accident involving ATMS will fall within this definition. Likewise, damage to automobiles and the loss of their use comes within the standard definition of "property damage." 345/ Comprehensive general liability policies consequently will be responsible generally for payment of damages or settlements, and usually for defense costs, as a result of product liability suits alleging bodily injury or property damage.

Not all cases alleging bodily injury or property damage involve covered claims, however. In many states and under the language of most comprehensive general liability policies,346/ coverage is not permitted where the insured is said to have

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343/ As discussed below, the government could also provide indemnity for ATMS developers, manufacturers, and information providers to encourage their involvement in building in ATMS.

344/ The Insurance Services Off ice ("ISO") is the insurance carriers' arm which drafts standard policy language for use by insurers across the nation. *Fireguard Sprinkler Systems v. Scottsdale Ins.* Co., 864 F.2d 648, 652 (9th Cir. 1988).

345/ "Physical injury to tangible properly, including all resulting loss of use of that property." 1988 IS0 Commercial General Liability Coverage Form.

346/ The standard policy requires that the alleged injury arise from an "occurrence," defined as "an accident... which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured." The carriers contend that this policy provision limits their responsibility to defend or indemnify their insured, and the issue is unresolved. E.g., *United States Pacific Ins.* Co. v. *McGuire* Co., 229 Cal.App.3d 1560, 1566 n.2, 281 Cal.Rptr. 375 (1991).

"expected or intended" to cause harm by engaging in willful or intentional conduct. The correct interpretation of this phrase varies from state to state.347/

The insurers contend, and some courts have agreed, that if the manufacturer should have known that its conduct would cause injury, then the harm was expected or intended and no duty to defend or indemnify applies. In City of Carter Lake *v. Aetna Cas. & Surety Co.,* 348/ the Eighth Circuit found that City of Carter Lake expected the repeated failures of its sewage pump to cause property damage if the city knew or should have known there was a substantial probability that the pump would malfunction. However, even that court noted that insurance would not be denied merely because the damage was reasonably foreseeable. 349/ Under this pro-insurer standard, it is possible that an ATMS manufacturer could discover that its insurance coverage does not extend to product liability actions involving a particular defect or malfunction, if it could be found that the manufacturer knew or should have known that there was a substantial probability that the system was defective and could cause injury. ATMS manufacturers and sellers should take great care in purchasing insurance to obtain adequate and complete coverage.

The states also are split as to whether an insurer can indemnify punitive damage awards -- a not uncommon result of a product liability trial. Twenty-five states permit indemnification of punitive damage awards in order to allow victims to receive greater compensation, to protect businesses from ruinous judgments, and to discourage vigilante justice. 350/ The balance of the states preclude indemnification of punitive damage awards on the ground that punitive damages will not serve to punish and deter egregious conduct if indemnified.351/ Even in those states which preclude coverage of punitive damage awards, the award may still be insurable if rendered in another state based on a standard of culpable conduct below that required to award punitive damages in the forum state. For instance, in *Continental Cas. Co. v. Fibreboard Corp.,352/* the court found that California law did not preclude the indemnification of a punitive damage award rendered in West Virginia because that award could have been based on mere reckless conduct, which is insufficient to award punitive damages in California.353/ The availability of insurance to pay punitive damage awards thus usually depends on which states' law applies to the interpretation of the defendant's insurance policy.

347/ *Peterson* v. *Superior* Court, 31 Cal.3d 147, 158-59, 181 CaLRptr. 642 P.2dd784, 1305 (1982) (permitting insurance for all forms of aggravated negligence): New *Castle County v. Hartford Acc.*

348/ *and Indem. 933 F.2d 1191 Cir.Co., 1162, (3rd 1991) (applying Delaware law).*

349/ 604 F.2d 1059 Cir.1052, (8th 1979).

Id. at 1058-1059.

350/ *E.g., Abbie Urigen Oldsmobile Buick, Inc. v. United States Fire Ins. Co.,* 95 Idaho 501, 511 P.2d *783, 789* (1973); *First Nat'l Bank v. Fidelity & Deposit Ins. Co., 283 Md. 389 A.2d 366228, 359,* (1978); *Hensley* v. *Erie Ins.* Co., 168 W.Va. 172,283 S.E.2d 227,233 (1981); *Lazenby v.*

351/ *Universal Underwriters Ins. 214 Tenn. 383Co., 639, S.W.2d 1, 5 (1964).*

E.g., City Products Corp. v. Globe Indemnity Co., 88 Cal.App.3d 31,39, CalBptr.151 474

352/ (1979).

762 F.Supp. 1368,1373 (N.D. Cal. 1991), *aff'd, 953* F.2d 1386 *(9th* Cir. 1991). *vacated and*

3531 *remanded for consideration mootness, of U.S.- -, 113 S.Ct. 399,121 L.Ed.2d 399 (1992).*

Id. at 1373.

Based on the current state of the law, ATMS manufacturers, distributors, retailers and providers of services should be able to purchase CGL policies which will cover many of the tort actions arising from ATMS-related accidents. The cost of such policies, however, depends on how the insurers rate the risk. As set forth above, that risk is not so great that the cost of insurance should be prohibitive.

IV. POSSIBLE LEGISLATIVE SOLUTIONS

Having discussed in detail the possible tort theories which could restrict the development of ATMS, we turn now to an analysis of some of the possible legislative alternatives which could limit or even eliminate some or all forms of tort liability for ATMS-related accidents. According to one study, investment decisions have been delayed or adversely affected by concerns about product liability exposure.3541 Depending on the severity of these adverse impacts, Congress could enact legislation which would greatly alters product liability law nationwide, and institute other tort law reforms to encourage the introduction of ATMS.3551

A. Preemption Of State Law Remedies

States individually could alter tort law, but the likelihood of enactment of relatively uniform reforms is remote at best. The most obvious federal legislative remedy to the patchwork of state tort laws is the enactment of **a** uniform set of federal laws which expressly preempt any state laws that impose more stringent requirements on ATMS manufacturers and sellers or on ATMS services.356/ No doubt many of those involved with ATMS products and services will favor such an approach, as they recognize the advantage of a single law governing their liability rather than 50 potentially different laws. Preemption provides business with the greatest amount of predictability of any legislative solution short of absolute immunity. On the other hand, states may oppose preemption as contrary to our federal system, which recognizes the rights of states to make public policy decisions regarding the imposition of tort liability. The public policy choice is for the Department of Transportation and Congress.

354/ K. Syverud, *Legal Constraints To The Research, Development, And Deployment Of IVHS Technology In The United States,* IVHS America Annual Meeting 418 (1993).

355/ Most of the following proposed solutions will combine legislation and regulation. Many will not be possible without some legislative change. To the degree it is within the Department of Transportation's current authority, the Department may be able to impose some of the solutions discussed below as a condition of disbursement of funds to states for use in ATMS development.

356/ Preemption may also occur impliedly, either because Congress has occupied the entire field or because of an actual conflict between federal and state law. However, should Congress desire to establish a nationwide law governing ATMS, it should draft legislation which expressly rather than impliedly preempts state common and statutory law to minimize litigation and inconsistent judicial interpretations. *See Cipollone v. Liggett Group, Inc.,* — U.S. —, 112 S.Ct. 2608,2617, 120 L.Ed.2d 407 (1992). The National Traffic And Motor Vehicle Safety Act of 1966, 15 U.S.C. §§ 1381 *et seq.,* for instance, has been interpreted by a few courts to expressly preempt state products liability law, and other courts are split as to whether preemption is implicit. See *Heath v. General Motors Corp., 756* FSupp. 1144, 1146-1150 (S.D. Ind. 1991).

B. Modifications In Strict Liability

Should the federal government preempt state laws, it will need to determine upon what basis and under what circumstances strict liability will be imposed. The most drastic legislative remedy would be simply to preclude victims from suing ATMS manufacturers or sellers under a strict liability or breach of implied warranty theory, limiting them to establishing negligence. The rationale for such legislation would be to encourage the development of ATMS by limiting the liability of ATMS companies to negligent design, manufacture, or failure to warn. The greater difficulties in proof inherent in negligence as compared to strict liability should have such an impact, while still encouraging ATMS companies to utilize due care. The contrary policy concern is that deserving injured plaintiffs will have more difficulty recovering damages. Considering the relatively low risk of strict liability being imposed on ATMS entities, however, preemption probably is unnecessary.

Alternatively, Congress could permit strict liability claims to be brought, but impose certain nationwide restrictions which would render them less attractive to victims and less costly to industry. For instance, should a court determine that the accident in question was the result of an openly obvious condition, then no liability would be imposed. Or Congress could model legislation on an array of state statutes governing the effect of compliance with federal regulations, either deeming such compliance to constitute a complete defense, or enacting rebuttable presumptions depending on whether such regulations were followed. Such laws would give ATMS manufacturers, designers and sellers substantial comfort, as they would be able to minimize their liability by ensuring compliance with federal standards. However, federal regulations would have to be comprehensive or issues would arise as to whether Congress preempted strict liability stemming from design features not expressly regulated.

Another approach would be to deem that state of the art evidence is admissible in a strict liability action, providing manufacturers with the opportunity to defend themselves by showing that their conduct **was** reasonable in light of industry knowledge. Or strict liability could be avoided if the plaintiff misused the product in question, even if that misuse was foreseeable. On the other hand, such an alteration in product liability law would be unnecessary if the federal government promulgated regulations which required manufacturers to take reasonable measures to counteract foreseeable misuses.

C. Modifications To Failure To Warn Theory Of Liability

Of lesser importance would be a legislative curtailment of potential liability for failure to warn (in negligence or strict liability) by mandating specified warnings for known hazards, and precluding states from imposing liability for failing to utilize a different warning. Case law indicates, however, that such legislation would have **to** be carefully drafted to preclude state product liability suits.

The mere fact that a federal agency promulgates regulations governing the content of warnings does not necessarily result in preemption. For instance, the

Food and Drug Administration promulgated regulations which detailed twenty items which must be included in warnings concerning oral contraceptives provided to patients.357/ Nevertheless, at least one court has found that drug manufacturers may still be liable for failure to include specific warnings of the risk of stroke.358/

In that case, the FDA did not mandate the precise wording of the warning. But even where Congress has required certain warnings, preemption does not necessarily result. In *Cipoilone* v. *Liggett Group, Inc.359/* the Supreme Court interpreted Congress' 1965 act prescribing a particular warning label on cigarettes as merely precluding states from requiring particular warning labels, but not precluding individuals from bringing damages actions.360/ While Congress' 1969 amendments to this law did preempt claims of failure to warn through advertising or promotional efforts, Congress failed to preempt such claims based on actions unrelated to advertising or promotion.361/ Construing Congress' law narrowly, the Supreme Court also refused to find preemption of common law claims for breach of express warranty, fraud, misrepresentation, and conspiracy.362/

These rulings do not indicate that preemption of failure to warn and other tort theories is impossible; only that any such legislation should be explicit in indicating , that no liability can be imposed whether in negligence, strict liability, or breach of warranty for failure to include a different warning label on the ATMS product than that mandated by federal law. Here again, however, the risk of liability on a failure to warn theory is sufficiently remote that such measures probably are unnecessary.

D. **Preclusion Of All Suits Aaainst The Private Sector**

A more drastic alternative is to preclude suits against the private sector entities involved in ATMS altogether, limiting victims to filing claims against the United States under the Tort Claims Act. The Atomic Testing Liability Act provides such an exclusive remedy against the federal government for injuries based on radiation exposure caused by a contractor who was carrying out an atomic weapons testing program under a contract with the United States.363/ The federal government adopted a similar approach in the 1970s to combat the Swine flu epidemic,364/ which withstood

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357/ 21 C.F.R. § 310.501.

358/ *MacDonald v. Ortho Pharmaceutical Corp, 394* Mass. 131,475 N.E.2d 65,71-72 (1985), cert. *denied,* 474 U.S. 920, 106 S.Ct. 250, 88 L.Ed.2d 258 (1965).

359/ — U.S. - I 112 S.Ct. 2606,2618, 120 L.Ed.2d 407 (1992).

360/ The 1965 legislation merely indicated that "No statement relating to smoking and health shall be required in the advertising of [properly labelled] cigarettes." 15 U.S.C. §§ 1331-l 340.

361/ The Supreme Court was influenced by the fact that the law stated that "No requirement or prohibition based on smoking and health shall be imposed under State law with respect to the **advertising or promotion** of any cigarettes the packages of which are labeled in conformity with the provisions of this Act.' [Emphasis added.)

362/ *Id.,* 112 S.Ct. at 2623-2625.

363/ 42 U.S.C. § 2212.

364/ The National Swine Flu Immunization Program, P.L. 94-360, amending section 317 of the Public Health Service Act, 42 U.S.C. § 247(b).

various constitutional challenges. 365/ The impetus for that law, however, was a concern for the public health caused by an outbreak of the flu and the refusal of the insurance industry to insure drug manufacturers who sold the vaccine.366/ The federal government should consider whether the adverse impact of fear of liability will sufficiently impede the development of ATMS to warrant such drastic measures. It is doubtful that it has.

E. Limitation On Amount And Type Of Compensatory Damages

Another possible legislative solution to the product liability explosion is to preclude liability nationwide for certain types of damages caused by ATMS-related accidents. The Death on the High Seas Act, for example, precludes recovery of non-pecuniary losses, such as loss of society or loss of consortium, in maritime wrongful death actions.367 To avoid unnecessary litigation, any such legislation should specifically enumerate the categories of damages (i.e., pain and suffering, funeral expenses, medical expenses, etc.) which are permissible.

A less drastic alternative would be a federal limitation on the amount an injured victim could recover for such non-economic damages, such as pain and suffering and emotional distress. California undertook this approach to medical malpractice claims in 1975 by enacting the Medical Injury Compensation Reform Act (" MICRA"),368/ which provides a cap of $250,000 for non-economic damages in medical malpractice actions against health care providers. The courts held that this statute does not violate the plaintiffs equal protection guarantees because the statute was supported by a rational basis -- the insurance crisis engendered by the explosion of 'medical malpractice cases with stupendous damage awards.369/ Juries are not informed of the cap so that their awards will not be influenced by its existence,370/ and any reduction of damages for the plaintiffs comparative fault is made before the cap is applied.371/ Similarly, the Warsaw Convention372/ provides a limitation on the amount of damages an injured passenger on an international flight can recover from an airline because the then-fledging airline industry was perceived to need a boost.373/

The advantage of this type of cap is the predictability it provides business. ATMS companies would know that no matter how many lawsuits are filed against them

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365/ *Sparks v. Wyeth Laboratories, Inc.,* 431 F.Supp. 411 (W.D. Okl. 1977); *Wolfe v. Merrill National Laboratories, Inc., 433* F.Supp. 231,236-37 (M.D. Tenn. 1977).

366/ *Wolfe v. Merrill Nat. Laboratories, Inc.,* 433 FSupp. at 233.

367/ *46* U.S.C. *0 762; Leland v. Western Oceanic, Inc.,* 755 F.Supp. 718 (W.D. La. 1991).

368/ Cal. Civ. Code § 3333.2.

369/ *Hoffman v. United States, 767* F.2d 1431, 1436 (9th Cir. 1965); Flores *v. Natividad Medical Center,* 192 Cal.App.3d 1106, 1116, 236 Cal.Rptr. *24* (1967); *Fein v. Permanente Medical Group,* 38 Cal.3d 137, 158 211 Cal.Rptr. *366,695* P.2d *665* (1965), *appeal dismissed, 474* U.S. 692, 106 S.Ct. 214,86 L.Ed.2d 215 (1965).

370/ *Schiembeck v. Haight,* 7 CalAppdth 669, 9 CalRptrPd 716 (1992).

371/ *McAdory* v. Rogers, 215 Cal.App.3d 1273, 1261,264 Cal.Rptr. 71 (1969).

372/ 49 U.S.C. § 1502.

373/ *Transworld Airlines, Inc. v. Franklin Mint* Corp., 466 U.S. 243, 104 S.Ct. 1776, 80 L.Ed.2d 273 (1964).

for ATMS-related accidents, their liability is limited.374/ On the other hand, severe injustice could be rendered if the cap is too low, particularly given the serious injuries which automobile accidents can inflict.375/ Moreover, if the risk of liability is low, then damage caps are not needed.

F. Limitations On Punitive Damage Awards

While compensatory damages, as inexact as they may be, are based upon the principle that the injured victim deserves compensation for his or her injuries, punitive damages are intended merely to set an example and punish the tortfeasor for its wrongful conduct. Punitive damage awards consequently may be exponentially larger than the compensatory damages. Moreover, there is no requirement that any particular court consider the amount of punitive damages a particular company has been required to pay for the same conduct. Companies such as Johns-Manville Company, manufacturer of numerous asbestos-containing products, have been held assessed for substantial punitive damage awards in numerous cases, each case justifying the amount in part on the total net worth of the company.376/ As Johns-Manville's decision to declare bankruptcy demonstrates, such multiple large punitive damage awards have a significant adverse impact on the companies.

Businesses have challenged such enormous verdicts as unconstitutionally depriving them of due process, so far without great success.377/ Recently, a plurality of the Supreme Court affirmed a $10 million dollar punitive damage award even though the actual damages were a mere $19,000.378/ A badly splintered court, however, had difficulty agreeing upon what standards should be applied to review punitive damage awards. Three justices declined to focus on the mathematical relationship between actual and punitive damages.379/ Justice Kennedy suggested focusing on the rationale for the particular punitive damages award in question, noting that evidence of the defendant's malice justified the massive award.380/ Justices Scalia and Thomas concurred in the result, but objected to creating any substantive due process right that

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374/ Congress also might seek to limit the amount of money attorneys can collect when representing plaintiffs on a contingency fee basis, in order to assure victims a minimum recovery. A similar proposal is part of President Clinton's health care reform legislation pending before Congress.

375/ Another approach exists in Indiana, which limits qualifying health care providers to paying $100,000 to victims of medical malpractice. Ind. Code § 16-9.5-2-1, 16-9.5-2-2. The maximum compensation which a victim can receive is $750,000, $650,000 of which is paid from a pool funded by fees paid by the health care providers. *Id.*

376/ *E.g., Cathey v. Johns-Manville Sales* Corp., 776 F.2d 1565, 1566 (6th Cir. 1965) ($1.5 million punitive damage award), *cert. denied, 478* U.S. 1021,106 S.Ct. 3335, 92 L.Ed.2d 740 (1966); *Hansen v. Johns-Manville Products* Corp., 734 F.2d 1036, 1039 (5th Cir. 1964) ($1 million punitive damage award reduced to $300,000 on appeal), *cert. denied, 470* U.S. 1051,105 S.Ct. 1750, 84 L.Ed.2d 614 (1965).

377/ *Pacific Mutual Life Ins. Co. v. Haslip,* 499 U.S. 1, 111 S.Ct. 1032, 1044-1045 113 L.Ed.2d 1 (1991) (upholding punitive damages more than four times compensatory damages).

378/ *TX0 Productions Corp. v. Alliance Resources Corp.,* — U.S. —, 113 S.Ct. 2711, 125 L.Ed.Pd 366 (1993).

379/ *Id.,* 113 .S.Ct. at 2721-2722 (Rehnquist, Blackmun and Stevens, J.J.).

380/ *Id.,* 113 S.Ct. at 2725-2726 (Kennedy, J., concurring).

punitive damages be reasonable.381/ Three justices dissented, criticizing the plurality for "erect[ing] not a single guidepost to help other courts find their way through this area."382/

The case, *TXO Productions Corp.* was extremely disappointing for business, for it provides no relief from the threat of punitive damage verdicts greatly out of proportion to the actual damages suffered. While additional cases may eventually lead to some judicial restrictions on punitive damages,383/ it seems safe to predict that unless legislative solutions are adopted the threat of large punitive damage verdicts will continue.

Assuming punitive damage awards meet constitutional restrictions, the federal government can limit their applicability to ATMS in a number of ways. If state laws are preempted, federal law can establish a stringent standard for the imposition of exemplary damages. The plaintiff can be required to prove fraud, malice, or other egregious behavior rather than mere recklessness. The burden of proof can be heightened beyond the normal preponderance of the evidence to "clear and convincing" evidence384/ or even "beyond a reasonable doubt."385/ Alternatively, Congress could limit the award to a particular multiple of the compensatory damages, such as Connecticut's law restricting punitive damages in product liability actions to twice the amount of other damages.386/

If these limitations are inadequate, the federal government could entirely prohibit awards of punitive damages. For instance, the Labor Management Relations Act of 1947 permits any person injured by reason of an unfair labor practice to sue for damages sustained,387/ and the courts have interpreted that language to limit damages to compensatory damages.388/

G. Statutes Of Limitations

As the law currently stands, each state has its own statutes of limitations governing the time in which an injured person can bring a suit to recover damages for injuries sustained. In California, victims have only one year to bring suit,389/ whereas in Arkansas, they are allowed three years.390/ In Arizona, a strict liability claim can be

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381/ Id., 113 S.Ct. at 2726-2726 (Scalia, J., concurring).
382/ Id., 113 S.Ct. at 2731-2732 (O'Connor, J., dissenting).
383/ See also, *William* Dunn V. HOVIC, et al., No. 91-3837 (3d Cir. 1992) (pending due process challenge to repeated punitive damage awards).
364/ Ohio Rev. Code Ann. § 2307.60 (1969); Cal. Civ. Code § 3254.
385/ Colo. Rev. Stat. § 13-25-127(2).
386/ Conn. Gen. Stat. § 52-2406.
387/ 29 U.S.C. § 187(b).
388/ *E.g., Austin Co. v. International Broth. of Elec. Workers, Local* No. *701,665* F.Supp. 614, 617 (N.D. Ill. 1967). The Consumer Products Safety Act, 15 U.S.C. § 2072, also limits damages for violations of that Act to "sustained damages," which likewise excludes punitive damages. *Baas* v. Hoye, 766 F2d 1190, 1196 (8th Cir. 1965).
389/ Cal. Code Civ. Proc. § 340(3).
390/ Ark. § 16-56-105.

brought for twelve years, 391/ whereas in Texas and Ohio the litigant is barred after only two years.392/ Given these variations, plaintiffs are encouraged to forum shop for jurisdictions with the longer statutes of limitations. To prevent forum shopping and add predictability, the United States could enact **a** uniform statute of limitations to govern personal injury or property damage actions, whatever the cause of action, brought in any state based on the use of ATMS services or products.

H. Joint And Several Liability

Joint and several liability can also be modified by federal law. In California each defendant in an action for personal injury, property damage or wrongful death, is liable only for the amount of non-economic damages allocated to him in direct proportion to that defendant's percentage of fault.393/ Non-economic damages are defined in that law as constituting pain and suffering, emotional distress, loss of society and companionship, loss of consortium, and injury to reputation and humiliation.394/ Adopting a similar law nationwide would have the effect of limiting the potential liability of IVHS contributors whose responsibility for a given accident is relatively small, while encouraging that innocent victims receive compensation for lost wages, funeral expenses, and medical expenses even if one or more of the joint tortfeasors becomes. insolvent. But if the number of cases is small and the verdicts low, such reforms would not be necessary.

Another issue ripe for legislative intervention is the collateral source rule. In many states the plaintiff is entitled to double recovery because evidence of payments received from sources "collateral" to the wrongdoer, such as money paid by insurers, pension plans, medical plans, Social Security, and federal or state disability programs, is inadmissible.395/ However, some states exempt Social Security or Medicaid payments from the collateral source rule. 396/ One permits introduction of payments of Social Security, state or federal disability payments, workers' compensation benefits, and medical or dental benefits in actions against health care providers for professional negligence.3971 Congress could expressly provide that payments received from some or all of these sources would be deducted from any recovery for injuries received in an ATMS accident, thereby precluding double recoveries.

I. Indemnification By Federal Government

Statutory indemnification provided by the federal government could provide an important limitation on the potential liability of those providing services and

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391/ Ariz. Stat.§12-551.
392/ Tex. Civ. P. Rem. Code § 16.003; Ohio Rev. Stat. § 2305.10.
393/ Cal. Civ. C.§1431.2.
394/ *Id.,* § 1431.2(b)(2).
395/ *E.g., Helfend v. Southern Calif. Rapid Transit Dist.,* 2 Cal.3d 1, 10- 1 85 CalRptr 173,465 P.2d 61 (1970); Minn. Stat. § 546.36(1).
396/ Minn. Stat. § 348.36(1) (exempting Social Security and pension benefits); Fla. Stat. § 766.76 (exempting Medicaid payments).
397/ Cal.Civ. Code $3333.1 (a).

products based on ATMS technology and encourage them to become involved in the development of ATMS. Such indemnification could take at least two different forms.

First, the federal government could follow the model of 49 U.S.C. section 1519 which indemnifies any person who publishes a chart or map for use in aeronautics from any claim, or a portion of a claim, which arises out of such person's depiction on such map of any defective or deficient flight procedure or airway, if such flight procedure or airway was promulgated by the FAA, accurately depicted, and not obviously defective.398/ Similarly, the federal government could enter into agreements to indemnify entities involved in the development, manufacture and sale of ATMS products or the provision of ATMS service from any claim or portion of a claim that arises out of ATMS, unless the claim arises from a manufacturing defect. Before undertaking such a broad indemnity obligation, the government might require that ATMS products and services undergo tests to determine whether they are reliable and safe. The government might also require that the products and services conform to certain specifications provided by the government or that they have certain operational characteristics that the government deems necessary in order to effectuate a national policy on ATMS development.

Second, Congress could provide for certain levels of federal reimbursement to private entities involved with ATMS for liability payments that exceed a defined amount. The private entity would still be responsible for maintaining insurance coverage from a private company up to a limit established by statute. The government would agree to indemnify the private entity for damages exceeding the required amount of insurance up to a designated amount. Congress has provided such an indemnification scheme for nuclear power facilities399/ and for satellite owners and launch companies.400/

Indemnification by the federal government is probably not necessary for the development of ATMS because of the limited potential for accidents caused by ATMS products and services.

J. Mandatory Alternative Dispute Resolution

Although litigation arising from ATMS may be relatively sparse, ATMS developers may be concerned about the potentially high cost of litigating claims arising from ATMS products and services. Defense costs, including attorneys' fees, are a significant expense which will be taken into account by companies deciding whether to

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398/ A search found no cases yet decided under § 1519.

399/ Price-Anderson Act, 42 U.S.C. § 2210. There have been no nuclear accidents that have required the federal government to provide indemnity to nuclear facilities.

400/ Commercial Space Launch Act, 49 U.S.C. §§ 2601-263. The indemnity provided by the government has apparently encouraged companies to proceed with the development and launching of private satellites. K. Syverud, *Liability and insurance implications of IVHS Technology,* University of Michigan Law School, SAE Technical Paper 901507 (1990). At least one court has upheld the Act's mandatory waivers. *Martin Marietta Corp. v. INTELSAT, 763* FSupp. 1327 (D. Md. 1991).

become involved in ATMS.401/ Alternative procedures for resolving disputes can lower litigation costs and streamline the process of resolving claims.

Congress could, for instance, provide that claims arising from ATMS be submitted to binding arbitration under the rules of the American Arbitration Association or a similar group. All those who use ATMS services or purchase ATMS products could be required to agree that they will submit any claims arising from their use of such services and products to binding arbitration. Courts would likely uphold such an arbitration agreement absent coercion since arbitration clauses are highly favored.402/ A better solution would be for Congress to mandate arbitration for all claims arising from ATMS technology, products or services, so that bystanders and passengers also would be bound to pursue arbitration. Congress could cite the compelling need for expeditious and inexpensive dispute resolution in the context of ATMS in order to justify taking such cases out of the court system.403/

Mandatory arbitration could provide several advantages, including: quicker results; shorter and less costly trial proceedings (e.g., the Rules of Evidence may be relaxed); the ability to select the arbitrator and determine his or her qualifications; greater privacy; and finality. On the other hand, arbitrators may be more . likely to compromise and split liability; there is limited discovery or pretrial law and motion, unless expressly provided for by the parties or by the statute creating mandatory arbitration; there is no jury; resolution is not always speedy; and there are limited grounds for judicial review from a judgment confirming an arbitration award.

Other alternative dispute resolution procedures that are worth exploring in this context are mediation, which involves a neutral third party who seeks to help parties settle claims (but who cannot issue a final judgment), and private judging, which is similar to arbitration except that there may be a right to full appellate review.404/

Alternative dispute resolution procedures provide the advantage of a potentially less expensive and more efficient way of resolving claims arising from ATMS. On the other hand, they would deprive those who suffer injury as a result of ATMS products, technology and services of recourse to the court system, which provides a long standing and well established mechanism for resolving disputes from automobile

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401/ It is doubtful whether the federal government would be willing to reimburse companies for the costs of litigating claims arising from ATMS, even if the government provides some indemnity for damages

402/ See, e.g., Moses H. Cone Memorial Hospital v. Mercury Const. Corp., 46 U.S. 1,24, 103 S.Ct. 927, 941-942, 74 L.Ed.2d 765 (1963).

403/ States have required mandatory arbitration in certain circumstances. For instance, in California, a party potential liable for a clean-up of released hazardous substances may be able to request mandatory arbitration under certain circumstances. Cal. Health & Safely Code, §§ 25356.2-25356.3. Also in California, lawsuits for $375,000 or less by a public works contractor against a local agency must be referred to mediation and, if not resolved, submitted to non-binding judicial arbitration; a party demanding a trial *de novo* may be ordered to pay attorneys' fees if it receives a less favorable judgment. Cal. Public Contract Code, § 20104.4; see Cal. Public Contract Code, § 10240.

404/ See, e.g., Cal. C. Civ. Proc. § 636 (providing for a reference of a case to a court-appointed referee).

accidents. Thus, proposals for alternative dispute resolution could spark opposition from consumer groups and plaintiffs' lawyers concerned about fairness. Given the unlikelihood that ATMS will spark thousands of lawsuits, mandatory alternative dispute resolution may be unnecessary.

IV. CONCLUSION

ATMS will provide the means to monitor traffic conditions, communicate with drivers, respond quickly to traffic incidents, and make dramatic strides toward increasing traffic flow. Since ATMS will not result in a shift of control of vehicles from drivers to products, the potential tort liability of manufacturers and designers of ATMS products, while real, should not impede the development of ATMS. The various legislative measures discussed above, therefore, probably are not required for the federal government to encourage ATMS development but may be helpful.