PRODUCT LIABILITY IN AVIATION

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Introduction

The area covered by product liability in the broadest sense is so vast that an attempt to analyse all its impact on the aviation world risks going far beyond the scope of this book. Every effort has been made to confine our review of the subject as closely as possible to its place in air law and its influence on aircraft manufacturers, airlines and passengers, in spite of strong connections with other spheres of commercial activity. A brief look at past developments will invariably touch upon these close links, But that is indispensable for a better understanding of modern trends.

Our review is largely based on American practice and American case law. This is not surprising as the idea of product liability originated in the United States.

How is the term 'product liability' to be defined or interpreted? There is more than one answer to that question. It is generally agreed that product liability is the liability resulting from damage caused by defective products. A broader definition is by Hursh,[1] reading as follows: Product liability is 'the liability of a manufacturer, processor or non-manufacturing seller for injury to the person or property of a buyer or third party caused by a product which has been sold'.

There are three grounds for a successful product liability lawsuit: (1) defective design; (2) defective construction; (3) inadequate instructions for handling a product put on the market. Whenever a product turns out to be defective after it has been sold, there are under Anglo-Saxon law two remedies available against the manufacturer: (1) breach of warranty; (2) tort.[2] It is worth pointing out here that an action for breach of warranty is available only to the direct purchaser on the basis of his contract with the manufacturer, which of course weakens its range and effectiveness. An action for tort offers the advantage of being available also to third parties who have acquired the defective product at a later stage. In tort, obligations are constituted not only by contract, but also by statute and common law;

This point is illustrated by Duintjer Tebbens.[3] He focuses in particular on the obligations affecting professionals suppliers of goods and services. Some obligations are usually created by their sales contracts, but others are imposed by law to enhance the general standards of craftsmanship and thus to protect the public at large from inferior or defective products, not only the direct purchaser.

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With an increasing number of court cases on their hands American judges and legal critics soon recognized that aircraft manufacturers bore a legal responsibility for product safety and reliability standards similar, or at least comparable, to those imposed by law on manufacturers of ordinary consumer goods. This trend of thought gained a foothold even in California, the home base of giant aircraft industries.

Martin quotes as an early, typical example of product liability in aviation the 1973 case of *Maynard v. Stinson Aircraft*.[4] In this case a passenger was awarded damages when she suffered injuries caused by an aircraft catching fire. The manufacturer was held by the court to have been negligent in the design of the aero plane on two counts. Firstly, the 'exhaust stacks' were too short to discharge the hot exhaust gases free and clear of the body of the aeroplane; secondly, the carburettor drain design was such that gasoline escaping from it was likely to accumulate on the underbody of the aeroplane where it was ignited by the exhaust gases.

The Warsaw Convention

The original text of the Warsaw convention may conveniently be examined first in terms of its applicability, and we note immediately, in Article 1,that it applies only when the transportation is international (although many nations apply its rules also to transportation within their borders.)Another notable element is that the Convention is applicable to all international carriage of persons, baggage or goods for reward. Note that by its nature the Warsaw Convention only applies to carriers; a law suit against e.g., an aircraft inspection service is not subject to the rules of the Convention.[5] Gratuitous carriage by aircraft is also covered by the Convention, but only when performed by an air transport company. Other gratuitous carriage is not included. The reason why an exception has been made for carriage by an air transport company is that free tickets are usually issued with the intention of obtaining something in return, e.g., for propaganda purposes. Rules concerning gratuitous carriage, when it occurs, are normally to be found in domestic law.[6] In the case of *Grein v. Imperial Airways*[7] 'agreed stopping place' was defined as a place 'where according to the contract the machine by which the contract is to be performed will stop in the course of performing the contractual carriage, whatever the purpose of the descent may be and whatever rights the passenger may have to break his journey at that place'. It should be noted with regard to 'agreed stopping places' that it was deemed sufficient for them to be referred to, for instance, in the time tables of the carrier, even if they had not been specifically mentioned in the documents.[8] In the same case it was ruled that 'an intermediate place at which the carriage may be broken is not regarded as a "place of destination".

The international character of the contract is determined b y the intention of the parties as expressed in that contract.

The Liability of the Carrier under the 'Warsaw System'

Jurisdiction and Forums

The convention mentions four courts for submitting claims(Art.28):—

1. The court having jurisdiction at the place where the carrier is ordinarily resident (court of domicile);
2. The court having jurisdiction at that place where the carrier has his principal place of business;
3. The court having jurisdiction at the place where the carrier mainatains an establishment through which the contract has been made; and
4. The court having jurisdiction at the place of destination

The Evolution Towards Strict Liability

As early as 1916 an American court, recognizing the limited reach of the breach of warranty action, had opened the way for third party compensation.[9] According to that decision, however, the claimant still had a heavy burden of proof. He had to demonstrate[10]:

a. that the damage had been caused by a defect inherent to the product;
b. that the defect already existed when the product left the producer; and
c. that the defect was due to negligence on the part of the producer.

Although the judgment afforded slightly better protection to third parties, the resulting position was still not nearly satisfactory. No redress was available, for instance, in cases involving products of which the defective parts had not been manufactured by the manufacturer /defendant himself. The trend in favour of applying strict liability to manufacturers grew stronger and stronger in the United States, and finally, in 1963, it was adopted, for the first time in an american court, in the case of *Greenman v. Yuba Power Products*.[11] The court ruled that' a manufacturer is strictly liable in tort when an article he places on the market, knowing that it is to be used without inspection for defects, proves to have a defect that causes injury to a human being'. Not long afterwards the principle was formally incorporated in the Restatement (Second) of Torts.[12]

Under the new doctrine the claimant had to prove that the defect causing the injury existed at the time the product left the seller's hands. The seller was not held liable if the product had been made unsafe by subsequent changes. In practical terms, the law affecting aviation products had by now become a true reflection of the general product liability law. Yet, it was still not possible to sue successfully on the grounds of defective design regardless of all other circumstances, as is apparent from the case of *Bruce v. Martin Marietta and Ozark Airlines*.[13] An aircraft of the Martin 404 type, built in 1952 by martin-marietta, had been chartered to carry a Wichita State University team and supporters to a football match in Logan, Utah. On its way to Logan the aircraft crashed in the

colorado Mountains. As a result of the terrific impact the passenger seats broke loose from their attachments and were thrown against the bulkhead of the aeroplane, blocking the exit. Shortly after the crash, the aircraft caught fire, and the accident resulted in 32 out of the 40 passengers being killed. The manufacturers were sued for damages on three counts: 'negligence', 'implied warranty', and 'strict liability'. The court stated that an aircraft manufacturer was not liable for damage arising from the crash on the grounds just mentioned for alleged defects in the adequacy of the seat fastenings and the lack of fire protection in an aircraft built as long ago as 1952. There was nothing to indicate that the ordinary consumer would expect a 1952. There was nothing to indicate that the ordinary consumer would expect a 1952 vintage aircraft to have the safety features of one manufactured in 1970.

Moreover, the air carrier, who was the intermediate owner and seller of the aircraft, and who had not made any significant changes in it during its ownership, was not held liable for damages arising from the crash.[14] Thus, the manufacturers were exonerated because the 'design' was regarded as not being defective according to 1952 standards, the year adopted by the court as the basis of its decision.

The case of *Kay v. Cessna Aircraft*[15] provides an instance of adequate instructions playing a crucial role. The pilot of a Cessna Skymaster Model 337 had, quite unforeseeably, misused the aircraft by failing to follow the operating instructions in his 'Owner's Manual'. Had he done so, he would have received a warning prior to take off that one of the two engines was out of order. The Court admitted that the instructions could have been drawn up more clearly, but found that had the pilot followed them, he could have averted the accident. The pilot's failure to comply with the instructions was ruled to be not reasonably foreseeable by Cessna, who were exonerated. The manufacturer may, of course, be granted exoneration if he can demonstrate that the injuries suffered by the plaintiff were not caused by the defect. Contributory negligence on the part of the injured person will also constitute a valid ground for exoneration. The doctrine of strict liability has been continually extended. The whole evolution one may observe in American case law derives basically from a fundamental rationale, i.e. the need to ensure that the costs resulting from defective products are borne by the manufacturers who put such products on the market, rather than by the injured persons who are powerless to protect themselves. An overriding motive behind this consideration has been has been the fact that the manufacturer is able to arrange for insurance: he can spread his cost among the general public, because such expenditure can easily be offset by a modest price increase.

An important court decision to be quoted in connection with the new trend, but also containing significant qualifications, is the case of *Kaiser Steel v. Westinghouse Electric*[16] although not relating directly to aviation, its considerations make very interesting reading because they were to affect indirectly airlines suing aircraft manufacturers. The Court of Appeal found that 'although the California rule of products liability... encompasses) situations in

which the principles of sales warranty serve their purpose "fitfully at best", the role of products liability does not subsume the entire area of a manufacturer's liability for a defective product'. The Court further noted that tort law is often resorted to as a basis for recovery when sales law, such as the Uniform Commercial Code, does not afford adequate protection to the consumer. Therefore, in an attempt to promote the cost shifting rationale, the Court established the following test to determine whether or not to apply the doctrine of strict liability in a particular situation. It ruled that (strict) Product liability does not apply as between parties who:

1. deal in a commercial setting:
2. from a position of relatively equal economic strength;
3. bargain the specifications of the product; and
4. negotiate concerning the risk of loss.

The significance of the Kaiser decision is evident, considering the fact that the purchase of an aircraft usually involves two companies of relatively equal economic strength. The impact of the strict liability rule was considerably weakened as a result of the kaiser decision.

To illustrate the evolution that took place in practice let us examine a number of cases:

1. In 1964, the dependants of passengers killed in the crash of a Boeing aircraft near Rome sued the manufacturers on the ground of strict liability. proceeding were based in this case on the law of the State of Washington, The seat of the Boeing Corporation. The Issue of Boeing's negligence with regard to the design of a part of the aircraft was, however, decided in accordance with Italian law, because the wrongful act had occurred in that country. It is interesting to note here, incidentally, that never before in Italy had passengers' dependants sued an aircraft manufacturer, and there was no provision in Italian law dealing with matters of this nature. In this instance recourse had to be taken to an article in the Italian Civil Code dealing with the liability of the owner/driver of a vehicle for damage resulting from defective construction. the Court decided, in 1971, in favour of the dependants by granting them compensation.[17]
2. An even more dramatic illustration of the consequences of strict product liability is given in the crash of a Turkish Airlines DC-10 near Paris in 1974, where 346 people from more than 10 different countries lost their lives as a result of the catastrophe. Following take-off a door had burst open and the resulting explosive decompression had caused the floor to collapse. The facts made it clear that the manufacturers, Mc Donnell Douglas, were to blame. In addition, the modifications recommended by the Mc Donnell Corporation had not been carried out

> by Turkish Airlines on its aeroplane. In the ensuing proceedings, the manufacturers were sued on the basis of strict liability, the result being that they had to pay great sums of money in compensation for the losses suffered by heirs and dependants.[18]

An interesting point at issue between several authors authors needs to be mentioned here, namely the question as to what extent the aviation repair stations are liable. Do they incur strict liability, or are they liable only up to certain limits? The trend is for them to be held strictly liable, with no limits, for two reasons; repair stations are involved in the safety of the aircraft, and moreover, the insurance option is always available to them.[19] The accident created a stir due to the US Federal Aviation Administration issuing an 'Emergency Order of Suspension' which prohibited the operation of all US-registered DC-10 aircraft.[20] Also worth nothing is the fine incurred by British Midland Airways on 25 July 1996 for criminal negligence in maintaining one of its aircraft. A mechanic had omitted to replace certain oil valves in the engines and to test their proper functioning. Only the pilot's consummate skill brought the aircraft to a successful emergency landing saving the lives of all passengers and crew.

The Tenerife accident, which took place in 1977 and is the biggest disaster yet in aviation history, occurred as a result of a series of unfortunate circumstances happening almost simultaneously. In the first place there was a congestion of aircraft at Tenerife, waiting for departure after being diverted because las Palmas airport had been closed shortly before due to a bomb scare. Secondly, during the preparations for take-off visibility deteriorated considerably, so that the Pan Am and KLM aircraft were no longer visible to each other and had to depend entirely on radio contact. Thirdly, radio contact each other and had to depend entirely on radio contact. Thirdly, radio contact was hampered by messages between the control tower and both aircraft being exchanged simultaneously and being unclear. The fog caused Pan Am to miss the exit prescribed to leave the runway which was not marked by lights at that moment. Garbled radio messages caused the KLM pilot to assume that both route clear and take-off clearance had been given, so that he made what was in fact an unauthorized start, with fatal result. In the ensuing proceedings liability was conceded by the airline companies; the insurance companies have played an essential part in settling the claims out of court by fixing the sums of money to be paid by the parties involved, including the manufacturer of the aircraft (Boeing) and the Spanish Government.[21]

In a number of cases occurring rather more recently the influence of the *Kaiser/Westinghouse* precedent is already apparent:

1. *SAS v. United Aircraft* (1979). SAS filed a suit against United Aircraft seeking relief for property damage resulting from the failure of jet aircraft engines manufactured by United Aircraft. The contracts for the purchase of the engines provided for certain limited warranties, express

or implied, in addition to an exculpatory clause.[22] After considering the clause which had been incorporated in the contract of sale, the trial judge, following United Aircraft's petition for a summary judgment on all claims, granted SAS's claims based on warranty and tort, but denied the claims based on negligence. In confirming the trial judge's decision, the Court of Appeals ruled that because of the lack of public policy the doctrine of strict liability was not applicable in this case. The decision found strong support in the *Kaiser/Westinghouse* case.[23]

2. *Tokio Marine v. McDonnell Douglas* (1980). On 28 November, 1972, a DC-8 aircraft manufactured by McDonnell Douglas and owned and operated by Japan Airlines (JAL), crashed during take-off at Moscow, killing 52 passengers and seriously injuring 10 others. Tokio Marine, the insurers for JAL. sought relief from McDonnell for the loss of the aircraft, basing its action on grounds of strict liability. The Court of Appeals decided, however, that the doctrine of strict liability in tort was not to be applied in California in a case where the sales contract was between two large corporations, negotiating from a position of relatively equal economic strength.[24]

The Liability Convention of 1972[25]

The preliminaries

Work on the may issues raised by the problem of liability for damage caused by space objects started in 1959, when the ad hoc committee of the United Nations focused the attention on this issue as one of the problems suspectible of priority treatment.[26] In 1962 this initial move was given a follow-up by UNCOPUOS, which decided to set up a special subcommittee to examine the legal implications of space activities. Following the signing of the Outer Space Treaty in 1967 the legal sub-committee stepped up its activities, but it soon found itself faced with a host of problems of great complexity, requiring the most careful attention. Lengthy discussions ensued, causing the conclusion of a convention to be delayed. On 4th July 1969, however, the Japanese delegation was able to provide the sub-committee with a perfect test-case: just previously, on 5 June a Japanese cargo ship had been damaged off the coast of Siberia by fragments of a device launched into outer space injuring 5 sailors. Shortly afterwards important draft texts for a convention were submitted by Belgium, Hungary, India and Italy, and on 19 June 1971 the subcommittee was able to agree the text of a draft convention.[27] Within a few months, on 29 November 1971, the Liability Convention was adopted by the UN General Assembly, with 94 states voting in favour none against and 4 abstentions (Canada, Japan, Iran). At 1 January 2006, the Agreement had 83 states parties and was signed by 25 additional states. Moreover, 3international intergovernmental organizations made declarations on their acceptance of the rights and obligations arising from the Convention.[28] The convention contains 28 articles.

Enhancing Aviation Safety through the Rule of Law

Safety Obligations and fundamental norms

Are there obligations inter se on the basis of reciprocity or obligations toward the international community as a whole, namely, obligations erga omnes/Determination of this issue may have a bearing upon the enforcement of these obligations and ICAO's present and future role in the aviation community.

According to Simma, now a judge in the ICJ, traditional international law is essentially 'bilaterally minded'; it 'does not generally oblige States to adopt a certain conduct in the absolute, urbi et orbi, as it were, but only in relation to the particular state or states (or other international legal persons) to which a specific obligation under treaty or customary law is owed'.[29] In the words of the ICJ in its Reparation for injuries opinion, 'only the party to whom an international obligation is due can bring a claim in respect of breach'.[30] As Simma further observed. 'an injured State may also renounce such a claim unilaterally. In this case, third states will have no possibility to object to such a course of action'.

The development of contemporary international law has gone beyond traditional bilateralism and focused more on community interest. In its advisory opinion in the Reservations to the Genocide Convention case, the ICJ pointed out that in such a convention, 'the contracting States do not have any interests of their own; they merely have, one and all common interest, namely d'etre of the convention.[31]

In the Barcelona Traction case, the Court manifestly referred to this type of obligation as obligation 'erga omnes' 'towards all' in the following obiter dictum: 'an essential distinction should be drawn between the obligations of a state towards the international community as a whole, and those arising vis-à-vis another state in the field of diplomatic protection. By their very nature, the former are the concern of all states. In view of the importance of the rights involved, all states can be held to have a legal interest in their protection; they are obligations erga omnes.

Such obligations derive, for example, in contemporary international law, from the outlawing of acts of aggression and of genocide, as also from the principles and rules concerning the basic rights of the human person, including protection from slavery and racial discrimination. Some of the corresponding rights of protection have entered into the body of general international law others are conferred by international instruments of a universal or quasi-universal character.[32]

Crashworthiness

Apart from the aforementioned grounds for supporting claims, there is also the additional factor of 'crashworthiness' to be taken into account in court cases involving product liability.[33] Crashworthiness is a comparatively new element in the game, which has been defined in at least three different ways:

1. 'Crashworthiness is the characteristic of a vehicle which protects its occupants from death in a survivable crash and otherwise protects its occupants from injury or cumulative injury.'[34]
2. Crashworthiness is 'The ability of the aircraft structure to maintain living space for its occupants';[35] and
3. A lack of crashworthiness is 'a design that aggravates the injuries caused by the original accident'.[36]

The term 'lack of crashworthiness', for instance, was used in connection with a crash involving a United Airlines Boeing 727 near Salt Lake City in 1965, where the death of most of the passengers had been caused not by the impact itself, but by toxic gases and disabling smoke forming as a result of the cabin interior catching fire.[37] In a second case, the Tenerife accident of 1977 referred to earlier, it also played a role. The Boeing Corporation, being the manufacturer of the older Panam aircraft, paid 10 per cent of the compensation on account of insufficient crashworthiness and for not taking adequate measures to prevent damage by fire.

To complete the picture it is appropriate to summarize the various types of damage usually claimed from manufacturers. They have been aptly categorized by Coie as follows.

1. personal injuries resulting from an accident;
2. damage to property other than the aircraft arising from an accident;
3. damage to the aircraft arising from an accident or incident;
4. failure of the aircraft to meet the commercial expectations of the airline; and
5. the airline's damages for loss of use of the aircraft while it is being repaired or replaced'.[38]

With changing attitudes towards product liability strongly affecting the position of aircraft manufacturers and airline companies alike, the position of the passengers did not remain unaffected either. Indeed, one might go as far as saying that it improved considerably. In the past, these persons could only sue the carrier, and their claims had to be based on one of the international Conventions on air law, wbich often offered the disadvantage of imposing strict limitations of the extent of the liability for compensation. For a passenger to sue the manufacturer was virtually impossible because the burden of proof was too difficult.

The *Greenman* doctrine changed all this, and simultaneously the general attitude of American courts in the last few years became more favourable towards an extension of the rights of the ordinary consumer, including the airline passengers. Unlike the previous situation, in which the passenger had to prove negligence on the part of the manufacturer, he can now confine himself to

claiming that the product was defective at the time it left the manufacturer's hands and that the defect was the direct cause of the damage. There is no longer a need for him to prove fault. The manufacturer is liable even if he has taken all necessary precautions. The fact that products are so sophisticated nowadays that it is extremely hard for a passenger to prove his case against the manufacturer has undoubtedly played an important role in the recent changes. There is a tendency nowadays away from negligence as the main criterion for liability, and in favour of shifting the burden of compensation onto the shoulders of those best able to pay and to insure themselves, i.e., the persons or companies with 'deep pockets'.

Punitive Damages

While discussing liability and compensation attention should be given to the so-called 'punitive damages'.[39] What are punitive damages? Punitive damages are considered to be related to misconduct that is intentional, malicious, or consists of action or inaction that is so grossly willful, or indicates such a conscious and aggravated disregard of others that a jury could conclude that the conduct takes on a criminal character, regardless of whether it is punishable as an offence.[40] In the USA, they are occasionally awarded in civil cases by juries upon request by claimants when injury has been claimed and proved. They are subsequently added to the compensation to be paid. In this manner, manufacturers have had to pay enormous sums of money during the past few years. It must be pointed out in this context that in nea1y all states of the USA the standard of strict liability is being applied to product liability. French law has also adopted strict liability in such cases, while English, German, Dutch and Canadian law are not far behind. Manufacturers may, of course, resort to insurance: to my knowledge, no insurance policy excludes coverage for punitive damages.

Haskell[41] mentions three reasons for their origin, furnished by case law They may be summarized as follows:

1. the refusal of early (Anglo-Saxon) courts to grant new trials when excessive compensation had been awarded in cases involving some form of malice, oppression or fraud;
2. the courts' failure to recognize certain injuries (e.g., mental anguish) as a proper measurement of damages;
3. punitive damages became the vehicle to reimburse the plaintiff for darn- ages not otherwise legally compensable (e.g. litigation expenses).

It should be expressly recorded here that punitive damages are not awarded in connection with product liability only: they are equally applicable in relation to other liability cases. This practice is, however confined to the United States.[42]

Conclusion

In sharp contrast with the rulings of the American law courts, we note the opinions of experts who argue that product liability should really be based oil standards laid down in laws or regulations rather than leaving it to be decided case by case, which results in a multitude of varying standards.[43]

Regulations of product liability on a national level have been devised in a number of countries, like the Model Uniform Product Liability Act in the United States.[44] Not being directly relevant to our subject they will not be considered here further. As for international rules, we must point out at once that no universal treaty or convention has been adopted by the international community of nations as yet. There are, however, agreements of a slightly more restricted range, such as the Strasbourg Convention of 1977, sponsored by the Council of Europe, which covers product liability in case of personal injury or death.[45] In addition, there is the Hague Convention of 1973 on the Law Applicable to Products Liability, which traces its origins back to the Hague Conference on Private International Law.[46] The Hague Convention is aimed at unifying rules of reference and rules of conflict, i.e., creating a body of rules determining which law shall be applicable to the substance of a given relationship. The Convention does not apply, however, to cases where the injured person has acquired the product directly from the liable party. The motive behind this important exception was that the Convention was not supposed to clash with another Convention, namely the Hague Convention on the Law Applicable to International Sales of Goods.[47]

Finally, the European Economic Community has, for its part, also published some regulations in a 'Proposal for a Council Directive relating to the Approximation of the Laws, Regulations and Administrative Provisions of the Member States concerning Liability for Defective Products'. An Amendment to this proposal was adopted on 26 October 1979 widening the definition of 'damage' to include damage for pain and suffering and other non-material damage. Moreover, indemnity ceilings for total liability were made to include 'damages related to death and personal injury.[48]

Endnotes

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5. See *Compania Panamana de Aviacion v. Gerstein*, 3rd D.C. App. Florida, 1994; 645 S.2d 55. *See*, however, also section II-C of this chapter, *infra*.
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16. *Kaiser Steel Corp. v. Westinghouse Electric Corp*., 55cal. App. 3d 737; 127 Cal. Reptr. 838 (1976).
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18. See for this case Re Paris Air Crash, US District Court, Central District of California, 1 August 1975, 14 Avi 17, 207; US District Court, Central District of California, 10 February 1977, 14 Avi 17,737 see also Judge Peirson M. Hall's ' Memorandum on the Choice of the law re Damages re Paris Air Crash' (399 F. Supp. 732 (D.C. Cal. 1975)) and his extensive

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20. See Larry S. Dushkes, 'The Chicago Convention; FAA's Action Barring Foreign Carriers' DC-10 Aircraft in US Airspace Held Improper' Air Law, Vol. VII (1982), pp. 92-104; Ghislaine Richard, 'The DC-10 Chicago Crash and the Legality of SFAR 10', Annals of Air and Space Law, Vol. VI, (1981) pp. 195-218.
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34. D. Donnelly. 'Aircraft Crashworthiness — Plaintiffs Viewpoint' [1976]. *JALC* 57—71.
35. *Glossary of Aeronautical Terms,* cited by G.I. Whitehead Jr., 'Some comments on aircraft crashworthiness' [1976] JALC 73—83, at *75.*
36. S.J. Levy, 'The Rights of the Passengers — A View from the United States', *Die.Produkihaftwig* (note 17, *supra), pp.* 77—89, at p. 85.
37. Levy (note 22, *supra),* at p. 85.
38. I.P. Coie, 'The present State of the Law in the United States from the Standpoint of Industry', Die Produkthaftung (note 17, *supra*), pp. 109—123, at p. 113.
39. See Ian Awford, 'Punitive Damages in Aviation Products Liability Cases', Air Law, Vol. X (1985), pp. 3—9.
40. D.M. Haskell, 'The Aircraft Manufacturer's Liability for Design and Punitive Damages—The Insurance Policy and the Public Policy', [1974] JALC 595—635, at 610.
41. Haskell, op. cit., at p. 609.
42. See however, In Re Disaster at Lockerbie, Scotland, US Court of Appeals (2nd Cire.), 22 March 1991; 13 Avi 17, 714; Air and Space Law, Vol. XVII (1992), pp. 317—318. In this case it was ruled that because the purposes for which the Warsaw Convention was created were not consistent with an award of punitive damages, such damages were not recoverable in actions governed by the Convention, even assuming that an air carrier committed wilful misconduct.
43. Cf. Duintjer Tebbens (note 3, *supra*), at p. 41 *et seq*.
44. See, on this Act. R.R. Craft Jr.,'La responsabilité des fabricants en droit Américain', [19811 RFDA 21—37 and also the various contributions in [1981] JALC 349—479 ('Special project—The Model Uniform Product Liability Act').
45. European Convention on Products Liability in Regard to Personal Injury and Death, Strasbourg, 27 January 1977. See, on this Convention, Duintjer Tebbens (note 3, *supra*), pp. 143 *et seq*.
46. The Hague Convention on the Law Applicable to Products Liability, The Hague, 2 October 1973. See Duintjer Tebbens (note 3, *supra*), p. 333 *et seq*.

47. Convention on the Law Applicable to International Sales of Goods. The Hague, 15 June 1955. See also the Final Act of the 13th Session of the Hague Conference on Private International La Netherlands International Law Review (1976), Vol. XXIII p. 404.
48. See, for this proposal, OJ 1976 C.24l/9 and Bulletin of the EEC Supp. 11/76. See for the 1979 amendment OJ 1979 C.27l/3. See for the text of the final Directive: OJ No. L210 of 7 October 1985. See, on this Directive, J.M. Fobe, Aviation Products Liability and Insurance in the EU, 1994. See also C. Mannin, 'The effects in aviation of the EEC Directive on product Liability', Air Law, Vol XI (1986), pp. 248—252. See also I.H.Ph. Diederiks-Verschoor, 'Product Liability and Insurance on Aircraft and Satellite', in The Utilization of the World's Airspace and Free Outer Space in the 21st Century, 2000, pp. 197—207.

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