Aviation Products Liability and Insurance in the EU

Legal Aspects and Insurance of the Liability of civil aerospace products manufacturers in the EU, for damage to third parties.

Jean-Michel Fobe

Kluwer

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by Jean-Michel Fobe

Licentiaat in de Rechten
Licence Spéciale en Droit Maritime et Aérien
LL.M.

Lawyer, Member of the Brussels (N) and Paris Bar

Kluwer
Law and Taxation
Publishers
Deventer ▪ Boston
1994

Kluwer Law and Taxation Publishers
P.O. Box 23 Tel.: + 31 5700 47261
7400 GA Deventer Fax: + 31 5700 22244
The Netherlands

Distribution in the USA and Canada
675 Massachusetts Avenue
Cambridge, MA 02139/USA
Tel.: + 1 617 354 0140
Fax: + 1 617 354 8595

ISBN 90 6544 8497

ABSTRACT

Civil aerospace products manufacturers in the EU may, as in the USA, be called into litigation as co-defendant following an aircraft accident by the victims or their dependents. As opposed to the airlines, their liability is not limited by international conventions.

This book examines their liability and insurance in case of damage to third parties after the entry into force of EEC Directive 85/374 on liability for defective products. First, a brief description will be given of the evolution of the aerospace industry in Europe and its governmental regulation through certification. In the second part we will examine the evolution of product liability in Europe. The main focus will be on the Directive. After a discussion of aspects of conflict of laws and enforcement of judgments, the particulars of aviation products liability in Europe will be looked at. Finally, we will consider aviation product liability insurance.

RESUME

En Europe, comme aux USA, les constructeurs aéronautiques peuvent être poursuivis comme co-responsables par les victimes ou leurs ayants droit en cas d' accident d' avion. Contrairement aux transporteurs leur responsabilité n' est pas limitée par des conventions internationales.

Ce livre étudie leur responsabilité et assurance en cas de dommage aux tiers après l' entrée en vigueur de la Directive CEE 85/374 concernant la responsabilité civile produits. D' abord nous examinerons l' évolution de l' industrie aérospatiale en Europe et son contrôle gouvernemental par la voie de la certification. La deuxième partie concerne l' évolution de la responsabilité civile produits en Europe et en particulier la Directive. Après une discussion des aspects du droit international privé et de l' exécution des jugements, les particularités de la responsabilité produits aéronautiques seront analysés. La dernière partie traite de son assurance.

ACKNOWLEDGEMENTS

This book would not have been possible without the kind assistance of several people and organizations. They have given generously of their time and support.

In particular, I am indebted to Professor Peter Haanappel whose advice, suggestions and criticisms have been most helpful. I would like also to thank Jacques Verwilghen of Aviabel, Jean-Pierre Vlérick of Sabca, Geoff Shumann of Aecma, Hektor Kerr Smiley of Bowring Aviation, Peter Madge of Willis Corroon, Jean-Michel Gicquel of La Réunion Aérienne, the directors and staff of AAU, USAIG, The Rand Corporation of Civil Justice, the partners and staff of Beaumont and Son in London, and all the others who gave me access to their documentation. The cooperation and assistance I received from the staff of the Law Library of the McGill University and the Katholieke Universiteit Leuven was also very appreciated.

My final words of appreciation are certainly due to my wife Vinciane for her patience and constant encouragements. This book is dedicated to her and our two little daughters Aurélie and Séverine.

The manuscript was finished on 30 August 1993. Since then some evolutions took place which could not all be included in this book[1]. Errors and ommissions are of course mine and I would welcome constructive suggestions and commentaries which would contribute to enhancing later updated editions.

[1]Most importantly: the entry into force on 1 January 1994 of the Treaty establishing the European Union, further referred to as EU, signed in Maastricht on 7 February 1992 (OJEC C 224 of 31 August 1992), and the very recent implementation of EEC Directive 85/374 by Spain on 7 July 1994.

LIST OF ABBREVIATIONS

ABC	Aircraft Builder's Council
AAU	Associated Aviation Underwriters
AECMA	Association Européenne des Constructeurs de Matériel Aéronautique
AIOA	Aviation Insurance Offices Association
BCAR	British Civil Aviation Requirements
CAA	Civil Aviation Administration
CII	Chartered Insurance Institute
DGAC	Direction Générale de l' Aviation Civile
ECAC	European Civil Aviation Conference
ECU	European Currency Unit
EEC	European Economic Community
EU	European Union
ESPLS	European Space Products Liability Scheme
FAA	Federal Aviation Administration
FAR	Federal Aviation Requirements
GAMA	General Aviation Manufacturers Association
ICAO	International Civil Aviation Organization
ICCAIA	International Coordinating Council of Aerospace Associations
JAA	Joint Aviation Authorities
JAR	Joint Aviation Requirements
LAUA	Lloyd's Aviation Association
LBA	Luftfahrt-Bundesamt
MNCP	Minor Component Parts (Scheme)
OJEC	Official Journal of the European Community
RLD	Rijks Luchtvaart Dienst
SBAC	Society of British Aerospace Companies
UK	United Kingdom
US	United States (of America)
USAIG	United States Aviation Insurance Group

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I. Introduction

A. THE EUROPEAN AEROSPACE INDUSTRY

1. From Small National Entities to Multinational Consortia

Since the early days of aviation some European pioneers have evolved like their counterparts in the United States and elsewhere from enthusiastic homebuilders to businessmen heading huge industrial entities. Over the years the structure of the industry has changed with progressive assimilation of most of the numerous small companies into today's large enterprises which trade on the world market. This evolution has both responded to and contributed to the steady and sometimes dramatic growth in the role of aviation in the economy and society in Europe[2]. This was also parallelled with a steady growth over the last 30 years in the practice of transfrontier cooperation between European companies for the development and production of advanced aerospace products.

In the aeronautical field the manufacture of aircraft and helicopters in Europe reached the point already some time ago where no major development was being undertaken which did not involve cooperation across frontiers[3]. To illustrate this we have reprinted hereafter a table from the EEC Commission on the main cooperative aircraft programmes in the past ten years with the participating companies[4]. They include both military and civil applications.

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[2]Commission of the European Communities, Toward a programme of Strategic Measures in Aeronautical Research and Technology for Europe, *COM(88) 294 final*, Brussels, 7 June 1988, p. 2.

[3]For a detailed discussion on cooperation in the civil aerospace industry *see* : G. Joucla, *La Coopération Internationale dans les Industries Aéronautiques Européennes, Paris, Librairie Générale de Droit et de Jurisprudence*, 1971; W. Spreen, *International Cooperation in the Aerospace Industry : Objectives, Structure, Performance, thèse doctorale auprès de l' Institut d'Administration et de Gestion, Université Catholique de Louvain*,1986 [unpublished]; K. Hayward, *International Collaboration in Civil Aerospace* (London: Frances Pinter(Publishers), 1986).

[4]COM(88) 294 final Annex A.

TABLE 1: The main cooperative aircraft programmes in the EU

	AS	AMD-BA	AIT	BAe	CASA	DORNIER	FOKKER	MBB	SABCA	OTHERS
CIVIL AIRCRAFT										
Airbus A300/310/320/330/340	●			●	●	●	●	●	●	
ATR 42/72	●		●							
Concorde	●			●						
Fokker F.27/Fo-50, F.28/Fo-100		●					●	●	●	●
MILITARY AIRCRAFT										
Jaguar		●		●						
Tornado			●	●				●		
Alpha Jet		●				●			●	
EFA			●	●	●	●		●		
Transall	●							●		
Atlantic -1/-2	●	●	●			●	●		●	
HELICOPTERS										
Puma	●								●	●
Gazelle	●									●
Lynx	●									●
EH 101									●	●
HAP - HAC/PAH 2	●							●		●
NH 90	●						●	●		●
A129 LAH					●		●			●

OTHERS: SHORTS AGUSTA WESTLAND

The latest successes of the European Space Agency and Arianespace with the Ariane launcher and in particular Ariane 4 at a time that the Space Shuttle was grounded have also shown the capability of European cooperative space ventures.

The European Aerospace Industry employs some 480,000 persons and has a consolidated turnover of about ECU 50,000 million, more than a nine-fold increase since the early 1970s[5]. The exports of the European Aeronautics Industry outside Europe represent 30 per cent of turnover (the figure for the aircraft sector alone is about 40 per cent). The average ratio of R&D expenditure to the European Aerospace Industry turnover is near 15 per cent. The US industry ratio however is markedly higher, at about 25 per cent. (These values are based on 1985 data.)[6].

For fifteen years, between 1965 and 1980, the European Aerospace industry grew continuously at the international level. Its relative weight against the American aerospace industry regularly increased. In 1965 the value of the European production represented only 18 per cent of the American. This figure increased to 20 per cent in 1970, 39 per cent in 1975 and culminated in 1980 with 52 per cent. From this year on with the rise of the US dollar against the European currencies (+ 82 per cent from 1980 to 1985) and, to a lesser extent, the important growth of the US military market (+ 67 per cent in constant dollars from 1980 to 1985), a downturn in favour of the US market has occurred with a low point in 1985 for the European aerospace production when it represented only 29 per cent of the US production. Since 1985, with the depreciation of the US dollar and the pause in the military budget, a new increase in the relative weight of the production of the European aerospace industry became was noticeable, with 43 per cent of the US production in 1987[7].

In the EU the aerospace production comes mainly from four countries : The United Kingdom, France, Germany and Italy. France and the United Kingdom have a similar weight in terms of turnover and are competing for the first place with each having approximately 30 per cent of the European production. The German industry is progressing regularly through its participation in almost every cooperative program with the French and British industries and its share is now approximately 25 per cent of the European production. Italy also develops its production steadily and arrives at a share between 8 and 10 per cent depending of the years. Three other countries, the Netherlands, Belgium and Spain - whose industry is the youngest - also have a notable production in this field and their development comes mainly from participation in international cooperative programs, but also in national programs eg. in the Netherlands : small commercial transport jets and commuters and in Spain : commuters and trainers.

The production is divided into four technical sectors :

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[5]US figures are respectively 0,95 million persons and an equivalent industry turnover in ECU of 82,775 million; numbers taken from: Commission of the European Communities 'The European Aerospace Industry - Trading Position and Figures 1992'.

[6]Euromart Study Report, Executive Summary Published April, 1988 at 14.

[7]AECMA, European Industrial Outlook - Aerospace Industry (Paris : August 1988) at 3.

1) airframes (aircraft, helicopters and missiles) for 49.2 per cent of the total in 1986
2) engines 17.6 per cent
3) equipment (mainly electronic and hydraulic) 27.8 per cent
4) space products (launchers and satellites) 5.4 per cent

Another major division is the *military sector* v. the *civil sector*. Although the production of military equipment is largely dominant, its importance is decreasing relatively from 70 per cent in total production in 1980 to 64 per cent in 1986 due to the growth of the civil production. The European military aerospace production consists mainly of fighter aircraft (Tornado, Mirage F1 and 2000, Harrier), trainers (Alfajet, Hawk), military helicopters and missiles of various natures.

In the civil sector the comeback of the European industry on the world markets is really the most significant fact of the last decades. In the mid 70s, the European production was only marginal with 5 per cent because of its absence in the field of the narrow bodied jet aircraft. Airbus Industries, created in 1970, has with the A300 and the A310 created a strong niche in the world market of the wide bodies, the large civil airliners, previously dominated by the US manufacturers[8]. The combined expertise and industrial strength of the Airbus partners - Aerospatiale, MBB, British Aerospace, CASA, and associates Belairbus and Fokker - established a very high reputation for quality in the airline industry, with technical innovation. The introduction of the smaller 150 seat airliner A320 in commercial operation with Air France and British Airways in April 1988 and total sales and commitments for more than 500 aircraft is confirming the market penetration of the European industry. With the start of the programs for the A330 and the A340 in the spring of 1987 the Airbus family will also be able to compete on the market for the large intercontinental airliners. In 1991 Airbus delivered 25 A-300, 19 A-310 and 119 A-320, thus securing about 1/5 of the world market for large commercial transport aircraft by numbers delivered. In terms of orders, Airbus had nearly 25 per cent of the market (in numbers of aircraft). By mid-1992, the Airbus order book amounted to 837 aircraft, made up of 88 A300, 48 A310, 335 A320 144 A321, 143 A330 and 115 A340.

Despite the success of the Airbus consortium, the United States is still the unchallenged leader in the world aerospace market: the whole of the European aerospace industry produces less than the four leading American manufacturers. However, this domination became somewhat attenuated during the 1980s: the value of American production fell from 326 per cent of European production in 1982 to 238 per cent in 1991, owing to the slowdown in American sales of military equipment coupled with the growth in European civil production[9].

In July 1990 the Commission of the European Communities adopted a communication on the European aircraft industry. This formed part of the industrial policy approach as defined by the Commission in its Communication on industrial

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[8]For a detailed history of Airbus Industrie *see* : L. Bogdan, *L'Epopée du ciel Clair - de Lindbergh à l'Airbus, Paris, Hachette*, 1988.

[9]Figures taken from the draft of 'Panorama of the EC Industry 1993 - Aerospace' at 2.

policy in an open and competitive environment of November 1990. It that document it stressed the importance of the completion of the internal market and its implications for companies' structures in connection with an increase in competition on the international market. The Commission considers that the aircraft industry is an important industrial sector considering in particular the considerable opportunities opened up by this industry for the transfer of technologies to other industrial sectors. A second Communication was adopted in April 1992[10]. Herein the Commission noted that the aircraft industry has to cope with structural adjustment problems, after a period of sustained development and that despite enormous efforts, at both national and European level, the European aircraft industry is still suffering from the effects of excessively long partitioning of its industrial structures, particularly in the equipment sector.

In response to the Commission's second communication the *Association Européenne des Constructeurs de Matériel Aérospatial*[11] (AECMA) produced a position paper: The European Aeronautical Industry Towards the 21st Century[12]. According to AECMA the industry is confronted by great opportunities and major challenges. Part of the challenges arise from factors internal to the industry. External developments are, however, not less important like the changing East-West relationship and consequent changes of defence forces levels; changes in the international framework for regulating state aids and tariffs applied to aeronautical products resulting from US pressures and the growing influence and scope of European Community laws and measures in the context of the Single Market.

[10]Commission of the European Communities, The European Aircraft Industry: First assessment and possible Community actions, *COM(92) 164 final*, Brussels, 29 April 1992, p.1.

[11]*See* discussion of AECMA and its structure hereunder at I.A.2.

[12]*Association Européenne des Constructeurs de Matériel Aérospatial*, The European Aeronautical Industry Towards the 21st Century, AECMA/23396/92.

2. AECMA and the National Trade Organizations

The '*Association Européenne Des Constructeurs De Matériel Aérospatial*' is an association under French Law. It was created in 1950, first under the name of AICMA - *Association Internationale des Constructeurs de Matériel Aérospatial* - but since 1973 under its current name and, after a review of its regulations in 1974 to highlight its more specific European vocation, with the aim of establishing a direct forum for senior management in the European Aerospace Industry to discuss subjects of mutual concern and interest. Its membership comprises the national aerospace trade associations from nine European countries[13]. The members of these national associations are the domestic aerospace manufacturing companies in each country and therefore it can be submitted that AECMA is representing the entire European Aerospace manufacturing industry.

The objective of the Association is to promote the development of the Aerospace Industry in Europe by making it more competitive as a whole, and by trying to create, for its benefit, a domestic European market. To meet this objective the Association studies all the problems linked with this, aiming to find solutions and define strategies which will benefit mutually all its members. It represents its members before all qualified bodies, and especially before European Union authorities. Its activities at the world level are conducted mainly through ICCAIA[14] and at ICAO[15].

The Association's decision making body is its Board of Directors, which is responsible, ultimately, for reviewing work programmes and initiating new studies for AECMA to undertake. The Board members are the AECMA President and Vice-Presidents, and the Presidents of the National Associations.

The three principal industrial sectors, Engine, Airframe and Equipment are represented individually in Sectoral Groups which meet to discuss issues relevant to their representative sector. A Coordinating Committee facilitates a liaison between the Sectoral Groups. AECMA has approximately ninety working bodies, grouped into Commissions, Committees and Working Groups. Only a brief description of the activities of the most important commissions can be given hereafter.

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[13]The AECMA member National Associations are : for Belgium, GEBECOMA (*Groupement Belge des Constructeurs de Matériel Aérospatial*); for Denmark, FDFF (*Foreningen af Danske Fabrikanter af Flymaterial*); for France, GIFAS (*Groupement des Industries Françaises Aéronautiques et Spatiales*); for Germany, BDLI (*Bundesverband der Deutschen Luftfahrt-, Raumfahrt- und Ausrustungsindustrie e.V.*); for Italy, AIA (*Associazione Industrie Aerospaziali*); for The Netherlands, NAI (*Netherlands Aerospace Industries*); for Spain, ATECMA (*Agrupacion Tecnica Espanola de Constructores de Material Aerospacial*); for Sweden, SAI (*Swedish Aerospace Industries*) and for The UK, SBAC (*Society of British Aerospace Companies*).

[14]ICCAIA is the International Coordinating Council of Aerospace Industries Associations. It groups together the aerospace industry associations of the United States, Canada, Europe and Japan.

[15]ICAO, the International Civil Aviation Organization.

Economic Commission (CE)

The Economic Commission of AECMA is responsible for studying economic, financial and administrative problems which arise at a European level as a consequence of international cooperation in the aerospace field. Product Liability is a particular concern within the Economic Commission and a working group constantly is monitoring developments in this subject. Their objective is to promote, via the responsible authorities and organizations and in liaison with other manufacturers, worldwide, a better protection of consumers' and manufacturers' interests where they are concerned in cases of air catastrophes. At the same time, a second group under the direction of the Economic Commission, is studying questions of industrial ownership of software and protection against unauthorized copies.

In 1968, the Economic Commission circulated amongst its members a Recommendation on 'The Administrative Clauses of International Contracts' for harmonizing the different national practices. It also circulated a study on 'The various Market Price Elements in European Aerospace Manufacture' to allow, as far as possible, a comparison of costs of production on the intra-European level. On 25 March 1975, the Economic Commission organised a Conference attended by Governments and Industry, on Product Liability of aircraft manufacturers and opened the dialogue with the national Governments, to whom it submitted the broad outlines of a plan covering 'catastrophe risks'[16]. In October 1977, the Economic Commission presented a 'Report' which was examined by a joint Government/Industry meeting held on 20 February 1979 in Paris, with the participation of all the AECMA countries. Following this meeting, the Economic Commission made contact with the qualified representatives from the European Aerospace Insurance Market, in order to know their point of view. A new joint Government/Industry meeting was held in Paris on 29 April 1981 with Insurance observers, based upon a new report giving the Insurers' position. Following this meeting a synthesis[17] stating the points of agreement and disagreement was issued, and a complementary report[18] agreed to be used as a new platform for discussions between Governments and Industry. In the mean time contacts were resumed with the Insurers, on the basis of a questionnaire[19].

The Economic Commission also in 1980 adopted a position on the 'Draft Community Directive on Strict Liability'. AECMA made its position on this Directive known to the European Communities Commission and asked that the Development risk be taken into consideration and that Limitation of Liability be

[16]Aecma 'Products Liability (Catastrophe Scheme)', October 1977, Recommendation n. CE/RC/77/7008/O/F et E/Rev. 1.

[17]AECMA doc. PC/ulr/11909/REV.1.

[18]Appendices 2 and 3 to AECMA doc. WBD/LSM/13262.

[19]Aecma doc. JA/BC/13024/2.