Liability of the operators and owners of aircraft for damage inflicted to persons and property on the surface

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Foreword

As the Chinese proverb says: 'the journey of a thousand miles starts with a single step'. I was fortunate in taking that first step in the Meijers Institute in the summer of 1997, which had just opened its doors at that time. The atmosphere of the institute, with its fine view of the Witte Singel and magnificent garden far more resembled a second home than an office. This was also largely due to its inhabitants, to whom I am very grateful for their patience in letting me distract them from their work.

In that respect I would like to thank all colleagues of the Institute and in particular my roommates Sharon Frank and Marten Zwanenburg. Barend Barentsen was an inspiring source of information on English novels and eccentric politicians. Saskia Westbroek proved a great friend and dining partner. Apart from sharing a room, Arine van der Steur and Myrthe Stolp also shared a sharp sense of humour, from which nobody was spared. Bregje Dijksterhuis shared an interest in movies and metaphysical matters. Martine Hallers was great to work with on a project on principles of proper accident investigation, particularly in our amusing interviewing sessions. Peter van Fenema was a great source of fun combined with air law. And last but not least, Lenie Chaudron was always there with great lunches, practical jokes, words of consolation, and cigarettes.

In relation to the subject of my thesis, I would like to thank Piet Swart for his help on international air law in this field and Onno Rijsdijk and Marijn Ornstein for their information on the legal aftermath of the Bijlmer air disaster. I am also indebted to Frans Husman for sharing his knowledge on insurance matters in the field of international civil aviation. Finally, I would like to thank Anne-Marie Krens for her swift and efficient manner in turning the manuscript into a book.

My friends have provided welcome forms of entertainment and escape. I am grateful to Frederik Heyman for his taped episodes of Seinfeld, David Cassuto and Nico Swart for taking me on their movie outings, and Marc Fraser for our holiday trips to the Dordogne. Jan-Koen Sluys was a special source of support, as he knew as no other what it takes to write a thesis. And finally, Floris Janssen van Raay could always put everything in the right perspective.

Finally, I am very grateful to my entire family for their love, support, patience, and encouragement to see the whole thing through and most of all to Bien, who had to endure it all on a daily basis.

The Hague, October 2003

List of abbreviations

AASL	Air and Space Law
ALR	Air Law Review / American Law Reports
BGB	Bürgerliches Gesetzbuch (German Civil Code)
BGH	Bundesgerichtshof (Germany)
BW	Burgerlijk Wetboek (Dutch Civil Code)
CC	Code Civil
CFR	Code of Federal Regulations
Colum. L. Rev.	Columbia Law Review
FAR	Federal Aviation Regulations
HR	Hoge Raad der Nederlanden
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICC	International Chamber of Commerce
IECL	International Encyclopedia of Comparative Law
IFALPA	International Federation of Airline Pilots Association
ILA	International Law Association
IMF	International Monetary Fund
JALC	Journal of Air Law and Commerce
JAR	Joint Aviation Requirements
JLR	Journaal Luchtrecht
LJIL	Leiden Journal of International Law
Luft VG	Luftverkehrsgesetz
NJ	Nederlandse jurisprudentie
NJB	Nederlands Juristenblad
NJW	Neue Juristische Wochenschrift
NTSB	National Transportation Safety Board
Rv.	Wetboek van Burgerlijke Rechtsvordering (Dutch Procedural Code)
SDR	Special Drawing Rights
TAQ	The Aviation Quarterly
ZLW	Zeitschrift für Luft- und Weltraumrecht

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1 Introduction

1.1 Aviation disasters and surface damage

On October 4, 1992, El Al Flight 1862 crashed into two apartment blocks in the Bijlmermeer, a residential area located 13 kilometres east of Schiphol airport. The aircraft, a Boeing 747 cargo-carrier, had taken off from runway 01L of Schiphol airport at 17.20 with three crewmembers and a non-revenue passenger on board. Approximately seven minutes after take-off, the inner engine of the right wing and its pylon fell off the wing and hit the outer engine of the right wing, which was subsequently torn off causing damage to the leading edge of the right wing. In the seven minutes that followed, the pilot attempted to return to Schiphol airport, but lost control of the aircraft around 17.35, the approximate time of the crash. The damage inflicted on the surface by the impact of the aircraft was enormous. Aside from the four people on board, approximately 44 people on the ground were killed. The two apartment blocks that were struck by the aircraft were partially destroyed at their point of connection by the impact of the aircraft and subsequent fire. Furthermore, the soil in the vicinity of the crash-site was polluted by a combination of airline fuel, oil, and combustion products from the aircraft and its freight.[1]

In order to determine its causes, various aspects of the accident were investigated by the Netherlands Accidents Investigation Bureau, specialists from the Aeronautical Inspection Directorate of the Dutch Department of Civil Aviation, and accredited representatives from Israel and the United States.[2]

The aircraft data revealed that the aircraft, a Boeing 747-200 Freighter Type 258F, had been built in 1979 and had been equipped with four engines manufactured by Pratt & Whitney. The aircraft had accumulated 45,746 flight hours and 10,107 flight cycles. The aircraft and its engines had been manufactured, maintained and inspected in compliance with the applicable regulations and requirements.[3] Furthermore, the applicable Airworthiness Directives (AD's)

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1 Raad voor de Luchtvaart – Netherlands Aviation Safety Board, Airline Accident Report 92-11, El Al Flight 1862, Boeing 747-258F 4X-AXG Bijlmermeer, Amsterdam October 4, 1992, at 5-9; hereinafter cited as Airline Accident Report 92-11.

2 Airline Accident Report 92-11, at 5.

3 The aircraft was manufactured in accordance with Federal Aviation Administration (FAA) type certificate no. A20W, as approved on 30-12-1969. Pratt & Whitney's JT9D-7J high bypass ratio turbofan engines had been certified by the FAA on 31-08-1976 with Type Certificate Data Sheet E20EA. The applicable maintenance and inspection requirements consisted of

had been implemented or were in the process of being implemented within the allowed time limits. Checks on the flight crew and weather conditions at the time of the accident revealed that neither had contributed to the accident. The probable causes were narrowed down to the design and certification of the pylon structure by which the engines of the aircraft were attached to the wing. According to the Netherlands Aviation Safety Board (*Raad voor de Luchtvaart*),

> The design and certification of the B 747 pylon was found to be inadequate to provide the required level of safety. Furthermore the system to ensure structural integrity by inspection failed. This ultimately caused – probably initiated by fatigue in the inboard midspar fuse-pin – the no. 3 pylon and engine to separate from the wing in such a way that the no. 4 pylon and engine were torn off, part of the leading edge of the right wing was damaged and the use of several systems was lost or limited. This subsequently left the flight crew with very limited control of the airplane. Because of the marginal controllability a safe landing became highly improbable, if not virtually impossible.[4]

Apparently, the fatigue crack in the outboard midspar fuse-pin had not been discovered during the final ultrasonic inspection of the pylon attachment points. The question whether the crack should or even could have been discovered was not resolved. The investigation of the crack by specialists of Boeing suggested that it could have been detected on the basis of its calculated depth of .14 inch. Perhaps not surprisingly, that assertion was contested by El Al.[5]

Aside from its causes, the effects of the Bijlmer aviation disaster were also considered by the Netherlands Aviation Safety Board. In a recommendation that is of particular relevance to this study, the Board held that the training of pilots and ATC personnel in handling emergency situations should not only take the safety of the airplane and its passengers into account, but also the risk to third parties, especially in residential areas.[6]

Aside from the Bijlmer aviation disaster, which ultimately even led to a parliamentary enquiry in the Netherlands, a number of other infamous examples of major aviation accidents involving damage to persons and property on the ground can be enumerated. These include the crash of an Antonov-124 cargo aircraft into an apartment building in Irkutsk, Siberia on December 6, 1997, in which 62 people were killed and the crash of a Concorde jet of Air

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the El Al Maintenance Program, the Boeing Maintenance Planning Document, the Maintenance Review Board Report and the El Al Engineering and Quality Control Division requirements and recommendations, *see* Airline Accident Report 92-11, at 11.

4 Airline Accident Report 92-11, at 46.

5 Airline Accident Report 92-11, at 30. *See also El Al Crash Report Raises Ground Safety Issue*, Aviation Week & Space Technology, 7 March 1994, at 38.

6 *See* Recommendation 4.10, Airline Accident Report 92-11, at 47.

France near the airport of Charles de Gaulle, Paris, on July 25, 2000. In the latter case, all 109 people on board as well as several people on the ground were killed when the aircraft struck a hotel.[7]

A number of infamous aviation accidents involving surface damage were deliberately set in motion, such as the Lockerbie disaster of 21 December 1988. In the Lockerbie disaster, Pan Am Flight 103, a Boeing 747-121A, exploded from a bomb above the Scottish town of Lockerbie. In the disaster, all 259 people on board as well as 11 people on the ground were killed. Furthermore, a number of houses of Lockerbie were partly or wholly destroyed by the impact of portions of the fuselage and wing structure of the aircraft.[8] But most strikingly of all, the gruesome terrorist attacks of September 11, 2001 on certain key targets in the United States come to everyone's mind. In these attacks, a death toll of thousands as well as a massive destruction of property was achieved by suicidal terrorists who steered American Airlines Flight 11 into the North Tower and United Airlines Flight 175 into the South Tower of the World Trade Center in New York, American Airlines Flight 77 into the Pentagon, and United Airlines Flight 93 into an open field near Shanksville, Pennsylvania.[9] The psychological, economical, political, and financial impact of these attacks has been astounding and the enormity of the damage suffered by the victims and their relatives can hardly be grasped let alone calculated accurately.[10]

This range of examples of major aviation accidents can serve as a grim introduction to this study, of which the objectives will be specified in the next paragraph.

1.2 OBJECTIVES OF THE STUDY

As has been illustrated by means of a number of major aviation accidents in the previous paragraph, aircraft are capable of inflicting substantial harm to third parties and property on the surface. The legal aftermath of such aviation accidents or incidents can raise questions on issues such as the applicable liability regime per implicated party, insurance issues, and the scope of the

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7 *See* D. Williams, *Toll Rises to 48 in Jet Crash Into Apartments in Siberia*, International Herald Tribune, 8 December 1997, at 1, 10, and S. Daley, *Continental Is Sued by Air France Over Concorde*, International Herald Tribune, 28 September 2000, at 2.

8 *See* the Accident Database of AirDisaster.Com for more details on the Lockerbie case.

9 *See Special Report War on America*, The Economist, 15 September 2001, at 15-19.

10 In a report made in the direct aftermath of the September 11 attacks, the global actuarial consultancy firm Tillinghast-Towers Perrin estimated that the financial impact on the insurance industry of the attacks would amount to approximately $30 to $58 billion, of which $5 to $20 billion was attributed to potential third-party liability claims, *see* Tillinghast-Towers Perrin, *September 11, 2001- Implications for the Insurance Industry*, 21 September 2001, at 2-11; *see also* J. Moore, *Lloyd's estimates losses for US attacks at £1.2bn*, The Times, 26 September 2001, at 28.

duty of care of potential defendants in relation to the potential claimants and recoverability of the damage inflicted by the accident or incident. Dependent on the circumstances of the case, potentially liable parties can include a wide range of persons or entities, such as the operator(s) or owner(s) of the involved aircraft, airline personnel, the producer(s) of the implicated aircraft and their components, maintenance companies, and air traffic control agencies.[11] Particularly in relation to aviation accidents caused by terrorists and/or explosives, the question of governmental or State responsibility or liability can even be raised, but prove difficult to resolve in practice.[12]

Fortunately, a growing trend to settle the majority of claims arising from major aviation accidents out of court can be observed.[13] However, the notion that swift settlements are arguably in the best interest of all parties concerned does not make the underlying liability regimes to which these parties are subjected unimportant or irrelevant. For such regimes can not only be used as valuable chips in the game of settlement negotiations, but can also serve as tools for instigating court procedures in cases where settlement procedures have failed. Especially in court the otherwise more obscured legal skeleton of the applicable liability regime will re-emerge from the cupboard and regain all the importance it may have lacked to a certain extent in cases that are swiftly settled. In short, liability regimes in this field are considered to be of importance, despite settlement trends.

This study will primarily focus on two main aspects of the legal aftermath of aviation accidents or incidents involving damage to third parties on the ground. These aspects are the third party liability regimes to which the operators or owners of aircraft are subjected under international, supranational, and a number of national laws on the one hand and the insurance or other security requirements imposed upon these entities for third party liability on the other hand. Why this specific attention for the third party liability regimes and insurance requirements imposed upon the operators or owners of aircraft?

First of all, the 'common sense' argument can be raised that operators or owners of aircraft involved in accidents or incidents involving damage to third

11 For an enumeration of the range of potential defendants and victims in the Bijlmer case *see* P.M.J. Mendes de Leon and S. Mirmina, *The International and American Law Implications of the Bijlmer Air Disaster*, 6 LJIL 111, at 111-114 (1993).

12 *See* H. Wassenbergh, *Beveiliging van de burgerluchtvaart en de economie van de luchtdienstexploitatie*, 5 JLR 110, at 117 (2002).

13 Since the Tenerife aviation disaster of 1977, in which 75% of all outstanding claims were settled through a joint settlement fund financed jointly by the liability insurers of the main defendants KLM, PanAm, Boeing, and the Spanish government, the joint funding approach has been applied succesfully by the aviation insurance community in a number of cases, including the Bijlmer accident, *see* J-M Fobe, Aviation Products Liability and Insurance in the EU 132-134 (1994). *See also* (on passenger claims handling) the ICC Explanatory Paper: Current Airline and Insurance Industry Practice in the Settlement of Liability Claims to Compensate Passenger Victims in Air Transport, Document no. 310/121-1/5 Rev. 4 of 23 June, 1995, at 3-9.

parties on the ground will always be implicated in the legal aftermath of such events as opposed to other potentially liable parties. For irrespective of the question whether the accident or incident was caused by birdstrikes, meteorological conditions, product defects, human errors, terrorist strikes, or combinations of such factors, the operators or owners of the aircraft involved will be implicated in the legal aftermath. This cannot be said of other potential defendants, as their potential involvement will depend on the specific causes of the accident or incident at hand. Producers of aircraft or aircraft components, for instance, will not be implicated in the aftermath of aviation accidents or incidents which are not caused wholly or partly by defective products, whereas the operators of such aircraft will be.

Secondly, the more legally founded argument for primarily focusing on the operators or owners of aircraft is threefold. Firstly, the current international liability regime in this field is deemed to be outdated and structurally deficient in a number of ways, as will be explored in more detail in this study. Secondly, a supranational European regime in this field is non-existent in terms of liability and in development in terms of insurance requirements. And thirdly, national regimes in this field are either non-existent or varying. Variety thus rules the field in abundance, which not only triggers the curiosity of the researcher, but also raises the more fundamental question if a more harmonized approach to third party liability and/or third party liability insurance regulation could not serve the interests of all parties concerned in a field which is so inherently cross-boundary. Why should there be structural differences in approach to third party liability regimes internationally, supranationally, and nationally when the effects of aviation accidents or incidents are so strongly comparable? Is the current plethora of rules in the field satisfactory or should more uniformity of legislation be reached on an international or supranational level in view of the often cross-boundary nature of aviation and in order to create a more level playing field for aviation in general? Should States in which regimes in this field are currently non-existing enact such specific regimes to cover the problem in absence of satisfactory international or supranational legislation in this field? Such questions will serve as the main point of departure of this study.

Although the stages of determination of liability and the subsequent determination of the scope of persons entitled to claim as well as scope of recoverable types of damage are intricately linked to one another, this study will focus primarily on the first stage of determination of liability. That choice is based on the notion that questions relating to damage law are not unique to the specific aftermath of aviation accidents or incidents. For similar questions on damage law will arise irrespective of the question whether damage is inflicted by an aircraft, spacecraft, tanker, car, or any other entity. To a slightly lesser extent the same argument can be put forward for not focusing extensively on questions of scope of duty of care under common law or of the *Schutznorm* under civil law, as those often elusive bridges between liability and subsequent

scope of persons entitled to compensation as well as recoverable damage are not unique to damage caused by aircraft. However, the latter problem will be dealt with in relation to the question to what extent the scope of duty of care or *Schutznorm* is effected by the applicable basis of liability of the regime at hand in this field. The rationale of this approach is to explore whether more stricter regimes of liability could be counterbalanced by a more narrow scope of persons entitled to claim as well as a more narrow scope of recoverable damage.

In order to address such core questions on regimes of third party liability and insurance requirements in this field, a number of general (sub-)questions have been formulated. These can serve as guidelines throughout the study, irrespective of the actual system of liability under investigation. These (sub-) questions are as follows:

1 Which range of conduct of aircraft can inflict which types of surface damage?
2 Which regimes can be codified to cover liability of operators or owners of aircraft for surface damage and what is the scope of such regimes?
3 Which entities and which types of aircraft are (or should be) subjected to such regimes?
4 Are (or should) such regimes (be) based on unlimited or limited liability?
5 Is (or should) third party liability insurance coverage or another form of security (be) compulsory for the operators or owners of aircraft?

1.2 Division of chapters

In Chapter 2, a theoretical outline of the problem of liability of the operators or owners of aircraft for surface damage will be given. The options of a 'fictitious' legislator for addressing the matter will be enumerated on the basis of the five (sub-)questions posed in the previous paragraph of this chapter. The theoretical outline can serve as an introduction to the actual liability and insurance regimes in force in this field that will be dealt with in this study. Those regimes can be divided into the international private air law regime of the Rome Convention of 1952 as amended by the Montreal Protocol of 1978, supranational European Community law specifying insurance requirements on third party liability, and a number of specific national liability regimes and insurance requirements in this field.

Chapter 3 will evaluate the Rome Convention of 1952 as amended by the Montreal Protocol of 1978 as well as the proposals made under auspices of the International Law Association to update these instruments. On the basis of this evaluation, a number of recommendations on the feasibility of these instruments will be made in general as well as on the manner in which they can be adequately modernized.

Chapter 4 will focus on a number of national liability regimes and national insurance requirements in this field in order to evaluate the underlying rationale for such regimes and insurance requirements. Furthermore, the current developments in European Community law in this field will be discussed in order to determine to what extent Community law can provide an alternative to the national laws of Member States.

Chapter 5 will deal with the developments in the United States, as most states within the United States have moved away from specific legislation in this field. The rationale for that trend will subsequently be analyzed and compared to the rationale for specific legislation. Furthermore, specific attention will be given to the complex legal aftermath of the terrorist attacks of September 11, 2001 in view of the impact of these events on both existing tort law and insurability of war and terrorist-related risks to third parties in the United States and worldwide.

On the basis of the findings of these Chapters, a number of final recommendations and conclusions will be given on the most preferable regime(s) of liability and insurance requirements in this field in Chapter 6.

2 An outline of the problem of liability for surface damage inflicted by aircraft from a theoretical and legislative perspective

2.1 INTRODUCTION

Aircraft are capable of inflicting damage to people and property on the surface of the earth by means of various forms of conduct. The potentially adverse effects of flying are evidently as old as aviation itself and will most likely remain with us as long as mankind chooses to roam the air, unless somewhere in the future aircraft entirely cease to crash or produce substantial noise and pollution.[1]

This Chapter is meant to provide an outline of the problem of liability for surface damage inflicted by aircraft from a theoretical and legislative perspective. The main aim of this exercise is to evaluate and explain the justifications for the available bases and regimes of liability from which a 'fictitious' legislator can choose in order to cover the problem of third party liability in this field. The figure of a fictitious legislator has deliberately been introduced in order not to stress the inherent differences between comparable (bases of) liability regimes under common or civil systems of law in general and more specifically per national jurisdiction. The point is rather to compare the justifications and rationale per liability regime in this field, irrespective of the specific jurisdiction at hand.

The following five (sub-)questions derived from the introductory Chapter to this study can serve as important guidelines for the structure of this Chapter:

1 Which range of conduct of aircraft can inflict which types of surface damage?
2 Which regimes can be codified to cover liability of operators or owners of aircraft and what is the scope of such regimes?
3 Which entities and which types of aircraft are (or should be) subjected to such regimes?
4 Are (or should) such regimes (be) based on unlimited or limited liability?
5 Is (or should) third party liability insurance coverage or another form of security be compulsory for the operators or owners of aircraft?

These (sub-)questions will be dealt with in the following order.

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1 The New York landmark case of Guille v. Swan, in which a balloonist was held liable in an action of trespass for damage to crops inflicted by the balloon as well as bystanders keen on assisting the balloonist, was decided as early as 1822, see Guille v. Swan (New York Sup. Ct., January, 1822), 1 CCH Avi 1.

The first question, on the range of conduct of aircraft that can inflict surface damage, will be illustrated by means of various scenarios of conduct of aircraft and the subsequent forms of potential damage that can arise under such scenarios (2.2).

The second question, on the various bases and regimes of liability that the fictitious legislator can opt for, will subsequently be addressed. First, the option of liability regimes based on fault or negligence in general will be taken into account. A general division has been made between these general headings of liability under civil and common law systems for that purpose. The general headings of fault liability under civil law systems will be dealt with first (2.3), followed by the general heading(s) of negligence under common law systems (2.4).

The arguments in favor of and against the application of fault liability or negligence to the problem of surface damage will subsequently be discussed (2.5). The main alternative of specific regimes based on absolute or strict liability will then be defined and described (2.6), followed by the justifications for application of such bases and regimes of liability in this field (2.7). Finally, the potential scope of absolute or strict liability regimes will be described (2.8).

The third question, on which entities and which types of aircraft should be subjected to such specific regimes will then be dealt with (2.9).

The fourth question, on whether such regimes should be based on unlimited or limited liability, will be evaluated by enumerating the arguments in favor of and against both alternatives (2.10).

The fifth question, on the need for compulsory third party liability insurance coverage or other securities, will be dealt with by means of a description of aviation third party liability insurance in general and an assessment of the question whether and when such coverage should be made compulsory (2.11).

The Chapter will close with a general enumeration of the main options for regimes of liability and insurance requirements in this field and their justifications, followed by justifications and recommendations for the most suitable options (2.12).

2.2 Scenarios of conduct of aircraft and surface damage

In order to address the first question posed in the previous paragraph, an assessment of the potential range of conduct of aircraft that is capable of inflicting potential surface damage has to be made. For that purpose, a slightly arbitrary division has been made between three main scenarios and certain sub-scenarios of conduct of aircraft that can inflict surface damage, which will be discussed in sub-paragraphs 2.2.1 – 2.2.3 respectively. A brief recapitulation of these scenarios will be given in subparagraph 2.2.4. Despite the fact that justice cannot be done to the complex variations in circumstances and causes

of aviation accidents or incidents by such a general division, this approach is deemed useful enough to clarify and objectify the potential scope of conduct of aircraft and subsequent damage. On the basis of such a division, our fictitious legislator can subsequently determine which scenarios should preferably fall under the scope of his liability regime.

2.2.1 *Scenario 1.* Surface damage inflicted by 'direct contact' or 'impact' of the aircraft or parts, objects, chemicals, or persons from the aircraft

The first and most significant scenario of potential damage to persons and/or property on the ground arises when such damage is inflicted by the impact of- or direct contact with the aircraft or aircraft components and/or other objects, persons, or materials from the aircraft. Firstly, this scenario encompasses genuine aviation accidents. Whether named aviation 'accidents', 'crashes', 'disasters', or whatever other term is deemed suitable, such occurrences can lead to the most serious forms of potential personal injury and property damage.[2]

Collisions between two or more aircraft can also be categorized under the first scenario. Such collisions can occur in any stage of operation, ranging from parked aircraft colliding with moving aircraft on the ground to aircraft colliding in mid-air.[3] An impressive classification of American aviation accidents and case law has been made by Speiser and Krause. Their enumeration includes takeoff accidents, accidents caused by windshear, bird strikes, miscellaneous pilot errors, mid-air collisions, cases of near misses, in-flight disintegration or break-up of the aircraft, and cases of aircraft flying into mountains, canyons, trees, buildings, cities, wires, power lines, poles or other aerial obstructions. Specific cases involving ground personal injury, death, and property damage have also been included.[4]

Secondly, the scenario of potential surface damage caused by direct contact with (parts of) the aircraft encompasses cases in which the aircraft does not actually crash. Examples that have mainly been derived from older American case law include scenarios involving people on the ground that were injured or killed by the wings of landing airplanes or propellers of aircraft.[5] A more

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2 *see* paragraph 1.1 of this study for examples of major aviation accidents involving surface damage.

3 In Southern Air Transport v. Gulf Airways, Inc.(Louisiana Sup. Ct., April 25, 1949), 2 CCH Avi 14900, a parked aircraft that was moved by the strong winds of a storm hit and caused damage to another aircraft.

4 S.M. Speiser & C.F. Krause, Aviation Tort Law 119-197 (1979).

5 Speiser & Krause at 150 and 194-195; *see, e.g.,* the cited cases of Platt v. Erie County Agricultural Soc. (1914) 164 App Div 99, 149 NYS 520, 1 CCH Avi 34 (in which the wing of a landing airplane extended into the crowd alongside the landing 'court', injuring several persons), and Strong v. Chronicle Publishing Co.(1939) 34 Cal App 2d 335, 93 P2d 649 (in

recent example involved a ground crew worker that died after being struck by a rotating propeller of an aircraft operated by Continental Express in July 1999, in Little Rock, Arkansas.[6] Fortunately, such scenarios can also occur without causing any damage, as was the case with a Boeing 747 of KLM on its way from Los Angeles to Schiphol Airport on August 28, 2000. The aircraft lost a part of its engines whilst in flight, which subsequently hit a crowded beach and barely missed one of its visitors.[7]

Similar scenarios involving military aircraft can evidently arise through deliberately inflicted damage by air raids and bombardments on surface targets. But military aircraft can also inflict surface damage through contact with objects on the surface in more unusual ways. A striking example of such an incident occurred near the town of Cavalese, Italy, on February 3, 1998, when a US EA-6B Prowler jet that was flying too low and too fast clipped the wires supporting a ski gondola. This incident led to the death of the operator of the gondola as well as the 19 people transported by it.[8]

Finally, the activity of crop dusting or spraying by aircraft can be categorized under the scenario of damage inflicted by materials carried by the aircraft. The activity of crop dusting can inflict damage to persons but mainly property (often livestock or bees) through contact with the chemicals released by the aircraft.[9]

From the perspective of a fictitious legislator, a definition that encompasses such scenarios can be useful in order to determine the scope of his specific liability regime. In that context, the general definition of the term 'accident' of Annex 13 to the Convention on International Civil Aviation, Chicago 1944, can serve as a guideline.[10] The definition, of which the relevant elements are in italics, reads:

> Accident.
> *An occurrence associated with the operation of an aircraft* which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, *in which:*

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which a newsboy, rightfully in the area as an invitee, walked into the idling propellor of an airplane which had stopped on a totally dark airfield to deliver the papers to airport).

6 Aerospace Risk, issue 15, March 2000, at 1-2.

7 *See KLM-Boeing in de problemen bij Los Angeles*, NRC Handelsblad, 28 August 2000, at 3 and KLM Wolkenridder Nr. 129, 1 September 2000. The presumed cause of this incident was a birdstrike.

8 *See Charge US Pilot for ski lift deaths*, Dispatch Online, 3 July 1998, at 1-2. (www.dispatch.co.za/1998/07/03/foreign/Skilift.htm).

9 Speiser & Krause at 154-157; *see also* I.H.Ph. Diederiks-Verschoor, *Aviation's Impact on Agriculture and Its Animal Habitat*, Pertanika J. Soc. Sci. & Hum.6(2), at 127-128 (1998).

10 *See* Annex 13 to the Convention on International Civil Aviation, Chicago 1944 (hereinafter referred to as the Chicago Convention of 1944) on Aircraft Accident and Incident Investigation, July 2001, at 1. Annex 13 contains International Standards and Recommended Practices ('SARPS') for Aircraft Accident and Incident Investigation.

a) *a person is fatally or seriously injured as a result of:*

- *being in the aircraft, or*
- *direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or*
- *direct exposure to jet blast,*

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to passengers and crew; or

b) *the aircraft sustains damage or structural failure which:*

- *adversely effects the structural strength, performance or flight characteristics of the aircraft, and*
- *would normally require major repair or replacement of the affected component,*

except for engine failure or damage, when the damage is limited to its engine, its cowlings or accessories; or for damage limited to propellors, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or

c) the aircraft is missing or is completely inaccessible

Although justly criticized by De Miranda on the grounds that the potential effects of common cargo were not taken into account, the definition does make clear that fatal or serious injuries to persons can be inflicted by direct contact with any part of the aircraft, including parts which have been detached from the aircraft, or direct exposure to jet blast.[11] And such a definition could easily be transformed to encompass death or personal injuries as well as material property damage of third parties in a specific liability regime by our fictitious legislator and thus serve as a manner to determine the scope of such a liability regime.

2.2.2 *Scenario 2.* Surface damage inflicted by flight in non-conformity with air traffic regulations; too low general or sudden overflight

In the second scenario, the aircraft does not crash, neither do objects or components fall from it, nor does it make contact with anybody or thing on or near the surface. The aircraft merely flies at a (too) low altitude. This can take place for a short period of time (e.g. by means of a sudden dive of the aircraft),

11 For common cargo can become highly toxic when released in an aviation accident and lead to fatalities on the surface without 'direct contact with any part of the aircraft', *see* K. de Miranda, *Some aspects of ICAO's Annex 13 'Aircraft Accident and Incident Investigation', Annex 16 – Volume 1 'Environmental Protection – Aircraft Noise' and Annex 18 'Safe Transport of Dangerous Goods by Air' in National Context, in* Pan European Foundation for Aviation Safety Management and Research, A structured approach to aviation safety oversight, Part 1 Adherence to ICAO Standards Section 5 ICAO Annexes 13, 16 and 18: Comments on National Aspects, 7 April 1999, at 4.

or for a longer stretch of the flight. The potential damage thus inflicted can arise from fright of people or animals caused by the sudden sight and/or sound of the aircraft approaching too low. Reactions based on fright can subsequently lead to more serious personal injuries or damage to animals, for instance if a driver of a car suddenly looses control of the vehicle and has an accident or if a horse bolts out of fright. The scenario can also lead to property damage caused by the vibrations of the low flying aircraft.

The second scenario is meant to refer to flight in non-conformity with the applicable air traffic regulations at hand, or flight that can generally be qualified as unlawfully low. By means of the qualification of flight in non-conformity with air traffic regulations, a distinction can be made between this second scenario of too low overflight and a third scenario of lawful overflight in conformity with air traffic regulations and subsequent potential surface damage. Evidently, borderline cases between the two scenarios can be envisaged in which the question whether the flight was in conformity or in non-conformity with air traffic regulations is not necessarily easy to solve. But the main point of this distinction between too low and normal overflight lies in the determination of the potential scope of specific liability regimes in this field, as will be seen in more detail in due course of this Chapter and study.

Under the second scenario, personal injuries or property damage can potentially be as severe as under the first scenario, albeit generally on a less grand scale than in case of genuine aviation accidents. As has been touched upon previously, a driver may lose control of his car and suffer personal injuries or inflict such injuries to others due to sudden fright evoked by a low flying aircraft. Likewise, various types of domestic animals and livestock may harm or kill one another or themselves out of fright in such cases. Property damage can also consist of the partial destruction of a roof due to the movements of a low flying helicopter. Genuine examples of such scenarios can be derived from mainly older American case law, which includes cases of damage inflicted to fences and cattle and to horses frightened by too low overflights.[12] A more recent German case involved two jet-aircraft flying over a street in a short distance from one another, which frightened a driver who subsequently lost control of the car and had an accident. Another German example of property damage inflicted under this scenario involved a helicopter flying over a house at a low altitude, which led to the collapse of part of the 90 year old roof.[13]

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12 *See* Decision of U.S. Comptroller-General McCarl (1923) 3 Comp.-Gen. 324 (in which a claim for damage to cattle and fences was made due to the stampeding of cattle against the Federal Government) and Neismonger v. Goodyear Tire and Rubber Co. (1929) U.S. Av. R. 96 (in which a low flying airship frightened horses), as cited in A.D. McNair, The Law of the Air 68 (1964).

13 *See* BGH Urteil vom 1. December 1981, NJW 1982, 1046 and BGH Urteil vom 27. Januar 1981, BGHZ 1979, 259 as cited by S. Grabherr, *Kausalität und Zurechnung bei der Gefährdungs-*

2.2.3 *Scenario 3*. Surface damage inflicted by normal overflight

In the third scenario of potential surface damage, aircraft take-off, fly, and land in conformity with the applicable air traffic regulations concerning the normal rights of passage. The main cause of potential damage lies in the nuisance and/or noise involved in normal flight operations, which can particularly affect persons and property in the vicinity of airports with many take-off and landing movements.[14] Potential damage can consist of certain degrees of mental injury to persons and animals and in certain extreme cases even death of animals, if the livestock is particularly sensitive to noise. Furthermore, normal overflight can result in property devaluation, especially directly under certain flightpaths and near airports.

In comparison with the previous two scenarios, however, the third scenario as a whole will normally inflict the least serious forms of potential damage, as death or bodily injury of people or actual destruction of property are highly unlikely to occur under this scenario.

2.2.4 A recapitulation of scenarios 1–3

In summary, the first broad and most significant scenario of conduct of aircraft that can inflict surface damage has been defined by using criteria such as 'impact' or 'direct contact' of the aircraft, parts of the aircraft, or objects or chemicals or other substances from the aircraft with the surface.[15] The scenario encompasses genuine aviation crashes, including collisions between aircraft, which can cause substantial damage in the form of personal injuries and destruction of property due to the impact of- or direct contact with- the aircraft and its components or the potentially dangerous toxic cargo that can be released in aviation crashes.

Furthermore, the first scenario encompasses cases of direct contact with the aircraft or its components or objects or substances dropped or falling from the aircraft without the aircraft actually crashing. Damage caused by crop-dusting could also be categorized under the first scenario in that context.

Under the second and third scenario, the damage is caused by too low or regular overflight respectively without any form of contact or impact

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haftung nach § 33 LuftVG, 35 ZLW 103, at 103-104 (1986); *see also* sub-paragraph 4.4.2.2 of this study for a description of these cases in more detail.

14 This noise-related scenario can also raise questions on the potential liability of other parties than the implicated aircraft, such as airports or governments, *see, generally* P. Mendes de Leon, *Liability of airports for noise hindrance: a comparative analysis*, 11 Korean Journal of Air and Space Law 169, at 174-176 (1999).

15 Notably, direct contact between for instance the property that suffers damage and the aircraft or parts of the aircraft is not necessary under this scenario. A barn located near the place of the accident catching fire due to gusts of wind is easily envisaged.

between surface and aircraft or objects from the aircraft whatsoever. These scenarios can be divided in the second scenario of damage due to fright of persons and animals or property damage caused by too low overflight and the third scenario of noise-related damage caused by normal overflight, especially in the vicinity of airports. However, borderline cases between these three scenarios can easily be envisaged.

The three aforementioned scenarios make clear that potential surface damage will generally be the most serious under the first scenario and the least serious under the third scenario. Such distinctions can be important for the legislature in order to determine and justify the scope of a specific liability regime in this field.

2.2 Fault liability under civil law

The scenarios of the previous paragraph have made clear how aircraft can inflict damage to third parties on the surface. The question now arises how the fictitious legislator can deal with the problem.

His first option lies in simply leaving the problem to the applicable general rules of fault liability under civil law systems or negligence under common law systems. In this paragraph, the main elements of the general headings of fault liability under a number of civil law systems will be discussed in a number of sub-paragraphs. A choice has been made for German, Dutch, and French civil law. These three systems of civil law admittedly do not cover the entire range of civil law countries of which the specific regimes of third party liability in this field are discussed in Chapter 4. The point of this selection is far more to demonstrate the general characteristics that the headings of fault liability have in common with one another in comparison with the general characteristics of stricter forms of liability. For that purpose, a smaller selection of fault liability regimes is deemed sufficient.

In the next paragraph, the main elements of negligence under common law systems will be dealt with. For although the continental and common law approach to fault and negligence may vary, the main elements of fault liability and negligence are deemed to be well suited for comparison as their essential characteristics resemble one another.[16] The general descriptions of fault liability and negligence are meant to serve as an introduction to the specific application of these headings of liability to the problem of liability surface damage, which will be dealt with in paragraph 2.5.

Under systems of civil law, liability based on fault arises when a number of general elements are met. Although the legal interests protected by these

16 *See* W. Friedman, Legal Theory 527-531 (1967). Friedman points out that upon closer scrutiny, both continental and common law systems reveal a far more substantial difference in form than in substance.

main headings of fault liability may vary, their main elements are at least comparable.[17] These main elements consist of an unlawful act, fault, damage and a causal connection between the act and the damage in order for liability to arise. Furthermore, the victims and types of damage suffered must generally fall under the protective scope of the regime of fault liability. The alleged tortfeasor can subsequently escape liability if he is able to invoke one or more of the general defences available to him under the general heading of fault liability at hand. The general criteria of unlawful act, fault, causation, and protective scope of fault liability will be discussed in more detail in subparagraphs 2.3.1 – 2.3.4. The main defences that can be invoked to wholly or partly escape liability will subsequently be discussed in sub-paragraph 2.3.5.

2.3.1 Unlawful act

In order to address the question whether an act can be qualified as unlawful, a closer scrutiny of the general headings of fault liability under discussion is necessary.

The most broad heading of fault liability under German civil law is § 823 (1) BGB, as it covers the most important legal interests that can be violated. Under § 823 (1) BGB, the requirement of an unlawful act or unlawfulness is met upon intentional or culpable invasion of the legal interests of life, body, health, freedom, ownership, and 'other rights'.[18] In this context, the terms 'intentional' or 'culpable' refer to the degree at which the tortfeasor was at fault.[19]

The two other headings of fault liability of § 823 (2) BGB and § 826 BGB complement the German regime of fault liability. The former provides a cause of action in case of culpable breach of protective statutory provisions and the latter offers protection against injury inflicted in violation of general standards of proper social conduct (*contra bonos mores*).[20] Since surface damage inflicted by aircraft can consist of personal injuries as well as property damage, the legal interests of life, body, health and ownership as covered by § 823 (1) BGB are of particular relevance to this study.[21]

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17 As will be seen in more detail, German civil law specifically narrows down the scope of protected interests covered by its fault liability regime, whereas French civil law knows no limitation of protected interests; *see* Van Gerven *et al*, Tort Law: Scope of Protection 3-5 (1998).

18 *See* K. Larenz/C-W Canaris, Lehrbuch des Schuldrechts 373-376 (1994); *see also* W. Fikentscher, Schuldrecht, 741-742 (1997) and K. Zweigert & H. Kötz, An Introduction to Comparative Law 599 (1998). 'Other rights' refer to servitudes, rent charges, patent rights, etc., *see* Zweigert & Kötz at 600.

19 *See* in more detail paragraph 2.3.2.

20 Van Gerven at 4.

21 Larenz/Canaris at 377-392 and Fikentscher at 742-745 on the definition and scope of these legal interests.

The question what can be qualified as an unlawful act under Dutch civil law has been dealt with by the Dutch Supreme Court in the landmark case of *Lindenbaum* vs. *Cohen.* Since that ruling, an unlawful act covers 'an act or omission which violates another person's right, or conflicts with the defendant's statutory duty, or is contrary either to good morals or to the care which is due in society with regard to another's person or property'.[22] Transformed into the current Dutch Civil Code in Article 6:162 (2) BW, the following acts are deemed to be unlawful: the violation of a subjective right, an act or omission violating a statutory duty or a rule of unwritten law pertaining to proper social conduct, unless there is a ground of justification.[23] The subjective rights that can potentially be infringed in cases of surface damage inflicted by aircraft include (the right to) life, bodily integrity, and property. Dependant on the circumstances of the case, both categories of act or omission violating a statutory duty and a general rule of unwritten law pertaining to proper social conduct can also play a role; the former can apply if the aircraft operator violates Dutch air traffic regulations or acts in violation of his license, and the latter if he is found to be in breach of general safety standards.[24]

The general principles of Articles 1382 and 1383 of the French Civil Code have been formulated in a far more open fashion than the German and Dutch regimes of fault liability by means of a mere reference to damage without the specific requirement of an *unlawful* act, as opposed to a categorization of specifically protected interests. Article 1382 of the French Civil Code simply requires that 'every act whatever of man which causes damage to another obliges him by whose fault the damage occurred to repair it'. Article 1383 of the French Civil Code subsequently holds that 'everyone is responsible not only for the damage which he has caused by his own act but also for that which he causes by his negligence or imprudence.'[25] In short, the requirement of 'every act whatever' is linked to the requirement of 'fault', adding up to a 'faulty act' ('*le fait fautif*').

Despite a lack of clear distinction between the elements of unlawfulness or fault under French law, the requirement of an act to be faulty or illicit at least makes clear that the act must somehow be contrary to law in the broad sense of accepted oral, legislated, or customary rules of conduct governing interpersonal relationships.[26]

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22 HR 31 Jan 1919, NJ 1919, 161, Lindenbaum-Cohen. *See also* Asser/Hartkamp 4-III, Verbintenissenrecht, 36-37 (1998); A.S. Hartkamp, Introduction to Dutch Law 134 (1999).

23 Van Gerven at 8; *See* for the translation of Article 6:162(2) BW into English P.P.C. Haanappel & E. Mackaay, New Netherlands Civil Code 298 (1990).

24 *See* S.D. Lindenbergh 1999 (T&C Vermogensrecht), art 6:162 BW, aant. 3.

25 The English translations of Articles 1382 and 1383 of the French Civil Code have been derived from Zwiegert & Kötz at 615-616.

26 *See* A. Sériaux, Droit des Obligations 325 (1992).

2.3.2 Fault

The requirement of fault makes more explanatory sense when linked to the person committing the act than to the act itself. Read as such, the requirement of fault refers to the culpability of the tortfeasor, which is generally measured in terms of lack of degree of care as demanded by society. Such a lack of degree of care can range from intentional to negligent conduct. In other words, to what extent can the alleged tortfeasor be blamed for the act?

The notion of fault as a requirement aside from the element of unlawfulness of the act corresponds with the German and Dutch civil law approach, and leads to a more clear distinction between the two elements than has been made under French civil law.[27] It also clarifies that liability of an alleged tortfeasor will not arise unless it can be established that he was at fault, even if he committed an unlawful act.[28] Fault in this sense should be interpreted subjectively. The test to determine if someone was at fault will thus somehow have to compare the presumed conduct of a 'normal' person in an identical situation to the conduct of the alleged tortfeasor. For specific activities which require specialized skills, such as the flying of an aircraft, such a test will make a comparison between the behaviour of the pilot in question and the presumed behaviour of an average pilot under the same circumstances in order to help determine if the pilot in question was at fault.[29] Ultimately, however, the question remains if the alleged actor can be blamed for the act, taking his specific qualities into account.[30]

Without having to delve into academic discussions on the borderlines between the concepts of unlawfulness and fault per system of civil law, the assertion that if an act can be qualified as unlawful, this will often imply that the actor was at fault can lead to a certain fortification of the position of plaintiffs faced with the task of having to prove fault. Under Dutch law, for instance, the courts can reverse the burden of proof if the unlawful act is qualified as an infringement of written or unwritten safety standards.[31]

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27 Zweigert & Kötz remark that a different approach to the elements of unlawfulness and culpability has also been adhered to in Germany by not qualifying the infringment of the legal interests of §823 (1) BGB as unlawful sec, but to make that qualification dependent on the culpability of the tortfeasor; in other words, if the tortfeasor is not at fault, the act is not unlawful. In the end, this different approach leads to same outcome as the traditional approach (for instance, that liability does not arise, irrespective of the question if the act is qualified as lawful due to lack of culpability or unlawful without the alleged tortfeasor being culpable), see Zweigert & Kötz at 599-600.

28 *See* A.S. Hartkamp at 134.

29 Zweigert & Kötz at 599, referring to German law.

30 *See* for Dutch law, Asser/Hartkamp, at 82.

31 See Asser/Hartkamp at 82-83 and Onrechtmatige Daad I (Jansen), nr. 59; the Dutch case law cited therein often refers to a breach of safety standards in maritime and road traffic accidents, *see e.g*. HR 10 januari 1929, NJ 1929, 419 and HR 1 november 1974, NJ 1975, 454. Analogous application to aviation accidents involving surface damage is imaginable.

2.3.3 Causal connection between the act and the damage

The next element that needs to be established in claims based on fault liability under civil law systems is that of causation.

Under German civil law, a two-tier test of causation is applied. First, a causal link between the event and the sustained injury must be established (the so-called *haftungsbegründende Kausalität*), followed by the link between injury and subsequent damage (the so-called *schadensbegründende Kausalität*).[32] The theory of adequate causation, which applies to the second test, is based on the criterion of foreseeability. This criterion requires that a sufficient link between the unlawful act and the specific interests enumerated in § 823 para 1 must thus be established that 'was apt to lead to the result which occurred, taking things as they normally happen and ignoring very peculiar and improbable situations which men of the world would not take into account'.[33]

Under Dutch civil law, the link of causation between the unlawful act and damage is also determined in two stages. Establishment of liability requires that the occurrence was a *condicio sine qua non* for the subsequent damage. That stage is followed by a second test of legal causation, by which the scope of recoverable damage is determined.[34] Although the applicable criteria of legal causation depend on the circumstances of the case, the criterion of 'reasonable foreseeability' can serve as an overall guideline. By means of the criterion of reasonable foreseeability, the scope of the more strict probability test of adequate causation has been broadened as to also cover certain cases of damage which might not be construed as foreseeable, but should lead to compensation nonetheless.[35]

French civil law requires a so-called *lien de causalité*, or link of causation between the conduct and the harm, which the victim has to establish.[36] Positive proof of this link is required by case law.[37] Two main theories on causation are applied in France, the so-called theory of *l'équivalence des conditions* and the theory of adequate causation, of which the latter prevails. The first theory holds that all (sub) causes that can be linked to the damage are equally valid, since the elimination of one of these would lead to a situation in which the damage would not have arisen. The theory of adequate causation,

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32 *See* W. Wussow, Unfallhaftpflichtrecht 58-59 (1996).

33 Zweigert & Kötz at 601; *see also* Geigel, Der Haftpflichtprozeâ 2 (1993).

34 *See* Article 6:162(1) BW jo. Article 6:98 BW.

35 Under Dutch tort case law, the theory of adequate causation has generally been replaced by that of reasonable foreseeability in the 1970's on practical grounds. However, the notion of foreseeability has not been entirely abandoned: for the more foreseeable the damage, the more swiftly compensation will be granted still goes, *see* W.J.G. Oosterveen 1999 (T&C Vermogensrecht), art. 6:98 BW, aant. 5.

36 *See* A. Bénabent, Droit Civil 279-280 (1995).

37 *"la seule concomittance entre tel comportement et le dommage n'est certainement pas suffisante, non plus qu'une simple probabilité que le comportement ait causé le dommage", see* A. Sériaux at 322.

on the other hand, merely focuses on the *cause efficiente* or general condition amongst potential other causes and the subsequent damage.[38]

2.3.4 Protective scope

In combination with the requirements of legal causation, the potential range of claimants and potential forms of recoverable damage can be limited by the protective scope of the applicable regime of fault liability.

Under § 823 (1) BGB, the scope of the so-called *Schutzzweck der Norm* can generally be derived directly from violation of one or more of the criteria of unlawfulness specified therein. In other words, violation of the legal interest of 'health' can not only be qualified as an unlawful act, but also specifies that the protective scope of § 823 BGB covers breach of all types of injury that fall under that interest.[39] The protective scope of § 823 (1) BGB can be limited when an occurrence leads to more indirect forms of violation of health in the form of certain psychological reactions, such as fright, anger, nervous shock, or heart attacks without any physical injuries. The classical example of nervous shock that arises after witnessing a traffic accident may thus lead to non-recoverability of such damage for the witness.[40] The protective scope of statutory provisions under § 823 (2) BGB depends on the formulation of the statutory regime at hand.[41]

Under Dutch civil law, the protective scope of Article 6:163 BW holds that 'there is no obligation to repair damage when the violated norm does not have as its purpose the protection from damage such as that suffered by the victim.'[42] Comparable to the German approach of general fault liability, the specific questions of protective scope thus first depend on the question whether the violated norm concerns subjective rights, an act or omission in violation of a statutory duty, or an unwritten rule of law pertaining to proper social conduct.[43] Once the violated norm has been established, the question arises if the claimant and the types of damage suffered fall under the scope of the protective norm. For more intangible forms of damage, such as mental injury

38 *See* A. Bénabent at 280-282.

39 A violation of health (*Gesundheitsverletzung*) is held to cover disturbances of a physical, psychological, or mental nature, *see* Larenz/Canaris at 377.

40 *See* G.H. Lankhorst, De relativiteit van de onrechtmatige daad 36 (1992).

41 *See* para 4.4.2 of this study for the scope of § 33 (1) LuftVG.

42 *'Geen verplichting tot schadevergoeding bestaat, wanneer de geschonden norm niet strekt tot bescherming tegen de schade zoals de benadeelde die heeft geleden';* the translation has been derived from Haanappel & Mackaay 299 (1990).

43 *See* paragraph 2.3.1. Similar to the German system, the Dutch rule of scope of protection also applies to regimes based on absolute or strict liability, although the protective scope of the violated norm then involves the specific criteria of damage caused by realization of danger for which the specific regime of absolute or strict liability was enacted, *see* Lankhorst at 41.

arising from the witnessing of accidents, the yardstick if the tortfeasor should have taken the interests of such a witness into account is applied.[44]

Contrary to German and Dutch civil law, a general rule that limits the protective scope of liability has never seen the light of day in French civil law; the protective scope of (fault) liability is merely limited by the notion that damage has to be a direct and immediate consequence of the event.[45]

2.3.5 Defences

The question if a claim based on fault liability will be granted does not only depend on the aforementioned elements but also on the question whether the alleged tortfeasor is able to invoke a defence in order to partly or wholly escape liability. A general distinction can be made between defences or grounds of justification that aim to justify the act such as *force majeure* and defences that aim to partly or wholly exculpate the conduct of the actor such as fault of the victim or behavior of a third party.

Under German civil law, a breach of a legal interest of § 823 (1) BGB amounts to unlawfulness (*Rechtswidrigkeit*), unless a ground of justification can be raised by the alleged tortfeasor. Similarly, an unlawful act can lose its unlawful character under Dutch civil law on the basis of a ground of justification.[46]

In relation to the problem of liability for surface damage, perhaps one of the most important grounds of justification consists of *force majeure* under both systems of civil law. *Force majeure* can generally be defined as any force which cannot or need not be resisted or 'an irresistible and unforeseeable event outside control of the defendant.'[47] In case of aviation accidents or incidents, severe meteorological conditions come to mind in that context.[48]

Under French civil law, the defence of *force majeure* can both be invoked in the stage of qualifying the act as faulty as well as in the subsequent stage

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44 The problem particularly applies to witnessess that are also relatives of more direct victims of such accidents, *see* C.C. van Dam, Aansprakelijkheidsrecht 171 (2000).

45 *Une suite immédiate et directe*, *see* Zweigert & Kötz at 621, Lankhorst at 13, and Van Gerven at 32.

46 *See* Van Dam at 85 and Article 6:162 (2) BW respectively.

47 *See* Asser/Hartkamp at 70-71, in which various forms of force majeure are discussed in more detail; *see* on the second (French) definition of force majeure, Zweigert & Kötz at 621 and A. Bénabent at 283.

48 Although not a case involving damage to third parties, the aviation accident of a DC10 of Martinair at Faro, Portugal, in December 1992 can serve as an example in which meteorological conditions played an important role. After the aircraft abandoned his first approach to the runway due to severe rainfall and gusts of wind, the low level wind conditions suddenly altered due to windshear at the second approach, which caused the right wing-tip of the aircraft to touch the surface and made the aircraft veer off the runway and crash, *see* S. Barlay, Cleared for take-off 204 (1997).

of determination of the causal link between fault and harm. If successfully invoked in the first stage, the act will lose its faulty character; if successfully invoked in the next stage, force majeure will be construed as a 'strange' or external cause (*cause étrangère*) to the alleged causal link between damage and conduct of the alleged tortfeasor. Other defences that can wholly or partly be qualified as strange or external causes include fault of the victim or acts of third parties.[49] The degree of fault of the victim to the unlawful act can lead to a proportional diminuation of compensation.[50]

2.4 NEGLIGENCE UNDER COMMON LAW

In common law jurisdictions, the industrial revolution and subsequent increase of non-intentional accidents gave rise to the general tort of negligence, which developed out of trespass. In the past, common law mainly focused on intentional wrongdoers by means of specific intentional torts. This left inadvertent harm unresolved, which was likely to arise with the introduction of industrial machinery and new forms of transport during the industrial revolution. Through the gradual development of negligence as a separate broad basis of liability, the defendant could also be held liable for non-intentional damage arising from industrial accidents if he had failed to take reasonable care to prevent the accident.[51]

In this paragraph, the general characteristics of negligence will be discussed on the basis of a similar division of negligence into main elements as has been done in the previous paragraph and sub-paragraphs in relation to fault liability under civil law.

The main elements of (breach of) duty of care, causation and damage, and defences that can be invoked by alleged tortfeasors will be dealt with in subparagraphs 2.4.1–2.4.3 respectively.

2.4.1 Duty of care

In brief, the tort of negligence requires a person to negligently or carelessly inflict harm without the need of actual awareness of the possibility of such harm, but with awareness of an unreasonable risk of harm. The main test to

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49 Bénabent at 283 and Zweigert & Kötz at 621.

50 *See* for German civil law § 254 (1) BGB (*Mitverschulden*) and S.P. de Haas & T. Hartlief, Verkeersaansprakelijkheid 92 (1998); *see* for Dutch civil law Article 6:101 BW and Van Wassenaer van Catwijck, Eigen Schuld en medeschuld 124 *et seq* (1985).

51 *See* J.G. Fleming, The Law of Torts 101-102 (1992); D.B. Dobbs & P.T. Hayden, Torts and Compensation, Personal Accountability and Social Responsibility for Injury 105-106 (2001).

determine negligence is based on the question how a reasonable person would have acted under the same circumstances.[52]

Another way of defining the tort of negligence can be achieved by construing it as a breach of the duty of care. Or, stated as questions, can liability arise in a certain type of situation in the first place (duty)? If affirmative, did the defendant fail to conform to the standard required of him in the situation at hand (breach of duty)? In comparison with civil law systems, the concept of breach of duty of care encompasses both the criteria by which an act is qualified as unlawful as well the criteria by which the actor is determined to be at fault to a certain extent.[53] Furthermore, the concept of duty encompasses the both the scope of persons and types of injury to whom and for which one owes a duty of care. In that sense, it is comparable to the *Schutznorm* as applied under various civil law systems.[54]

The role of the actor is determined by generally establishing how a reasonable person would have acted under comparable circumstances. That question can be narrowed down by looking at the manner in which a reasonable person in a certain position would behave. The behavior of a pilot implicated in the causes of an aviation accident would thus be compared to that of a fictive 'reasonable pilot' under similar circumstances. One of the dangers of application of the open-ended criterion of the reasonable man standard is that it can mask the role of judges or juries as policy-makers. In the amusing words of Atiyah and Cane:

> Judges in this country *(Great Britain)* have traditionally eschewed the role of policy-maker: they continue to proclaim that they are not concerned with policy but only with law, and it is possible that the public prefers it this way. To many people 'impartial justice' means justice without policy. If a judge were to say to a defendant: 'You have failed to do what I think you should have done and that amounts to negligence', the defendant may come away thinking of the judge, 'Who are you to tell me that?' But if the judge says: 'You have failed to do what the reasonable person would have done, and that amounts to negligence', the defendant may come away with more respect for the judge and the law.[55]

The broadly formulated reasonable man standard can also be refined by means of a number of helpful yardsticks: first, the degree of probability that damage would result from the conduct; second, the magnitude of the harm which was likely to arise if the conduct took place; third, the value or utility of the conduct; and fourthly, the burden of taking precautions against the risk of damage measured in terms of costs, time, and trouble. These yardsticks indicate that

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52 *See* M.D. Bayles, Principles of Law, A Normative Analysis 225 (1987).

53 *See* C.AE. Uniken Venema, Van Common Law en Civil Law 101-102 (1971).

54 M.D. Bayles at 228 *et seq*. *See also* on the scope of duty of care and the tests of foreseeability and proximity, Van Gerven at 16 *et seq*.

55 *See* P. Cane, Atiyah's Accidents, Compensation and the Law 30-31 (1999).

the defendant must be able to foresee such risks in order to take precautionary measures to prevent them beforehand, which brings the requirement of foreseeability into the equation.[56]

2.4.2 Causation and damage

Under common law, the question of causation is determined in two stages. In the first stage, the question if the carelessness of the defendant caused the damage is addressed. This is the so-called question of 'factual causation' or 'cause in fact' or 'but-for cause'.[57] In the words of Markesinis: 'would the loss have been sustained but for the relevant act or omission of the defendant?'[58]

The second stage of causation or legal cause requires the establishment of a sufficient link between the conduct and the subsequent loss. Criteria such as foreseeability and proximity can then be of aid.

Evidently, difficulties can arise in this area if various persons are implicated in a long chain of causation. Complex examples are easily envisaged. One could imagine a victim of an aviation accident being driven to a hospital at high speed by an ambulance that arrives at the hospital at a later time than planned because it first ran into a tree after a near miss of a pedestrian. When the victim finally reaches the operating theatre, his injuries can be aggravated by an incompetent doctor who makes certain crucial mistakes. The difficult test of legal causation would then be to determine to what extent the original tortfeasor (the operator of the aircraft) can be held liable for the final aggravated injuries. However, the but-for test at least has been met in such a case.

2.4.3 Defences. The doctrine of *res ipsa loquitur*

Under negligence a number of defences are available to defendants. Some of these defences spring into action in combination with the common law doctrine of *res ipsa loquitur* ('the thing speaks for itself'). This doctrine can come to the aid of plaintiffs in certain cases when negligence can be difficult to prove, for instance if the cause of the harm lies exclusively within control of the defendant, although more conditions may be required for the doctrine to be invoked successfully. Typically, the claimant can only establish the fact that an accident has happened, without being able to prove the exact conduct of

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56 P. Cane at 32-38.

57 The 'but-for' rule indicates that if the defendant had not behaved negligently, the victim would not have suffered injuries. In other words: but-for the defendant's conduct, the injuries would have been avoided, *see* Dobbs & Hayden at 192-195.

58 *See* B.S. Markesinis & S.F. Deakin, Tort Law 163 (1994).

the defendant by which the accident occurred. The test would then be if it is more likely than not that the effective cause of the accident could be ascribed to the act or omission of the defendant. Such an act or omission could then qualify as a failure to take reasonable care of the safety of the claimant.[59]

In such cases, a presumption of negligence can be accepted by the court, which has to be rebutted by the defendant in order to escape liability.[60] Insofar as it can be defined as a defence (since it comes down to a denial of fault), the defendant can rebut negligence by claiming that the event that led to the damage was an 'inevitable accident.'[61] An 'inevitable or unavoidable accident' has been defined as

> one produced by an irresistible physical cause; an accident which cannot be prevented by human skill or foresight, but results from natural causes, such as lightning or storms, perils of the sea, inundations or earthquakes, or sudden death or illness. By irresistible force is meant an interposition of human agency, from its nature and power absolutely uncontrollable.[62]

As the definition requires that the accident cannot be prevented by human skill, the defence of an 'inevitable accident' cannot be invoked when the risk at hand is reasonably foreseeable.[63]

As will be seen in more detail in the next paragraph, the doctrine of *res ipsa loquitur* has been used to assert that negligence should prevail as the ideal basis of liability in aviation accidents involving surface damage.

Aside from the defence of an inevitable accident, the defence of act of God can be invoked if the accident at hand came about due to natural forces beyond anyone's control.[64]

Another important defence available to defendants under negligence is that of contributory negligence, or failure to take care of one's own safety in the situation at hand. Contributory negligence thus relates to the careless conduct of potential claimants, or his act or omission which has materially contributed to the damage.[65] If accepted, such a defence may reduce the

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59 *See* Judge Walton, R. Cooper & S.E. Wood, Charlesworth & Percy on Negligence 350-351 (2001).

60 *See* Shears & Stephenson, James' Introduction to English Law 323 (1996). The classic *res ipsa loquitur* case, Byrne v. Boadle 2 H & C 722, 159 Eng. Rep. 299 (Exch. 1863) involved a pedestrian that was hit by a barrel of flour that fell from an open door in a warehouse. This was construed as a scenario which held sufficient proof of negligence to go to jury without extra evidence on how the accident could have happened.

61 Markesinis at 673.

62 Black's Law Dictionary 776-777 (1990).

63 Walton, Cooper & Wood at 219.

64 Markesinis at 673. Note that an important difference between an inevitable accident and an act of God lies in the fact that an act of God is the opposite of act of man, and is thus much broader in scope than natural causes without human intervention, *see* Walton, Cooper & Wood at 220-221.

65 Walton, Cooper & Wood at 170.

compensation due to the victims in proportion with their own degree of carelessness.[66]

2.5 FAULT LIABILITY, NEGLIGENCE AND SURFACE DAMAGE

The quest for specific regimes of liability for surface damage of aircraft operators or owners could stop at this point. The fictitious legislator could simply decide to leave the problem to his national general rules of fault liability or negligence. He could argue that the presumption of fault or negligence, which will most likely be present in cases of genuine aviation accidents, provides a sufficient safeguard for third parties to establish liability of the implicated aircraft operators or owners.

However, he could also conclude that such an outcome may lead to unsatisfactory results if fault or negligence turn out to be difficult or impossible to prove and thus lead to situations where damage to persons and property are left uncompensated. If he finds such an outcome unsatisfactory, he could ponder over a regime based on stricter forms of liability. In this paragraph, the general headings of fault liability and negligence will be applied to the three described scenarios of conduct of aircraft that are capable of inflicting surface damage in sub-paragraphs 2.5.1 and 2.5.2 respectively. This exercise is meant to determine whether and when fault liability or negligence are not the most preferable bases of liability in this field. Furthermore, the relationship between property ownership and overflight under common and civil law will be examined in that context in sub-divisions 2.5.2.1 and 2.5.2.2 of sub-paragraph 2.5.2.

2.5.1 Fault liability, negligence and the first scenario of surface damage

The first and most significant scenario of surface damage arises when one or more aircraft have a genuine accident, that is, actually crash. Irrespective of the causes of the case at hand, the common denominator of this scenario is that damage to persons and/or property on the ground will be caused directly or more indirectly by the impact of the aircraft or parts of the aircraft with the surface. The assertion is that the victims may not be able to prove fault or negligence of the operator, even with the aid of instruments such as a procedural reversal of the burden of proof under civil law systems or the doctrine of *res ipsa loquitur* under common law systems. That this is not a mere

66 Cane at 44 *et seq*. It is noteworthy that under English Law, the Law Reform (Contributory Negligence) Act of 1945 made certain that damages were merely reduced instead of denied completely in cases of contributory negligence, *see also* Walton, Cooper & Wood, at 175.

imaginary scenario, can be illustrated by the American case of *Crosby* v. *Cox Aircraft Co.*, in which the standard of negligence was applicable.[67]

In the Crosby case, the plaintiff's garage was damaged by a crash landing of an aircraft. Strict liability was denied in favor of the standard of negligence on the grounds of common usage of aircraft and their social utility as well as the appropriateness of air navigation over plaintiff's property. Remarkably, the court followed a line of reasoning in defence of the standard of negligence, which seems to establish exactly the opposite. For the court held that:

> The causes of aircraft accidents are legion and can come from a myriad of sources. Every aircraft that flies is at risk from every bird, projectile and other aircraft. The injury to the ground dweller may have been caused by faulty engineering, construction, repair, maintenance, metal fatigue, operation or ground control. Lightning, wind shear and other acts of God may have brought about a crash. Any listing of the causes of such accidents undoubtedly would fall short of the possibilities.[68]

For precisely the fact that such variable and multiple causes can cause aviation accidents indicates that the main problem of relying on the standard of negligence in such cases can be its difficulty to prove. In view of this problem, the dissenting opinion in the Crosby case enumerated a number of key arguments in favor of application of stricter forms of liability in this field. The dissent held that the burden of loss should fall on the person who by his own free will and for his own benefit voluntarily chooses to fly instead of on wholly innocent, non-active, and non-benefited third parties who suffer damage. Furthermore, the dissent argued that negligence can be difficult to prove in aviation cases even with the aid of the doctrine of *res ipsa loquitur.*[69]

Doubts on the fairness of application of negligence in combination with the doctrine of *res ipsa loquitur* to aviation accidents are by no means new. As Knauth put it as early as 1938:

> Airplane crashes usually kill all the occupants and "inside" witnesses (=black boxes). The wreck is frequently burned, or under water. The track of the aircraft, being traced in air and not on the ground, cannot be reconstructed. There are seldom any "outside" or neutral witnesses; the air lanes are not watched by as many pairs of eyes as are the highways. Accidents happen very suddenly, above the clouds, in remote places. It is said we should use the rule of res ipsa loquitur; and of necessity we often do so. But that is a very troublesome and unsettled rule of evidence; it enjoys two major and many minor interpretations. It is at best a stopgap invented by humane judges to help plaintiffs get over the high barriers pres-

67 746 P.2d 1198 (Washington 1987).

68 746 P.2d at 1201, *as cited by* W.K. Jones, *Strict Liability for Hazardous Enterprise*, 92 Colum. L. Rev. 1705, at 1748 (1992).

69 746 P. 2d at 1203-1204, *as cited by* W.K. Jones at 1748.

> ented by the general rule that the plaintiff in a negligence suit has the burden of proving some negligence…[70]

And a closer examination of American case law in this field on the question when the doctrine of *res ipsa loquitur* can be invoked, reveals that the odds are comparable to those of a lottery. In some cases, the doctrine was acknowledged, such as in the case of *San Diego Gas & Electric Co.* v. *United States*.[71] In that case, a government aircraft controlled by a pilot instructing a student pilot hit electric powerlines on the surface and subsequently crashed. The owner of the powerlines based his claim on the doctrine of *res ipsa loquitur*. A witness saw the aircraft flying too low (in non-conformity with air traffic regulations) for its last 5 minutes of flight and subsequently disappear behind a hill in the last 5 seconds before the crash. The court permitted the doctrine to be invoked on the grounds of a presumption of continuing negligence during the last 5 seconds of flight prior to the crash, which, incidentally, could still have been countered by disproving negligence.[72]

However, the doctrine of *res ipsa loquitur* was not accepted in a number of other cases. This was due to the fact that the mere occurrence of an aviation accident was not deemed a sufficient ground for the doctrine to apply automatically. Wolff has distinguished three main groups of cases where the doctrine failed because the criteria of the doctrine were not met:

1 cases in which the evidence failed to establish that the aircraft was under exclusive control of the defendant;
2 cases in which it was held that it is not an unusual occurrence for an airplane to crash without the intervention of a human agency;
3 cases holding that experience was not sufficiently uniform to justify a presumption that such accidents do not happen in the absence of negligence.[73]

The case of *Williams et al*. v. *United States* (1955) indicates that a number of these elements can be required jointly by the court.[74] In the Williams case, a B-47 Strato-Jet bomber of the United States Airforce caught fire, exploded,

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70 A.W. Knauth, *The Uniform State Aeronautical Liability Act Adopted at Cleveland, July 23, 1938*, 9 ALR 352, at 353 (1938).

71 San Diego & Electric Co. v. United States (1949, CA9 Cal) 173 F2d 92, as cited by T.L. Kruk, *Res Ipsa Loquitur in Aviation Accidents*, 25 ALR4th 1237, at 1283 (1983).

72 T.L. Kruk at 1283.

73 W.C. Wolff, *Liability of Aircraft Owners and Operators for Ground Injury*, 24 JALC 204, at 212 (1957); Dobbs & Hayden also point out that the doctrine is not always applicable to aviation cases, but that the circumstances per case must be considered before invoking the doctrine; aside from the criteria provided by Wolff, they have added the criterion of absence of voluntary action or contribution by the plaintiff, *see* Dobbs & Hayden at 185-187 and the case law cited therein.

74 Williams et Al. v. United States, 218 F. 2d 473 (5th Cir. 1955); see also 4 Avi 17187 (District Court Decision, October 23, 1953).

and disintegrated above the city of Marianna, Florida on 22 July 1952. Some of the aircraft parts and its contents, which included inflammable substances, fell to the earth and scattered over a large area and subsequently caught fire. Two minor children of the plaintiffs, the Williams family, were burned so severely by the heat and flames that they died soon after the accident in the hospital.[75]

Not only did the court of appeals hold that the mere criterion that the aircraft was under exclusive control of the defendant (the government) could not suffice, but also that the accident would not have occurred in the ordinary course of events if due care had been exercised. If this cannot be established, no basis for recovery exists (*in casu* under the Federal Tort Claims Act). Wolff points out that, although human experience in the field is often so uniform and well established that it is not necessary to prove this by extraneous negligence, in this particular case a problem arose since the court had no technical or judicial knowledge of what might cause a jet airplane to suddenly explode in flight. Then the story ends for plaintiffs if they cannot present evidence to show that such an accident could not occur but for negligence. In other words, evidence of negligence must be presented before the defendant is required to disprove negligence in such cases.[76]

2.5.2 Fault liability, negligence and the second and third scenarios of surface damage

Aside from genuine aviation accidents, surface damage can arise in scenarios where aircraft fly in non-conformity or even in conformity with air traffic regulations. Since the differences between too low overflight and normal overflight can be narrow, these two scenarios will be discussed jointly. A division has been made between the problems presented by overflight in relation to property ownership under common and civil law in sub-paragraphs 2.5.2.1 and 2.5.2.2 respectively.

2.5.2.1 The relationship between ownership of land and overflight under common law

In scenarios of damage resulting from overflight, the most important category of potential plaintiffs is formed by landowners. The classic conflict of interests between landowners and those engaged in the activity of flying has been expounded on in legal doctrine and case law. The ancient law doctrine of *'cujus est solum, ejus est usque ad coelum et ad inferos'* ('whose the soil is, his it is from the heavens to the depths of the earth') was formulated in pre-aviation times.

75 Williams et Al., 4 Avi 17187.
76 Wolff at 212-213.

The doctrine has not been considered to be valid in order to determine the borderlines between the right of overflight of aircraft and actual interference of the land.[77] But if the doctrine is outdated, how can the borderlines between the interests of landowners and those of aviation be demarcated?

Perhaps the most famous American case in which this problem has arisen, is *Causby* v. *U.S.*[78] In the Causby case, the respondents owned a piece of land on which they raised chickens. At a certain point in time, the respondents were forced to give up their chicken business. This was due to the fact that the chickens killed themselves by flying into the walls out of fright caused by the noise of overflying aircraft. The noise was generated by various four-motored bombers and other heavy aircraft that flew over the land at close range (thereby barely missing the tops of the trees) in order to take-off and land from the nearby airport. The respondents were also deprived of sleep as they were tormented by nervousness and fright caused by both the noise and the nightly glare produced by the aircraft. On the basis of these facts, the Court of Claims held that the property had depreciated in value and that the United States had taken an easement over the property and that the value of the property destroyed and the easement taken was $2000.[79]

The United States argued that when flights are made within navigable airspace without any physical invasion of the property, there has been no taking of property, but at most incidental damage occurring as a consequence of authorized air navigation. Furthermore, the United States argued that the landowner does not own superadjacent airspace which he has not subjected to possession, e.g. by the erection of structures.

However, the Supreme Court held that although the Civil Aeronautics Act (1938) gives citizens of the United States a public right of freedom of transit through the navigable air space of the United States, that is, airspace "above the minimum safe altitudes of flight prescribed by the Civil Aviation Authority", landowners are not deprived of all rights to air space above their heads. If the taking-off and landing procedures are performed at altitudes so close to private property and at frequent intervals as to interfere with its use, they can amount to a taking of private property without just compensation (the

77 J.G. Verplaetse, International Law in Vertical Space 220-225 (1960). For an example of early case law, see Johnson v. Curtis Northwest Airplane Company et Al., United States District Court, District of Minnesota, Second Judicial District, September 27, 1923, 1 Avi 61. In this case, the doctrine was invoked and rejected in a case where the aircraft flew over plaintiff's land at a level of 2000 feet. The rejection was based on the notion that the upper air is a natural heritage common to all people, which should not be hampered with by an artificial maxim of law.

78 United States v. Causby and Wife, Supreme Court of the United States, May 27, 1946, 2 Avi, 14189.

79 United States v. Causby, 2 Avi., at 14190.

Fifth Amendment provides that private property shall not be taken for public use without just compensation).[80]

In an interesting dissenting opinion Justice Black pointed out that the Supreme Court's opinion

> seems to indicate that the mere flying of planes through the column of air directly above respondents' land does not constitute a taking. Consequently it appears to be noise and glare, to the extent and under the circumstances shown here, which make the government a seizer of private property. But the allegation of noise and glare resulting in damages, constitutes at best an action in tort where there might be recovery if the noise and light constituted a nuisance, a violation of a statute, or were the result of negligence. But the Government has not consented to be sued in the Court of Claims except in actions based on express or implied contract. And there is no implied contract here, unless by reason of the noise and glare caused by the bombers the Government can be said to have "taken" respondents' property in a Constitutional sense. The concept of taking property as used in the Constitution has heretofore never been given so sweeping a meaning.[81]

Justice Black continued to attack the Court's interpretation of a taking and its definition of property owners rights by stating that old concepts of private ownership should not be introduced in the field of air regulation. Just claims of aggrieved parties could be met far better by awarding of damages for injuries suffered from the flying of planes, or by the granting of injunctions to prohibit their flying, instead of through the application of rigid Constitutional restraints formulated and enforced by courts.[82]

Unfortunately, no hard and fast rules can be given on the question when the operation of an airport or the flight of aircraft constitute a taking under American law. Some courts have held that there must have been a direct invasion of the property of the landowner or of the airspace directly above his land. Other courts have recognized that flights not directly over such land can also be an infringement of the rights of property owners and thus constitute a taking. In some cases, courts have held that only the operator of the airport can be held responsible for takings by flights and not the aircraft operators, since property owners would otherwise have to make long-term observations of the overflights, identify each aircraft, and are burdened with difficult to prove exact altitudes of such flights. Alternative remedies could include actions based on nuisance, negligence, or trespass.[83]

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80 United States v. Causby, 2 Avi., at 14189-14190.
81 United States v. Causby, 2 Avi., at 14193-14194.
82 United States v. Causby, 2 Avi., at 14195.
83 *See* J.M. Zitter, *Airport operations or flight of aircraft as constituting taking or damaging of property*, 22 ALR 4th 863, at 868 *et seq* (1980).

2.5.2.2 The relationship between ownership of land and overflight under civil law

Civil law systems have acknowledged the relationship between ownership of land and overflight in specific property law provisions of their civil codes. German civil law, for instance, has codified a specific provision in § 905 BGB, which holds that the right of a landowner reaches into the space above and below its property. However, he cannot prohibit the effects of invasion of that space at heights or depths which go beyond his interests of ownership.[84]

Inspired by the German provision, the relationship between the rights of land-owners and the rights of overflying aircraft have been demarcated in the following fashion in Article 5:21 BW of the Dutch Civil Code:

> Article 5:21 BW:
> (1) The right of the owner of land to use it includes the right to use what is above and below the surface.
> (2) Other persons may use what is above and below the surface if this takes place so high above or so deep below the surface that the owner has no interest to object thereto.
> (3) The preceding paragraphs do not apply to the right of overflight.[85]

As the Dutch author Ploeger points out, both the German and Dutch provision have been inspired by the '*cujus est solum*' doctrine. In relation to overflight, the question will arise when overflight constitutes a breach of the rights of the landowner. Under German civil law, the essential criterion that has to be met holds that the landowner must have an interest ('*interesse*') in the claim to prevent the effects ('*Einwirkungen*'), in order for the claim to be justified. If there is no such interest, the so-called *actio negatoria* or right to deny third parties access to the column of air above him is denied to him.[86] It is noteworthy that the Dutch system specifically exempts the right of overflight from the rights of the landowner. The question then remains when the right of overflight becomes unlawful in the sense of a breach of the rights of use that are granted to the landowner.

In civil law systems, the approach to the problem of surface damage inflicted by aviation from the perspective of property law points to landowners having to prove a breach of certain of their rights, which has to be unlawful. The element of unlawfulness conveniently leads back to the realm of the

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84 § 905 BGB reads: Das Recht des Eigentümers eines Grundstücks erstreckt sich auf den Raum über der Oberfläche und auf den Erdkörper unter der Oberfläche. Der Eigentümer kan jedoch Einwirkungen nicht verbieten, die in solcher Höhe oder Tiefe vorgenommen werden, daâ er an der Ausschlieâung kein interesse hat.

85 The English translation is derived from Haanappel and Mackaay at 163.

86 H.D. Ploeger, *Tot de poorten van de hel, Over art. 5:21 BW en de exploitatie van de derde dimensie, in* M.H. Claringbould *et al.,* Van Beheering, 'goederenrechtelijke beschouwingen', 129 at 135-136 (1998).

general provisions of fault liability in the sense that the breach has to constitute an unlawful act. Plaintiffs will then have to subsequently establish the applicable criteria of fault, damage, and a sufficient causal link between the damage and the act. In comparison with the scenario of aircraft actually crashing, an obvious advantage of such scenarios is that the aircraft will generally be completely intact, which makes the finding of clues as to the reasons of the (too) low overflight more accessible since the pilot(s) can be questioned on their conduct and the flight data are preserved. The element of unlawfulness will most likely be met automatically if the aircraft has flown too low, that is, in non-conformity with air traffic regulations. More difficulties may lie in proving fault of the operator and in the potential defences that the operator can invoke. In this context, the defence of force majeure or Act of God could prove to be an important barrier to compensation, for instance if the aircraft flew too low to evade certain meteorological conditions. Causation could also raise difficulties, since the causal connection between the damage and the act of flying over at a low level is less evident than in cases where the aircraft actually crashed (unless perhaps contact has been made during overflight between the aircraft and objects or persons on the surface).

The key question that has to be addressed by our fictitious legislator is whether the relationship between owners of land and overflying aircraft should be covered by a more strict regime of liability than the current systems of common and civil law can provide. In other words, to what extent – if at all – should claims based on nuisance, noise, glare, and sudden fright fall under separate regimes of codified strict or absolute liability? In order to address this question, a general definition of the concepts of absolute and strict liability is useful. Justifications for regimes based on absolute or strict liability as well as their potential scope, will subsequently have to be taken into account.[87]

2.6 THE ALTERNATIVES OF ABSOLUTE OR STRICT LIABILITY

Before delving into the justifications for application of the bases of absolute or strict liability to the problem of surface damage inflicted by aircraft, some workable definitions of these concepts can be of use. For although these concepts are often used synonymously and can be difficult to distinguish in practice, a number of distinctions can be made in the manner in which liability arises under both bases of liability.

Bin Cheng's has attempted to define these two closely aligned bases of liability in the following manner. Taking the bases and criteria of fault liability or negligence as a starting point, strict liability arises when the offending act has been committed by the person to be held liable without fault on his part and when there is a causal link between the person held strictly liable and

87 *See* paragraphs 2.6-2.8 of this study.

the damage. In other words, only the criterion of fault has actually been eliminated from the original criteria of fault liability or negligence by Bin Cheng. All other criteria and defences related to fault liability or negligence, except those aimed at disproving fault, are thus left intact under regimes of strict liability.[88]

Although absolute liability also dispenses with the fault criterion, it differs from strict liability in that it arises whenever the circumstances stipulated by the legislature for such liability to arise are met. As opposed to strict liability, there is no specific requirement that the damage has to be caused by the person to be held liable, nor are the normal defences available. This means that the person addressed by the absolute liability regime can be held absolutely liable for damage under the specified circumstances of the regime without necessarily having caused the damage himself.[89] The legislature should seriously consider the exact wording of his absolute liability regime in view of potential liability of the operators or owners of aircraft in cases of terrorism such as the terrorist attacks of September 11, 2001 on the United States. For under a regime of absolute liability, the operator could be held liable for deliberate acts of a third party, depending of course on the exact scope and wording of such a regime.

Although absolute liability dispenses with the defences available under fault liability or negligence as a starting point, this does not mean that no defences are left to the person held absolutely liable under the regime at hand. As Bin Cheng stresses, exceptions to absolute liability can be specifically enacted in the form of available defences, e.g. in case of contributory negligence, armed conflict, or exceptionally grave natural disasters. Thus, even the defence of Act of God could be enacted under an absolute liability regime.[90]

Recapitulating, the following definitions emerge:[91]

Strict liability:
(*reponsabilité objective; responsabilité objective simple; gewöhnliche Kausalhaftung*) arises if the criteria of *author of an act causing damage* are met. The usual defences as under regimes of fault liability can be invoked, except those directed to proving absence of fault.

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88 *See* Bin Cheng, *A reply to charges of having inter alia misused the term absolute liability in relation to the 1966 Montreal Intercarrier Agreement in my plea for an integrated system of liability*, McGill Annals of Air and Space Law 3, at 9 (1981).

89 Bin Cheng at 9. Aside from absolute third party liability regimes in the field of aviation, the Convention on Third Party Liability in the Field of Nuclear Energy (Paris, 29 July 1960), can serve as an example of a absolute liability regime in which the operator of a nuclear installation can be held absolutely liable for damage to third parties caused by nuclear incidents.

90 Bin Cheng at 11.

91 Bin Cheng at 10 (the definitions are based on the diagram).

Absolute liability:
(*responsabilité objective; responsabilité objective proprement dite; responsabilité absolue; reine Kausalhaftung; Gefährdungshaftung*) arises when the criteria *person in a prescribed relationship to a specific circumstance*, *such circumstance arising* and *causing damage* are met. Only those defences specifically provided for are available.

In the context of this study, the Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface, Signed at Rome on 7 October 1952 (hereinafter cited as the Rome Convention of 1952), can serve as an example of an international air law regime based on absolute liability, which has been codified in the following fashion:

> Article 1 (1) Any person who suffers damage on the surface shall, upon proof only that the damage was caused by an aircraft in flight or by any person or thing falling therefrom, be entitled to compensation as provided by this Convention. Nevertheless there shall be no right to compensation if the damage is not a direct consequence of the incident giving rise thereto, or if the damage results from the mere fact of passage of the aircraft through the airspace in conformity with existing air traffic regulations.

Liability is attributed to the operator of the aircraft (Article 2(1) Rome Convention 1952). Taking Bin Cheng's definition into account, the absolute nature of the liability regime lies in the fact that the operator can also be held liable without having necessarily caused the damage himself under certain conditions specified in the Convention.[92] In the system of Bin Cheng, the regime would be strict if for instance codification of Article 1(1) would have been as follows: 'Any person who suffers damage on the surface shall, upon proof only that the damage was caused by *the operator* of an aircraft in flight or by any person or thing falling therefrom, etc', and if all the usual defences available under fault liability or negligence were left intact with the exception of disproval of fault.

Furthermore, the regime of the Rome Convention of 1952 also qualifies as absolute, as it only allows for number of defences, such as contributory negligence, the defence that the damage is the direct consequence of armed conflict or civil disturbance, and the defence that such person (the legitimate

92 For the operator can also be held liable for damage caused by other persons under the conditions specified in for instance Article 2(1) (b) (use by servants or agents), Article 3 (person without exclusive right to use the aircraft for more than fourteen days causing damage leads to joint and several liability with the operator), Article 4 (person using aircraft without consent of the operator causing damage leads to joint and several liability with the operator, unless operator can prove that he has exercised due care to prevent such use) Rome Convention.

operator) has been deprived of the use of the aircraft by act of public authority.[93]

However, it should be borne in mind that the concepts of absolute and strict liability are often used synonymously and that the aforementioned definitions should thus not be applied too rigidly. The guidelines on the exact type of liability can best be derived directly from the wording of the regime at hand; the question whether such a regime should or could be qualified as absolute or strict then becomes a secondary matter.

In the next paragraph, the main justifications for regimes of absolute or strict liability in this field in general will be enumerated.

2.7 JUSTIFICATIONS FOR REGIMES BASED ON ABSOLUTE OR STRICT LIABILITY

The key question arises on what ground regimes of absolute or strict liability should be codified in order to cover the problem of surface damage inflicted by aviation. In this paragraph, seven arguments in favor of absolute or strict liability in this field will be enumerated. The first two arguments have been derived from the dissenting opinion in the previously discussed American Crosby-case. The third, fourth, and fifth argument relate to 'things' or 'activities' in general (e.g. ships, railways, tramways, space ships, unmanned missiles, oil wells, pipelines, nuclear installations, and of course aircraft) and are primarily based on the serious *danger* that such things or activities can pose to third parties.[94] Finally, the sixth and seventh argument are directly related to aviation.

1 The burden of loss should fall on the person who by his own free will and for his own benefit voluntarily chooses to fly in stead of on wholly innocent, non-active and non-benefitted third parties on the surface who consequently suffer damage.

The first argument, which holds that the burden of the risks of flying should preferably fall on those willing to take those risks in stead of on innocent non-benefitted third parties, almost goes without saying. As a minor counter-argument the objection could be raised that certain third parties that suffer damage can be benefitted by aviation in a more general sense, for instance if they are employed in the aviation industry or fly frequently. Goedhuis has raised this issue in relation to the scope of the original Rome Convention of 1933 by dividing surface victims in two main categories encompassing those employed in the aviation industry and others. The former category included

93 Bin Cheng at 11; *see* Articles 6 and 5 of the Rome Convention of 1952.

94 The third, fourth, and fifth argument have been derived from Stone, Liability for Damage Caused by Things, IECL, XI, Torts, Chapter 5 (1983).

employees of the aircraft operator or carrier implicated in the accident or incident, employees of airports struck by an aircraft on the airport, and a number of other related categories of persons somehow linked to- or involved in the aviation business.[95]

Such distinctions may have certain validity from an academic point of view, but seem to lack fairness and practicability. For such a division would mean that the basis of liability to which aircraft operators are subjected would vary per victim. While certain victims would be entitled to compensation almost automatically on a basis of absolute or strict liability, others would have to prove negligence because of the mere coincidence of employment in the aviation industry.

2 The fact that negligence (or fault) can be difficult to prove in aviation cases, even with the aid of doctrines such as *res ipsa loquitur*, which can not be invoked successfully in every accident or incident.

The second argument, which holds that negligence or fault can be difficult to prove for surface victims in view of the inherent complexity of most aviation accidents, can be qualified as valid in any era of aviation. As has been established previously in this Chapter, even doctrines such as *res ipsa loquitur* in common law jurisdictions are not universally applicable to soften the burden of having to prove negligence. Procedural reversals of the burden of proof under certain civil law systems are neither automatically guaranteed, but can depend on the discretion of the court seized of the case.[96] And even if they do apply, aircraft operators can still disprove fault or negligence.

Another related argument against application of the standard of negligence concerns the historic notion that under common law, the barrier of negligence was introduced in the industrialization period of the nineteenth century as a protective measure for nascent industries. Although perhaps valid at a certain point in time, aviation cannot be said to be a nascent industry anymore.[97]

Finally, one could remark that negligence or fault can be difficult to prove on the often mere basis of investigative reports made by governmental accident investigation agencies such as the National Transportation Safety Board. For such reports are not intended to attribute blame or liability to the implicated parties and are thus not drafted in that sense. The difficulty need not only lie in the fact that such reports may stress certain causes while leaving others out (which may be crucial for the determination of liability), but also in the

95 *See* D. Goedhuis, *Aansprakelijkheid voor luchtvaartschade*, NJB 161, at 162 *et seq* (1935).
96 As under Article 177 Rv (Dutch Procedural Code).
97 *See also* paragraph 5.2 of this study.

fact that the use of such reports as evidence in courts could be restricted.[98] Another problem concerns the fact that it can take years before such an accident report sees the light of day, especially in complex cases.[99]

3 The perception of the inherent dangerous qualities of certain things or activities or of them becoming dangerous when used improperly;

The third argument is related to the perception of aviation as an ultra-hazardous or dangerous activity and reveals a remarkable line of reasoning that has been applied in this field in the United States. Under common law, the rationale for application of regimes of absolute or strict liability to new developments in society has traditionally been based on the landmark case of *Rylands* v. *Fletcher*. In *Rylands* v. *Fletcher*, a form of strict liability for escaping things was introduced based on the more ancient common law doctrines of trespass and nuisance.[100] The rule has helped to establish a separate category of strict liability for damage caused by so-called ultrahazardous activities in the United States, which initially included the risk posed by aircraft to third parties on the surface.[101] However, in due course of time, the perceived danger or ultrahazardous nature of aviation gradually transformed into the notion of aviation being regarded as a safe activity. This change of attitude corresponded with the notion that negligence should therefore apply as the preferable basis of liability in cases of surface damage inflicted by aircraft.[102] Upon closer scrutiny, the argument reveals a Catch-22-like line of reasoning. For if an aircraft happens to fall out of the sky in a period when flying is deemed 'safe', victims will have to prove negligence to receive compensation, whereas victims were able to rely on absolute or strict liability in times when aviation was still considered ultrahazardous. But at what exact point in time can aviation be perceived as safe if aircraft can evidently also crash in 'safe'

98 Under the rule of Article 179 Rv (Dutch Procedural code) for instance, accident investigation reports can be presented as evidence before courts; however, courts are completely free to ignore them under Dutch law. If acknowledged by the court, evidence to the contrary can be produced by the other party, *see* R.W. Polak, *Onderzoekscommissies onderzocht*, *in* E.R. Muller & C.J.J.M. Stolker (Eds.), Ramp en Recht, Beschouwingen over rampen, verantwoordelijkheid en aansprakelijkheid, 357 at 367 *et seq* (2001).

99 *See* C.C. Lebow *et al*.,'Safety in The Skies', Personnel and Parties in NTSB Aviation Accident Investigations, RAND Institute for Civil Justice, at 16. In some cases, the release of such NTSB reports took up to four years.

100 See Rylands v. Fletcher (1865)3 H.&C. 774 (Court of Exechequer);(1866) L.R.1 Ex.265 (Court of Exechequer Chamber); (1868) L.R.3 H.L.330 (House of Lords), *as cited in* Winfield and Jolowicz on Tort 443 (1994).

101 Prosser and Keeton on Torts 550 *et seq.* (1984). Although the doctrine of Rylands v. Fletcher was initially rejected in a number of early American cases on the grounds that it conflicted with US law principles based on the assumption that negligence was required, it flourished in later case law, *see* J.J. Phillips *et al*., Tort Law, Cases, Materials, Problems 438 *et seq.* (1997).

102 *See* C.J.J.M. Stolker and D.I. Levine, *Compensation for Damage to Third Parties on the Ground as a Result of Aviation Accidents*, XXII AASL 60, at 61-63 (1997).

times? For a glimpse in any newspaper of recent years will confirm that aircraft still crash nowadays. Even if only one accident involving surface damage would occur every ten years, that specific accident could still pose the problems of having to prove negligence or fault for the victims, irrespective of the perceived safety of flying in general. And that reveals the fallacy of the line of reasoning which is based on the general (and perhaps statistically even true) notion that aviation is safer than in its early days, but does not take into account that aviation accidents keep occurring, irrespective of their numbers. And in such cases, the danger or ultrahazardousness of the activity is just as apparent as in earlier times (at least to those involved in the accident) and should thus justify absolute or strict liability.

4 The balancing of the use of the activity to society in general and the potential harm it can create to certain members of society;

The fourth argument, which is based on the idea of balancing the interests of the activity on the one hand and society as a whole on the other is related to the first argument and tips the scales in favor of absolute or strict liability. For although society as a whole may benefit from aviation, this should not mean that the inherent risks of flying should be borne by certain members of society if they are faced with cases where negligence or fault turn out to be difficult to prove.

5 The economically founded argument of the relatively common and easy availability of insurance coverage for the entities that choose to take the risk of the activity rather than letting the risk fall on innocent parties or their insurance coverage;

The fifth argument is based on the economic notion of relatively common and easy availability of insurance coverage for third party liability for operators of aircraft. This is perceived as more preferable and practical than leaving such risks to innocent third parties and their insurance coverage for such risks, if obtainable at all.

For 'normal' aviation accidents, the argument rings true: operators of aircraft can obtain insurance coverage for third party liability from the international aviation insurance market, albeit up to certain limits of coverage as set out in the policy. Normally, such coverage is meant to suffice in cases of liability arising from surface damage. Common sense also dictates that operators of aircraft are in a better position to take out insurance for such third party liability and assess the risks imposed by the activity of flying. However, as the terrorist attacks of '9/11' on the United States have made clear, trouble can arise for the aviation industry if the damage inflicted by such attacks exceeds the obtainable coverage for such specific risks related to war and

terrorism by far.[103] For as opposed to the risks of 'normal' aviation accidents and incidents, the risks of terrorism pose a new threat in terms of potential damage and in terms of insurance coverage since September 11, 2001. However, such abnormal occurrences should be seen as exceptions, which do not disprove the argument in general.

It should be remarked that the insurance argument essentially merely states that the party better equipped to do so, should take out insurance. Perceived in that sense, the argument can be raised irrespective of the question whether the underlying regime of third party liability is based on general fault or negligence or on a specific regime based on absolute or strict liability. Notably, the insurance argument goes a large step further in this context by actually linking the notion that the party taking the risk is better equipped to insure himself than innocent third parties to a justification for application of absolute or strict liability in this field.

6 Absolute or strict liability is the corollary to the freedom of flying over private property. This argument is substantiated by the fact that property owners generally cannot prevent overflight legally;[104]

The sixth argument is based on the rationale that aircraft may fly freely over the country, its inhabitants, and their property, as long as they assume responsibility in the form of a severe regime of liability when things go wrong.

7 The developments in the field of passenger liability under the Warsaw system.

Finally, a perhaps more spurious seventh argument can be put forward if one allows the recent developments in the field of contractual international private air law to be taken into account. Under the so-called system of Warsaw, a gradual move to an international regime based on contractual absolute liability towards passengers can be observed. For the latest update of the regime of Warsaw by means of the so-called Montreal Convention of 1999 provides that carriers shall not be able to exclude or limit their liability for damage sustained

103 The specific risks brought about by factors such as war and hijacking can lead war risk insurers to give seven days notice of review of the rate of premium, conditions and the geographical limits of the policy, *see* R.D. Margo, Aviation Insurance, 329-330 (2000). This has occurred after the recent terrorist attacks on the United States in the form of a drop of obtainable coverage to 5% of the initial coverage for hull, passenger, and third party liability risks.

104 *See* N. Matte, Treatise on Air – Aeronautical Law 504 (1981).

in case of death or bodily injury of passengers for damages not exceeding 100,000 Special Drawing Rights.[105]

As an interim measure before the Montreal Convention of 1999 comes into force for a substantial number of Member-States, the European Council has made a similar protective move toward passengers by means of Council Regulation No. 2027/97 of 9 October 1997, as amended by Regulation (EC) No 889/2002 of 13 May 2002. Under the Regulation, the liability of Community air carriers in respect of passengers and their baggage shall be governed by all provisions of the Montreal Convention relevant to such liability.[106]

Arguably, these moves toward more protection of passengers by means of absolute liability regimes up to 100.000 SDR which are growing into the accepted standard in international civil aviation, should lead to at least similar legal treatment of third parties that did not even volunteer to take the inherent risks posed by international civil aviation. If a passenger and a surface victim both suffer similar bodily injuries arising from the same aviation accident, why should the passenger automatically receive up to 100.000 SDR for his injuries, whereas the surface victim may have to prove fault or negligence as a prerequisite to any compensation?

If our fictitious legislator is convinced by the line of reasoning of one or more of these seven arguments, he can opt for a specific regime based on absolute or strict liability in this field. In the following paragraphs, the legislative steps needed for such a regime will be enumerated.

2.8 SCOPE OF ABSOLUTE OR STRICT LIABILITY

In this Chapter, the three main scenarios of conduct of aircraft capable of inflicting surface damage have been given. Furthermore, the main justifications for regimes based on absolute or strict liability in general and in this field have previously been enumerated. The combination of scenarios and justifications makes clear that the first scenario of damage inflicted by *impact* of the aircraft or parts of the aircraft, including objects or persons falling from the aircraft, should definitely fall under the scope of the regime. For in case of such genuine

105 In full: *Convention for the Unification of Certain Rules for International Carriage by Air, signed at Montreal on 28 May 1999*, hereinafter cited as the Montreal Convention of 1999; *see* Article 17 (1) jo. Article 21 (1) Montreal Convention 1999.

106 *See* Article 3 Council Regulation (EC) No 889/2002; *see also* Council Decision of 5 April 2001 on the conclusion by the European Community of the Convention for the Unification of Certain Rules for International Carriage by Air (the Montreal Convention). Earlier contractual moves by air carriers in this direction initiated by Japanese Airlines and the IATA by means of the IATA Intercarrier Agreement have paved the way to these latest legislative developments; *see, e.g.,* M. Milde, *Warsaw requiem or unfinished symphony? (from Warsaw to The Hague, Guatemala City, Montreal, Kuala Lumpur and to…?)*, TAQ 37, at 37-51 (1996).

aviation accidents, the damage will be the most severe and fault or negligence will be most difficult to prove, since the aircraft does not remain intact. Aviation accidents involving damage to third parties should be the cornerstone of a separate regime in the first place.

The next scenario of damage inflicted by flight in non-conformity with air traffic regulations can also cause personal injuries or property damage, albeit generally on a less grand scale. In comparison with the previous scenario, it is at least apparent that the causal connection between the damage and the conduct of the aircraft operator is more diffuse in cases of low flying aircraft than in cases of genuine aviation accidents. Furthermore, proof of fault or negligence will generally be less difficult to produce, as the aircraft remains intact. This scenario therefore provides less justification for a regime based on absolute or strict liability. In case of exclusion of this scenario from the scope of absolute liability, third parties will evidently have to fall back on the applicable general rules of fault liability or negligence or other available headings of liability. However, some national regimes in this field, such as the German one, have encompassed this scenario. Under the German regime, for instance, this has been achieved by means of the yardstick of an accident ('*Unfall*'), which has been defined as a sudden and external event causing personal injuries or property damage.[107]

Although borderline cases between damage caused by too low overflight and damage caused by general overflight can be envisaged, the criteria of the German private air law regime at least make clear that a requirement of *suddenness* is one of the key elements for inclusion within the regime. And that element is not met in cases of general overflight and the subsequent more 'long run' forms of potential nuisance and noise. In that context, it is evident that damage caused by aircraft in normal overflight and in conformity with air traffic regulations (and if prescribed, in conformity with specific noise modifications of the aircraft itself as well) should be excluded from the scope of a liability regime in this field. This can be substantiated by the fact that no criteria that would justify a regime based on absolute or strict liability, such as potential danger or seriousness of damage, play any significant role part in this scenario. The conduct of aircraft engaged in normal overflight cannot even be qualified as unlawful.

Article 1 of the Rome Convention of 1952 can serve as an example of how the international legislator has dealt with the three aforementioned scenarios. It reads:

> Article 1.(1) Any person who suffers damage on the surface shall, upon proof only that the damage was caused by an aircraft in flight or by any person or thing falling therefrom, be entitled to compensation as provided by this Convention. Neverthe-

107 *'ein plötzlich von auâen kommendes unvorhersehbares, einen Personen- oder Sachschaden verursachendes Ereignis'*, *see* § 33 *et seq*. Luft VG *and* sub-paragraph 4.4.2.2 of this study.

> less there shall be no right to compensation if the damage is not a direct consequence of the incident giving rise thereto, or if the damage results from the mere passage of the aircraft through the airspace in conformity with existing air traffic regulations.
> (2) For the purpose of this Convention, an aircraft is considered to be in flight from the moment when power is applied for the purpose of actual takeoff until the moment when the landing run ends. In the case of an aircraft lighter than air, the expression 'in flight' relates to the period from the moment when it becomes detached from the surface until it becomes again attached thereto.

Arguably, the first and second scenarios are covered by the regime, although such an assessment depends on the exact interpretation of the scope of the first two sentences of Article 1. The criteria of 'any person who suffers damage on the surface caused by an aircraft *in flight* as long as the damage is a direct consequence of the incident giving rise thereto', seem to point in the direction of inclusion of both genuine accidents as well as incidents involving damage caused by (sudden) too low overflight. However, the wording of these sentences remains ambiguous.[108]

The third scenario, of damage caused by normal overflight, has literally been excluded in the last part of Article 1(1). Notably, Article 1(2) governs the point where the aircraft is on the runway just before for take-off up to the point when the landing run ends. Apparently, the potential dangers to others involved in the process of taxiing to and from runways were not considered worthy of inclusion within the scope of absolute liability of the Convention.

Aside from these considerations on scope, the severity of the regime evidently also depends on the basis of strict or absolute liability and the defences allowed under the regime at hand to those entities addressed by it.

2.9 Persons or entities addressed by the regime

A legislator faced with the task of creating a specific regime of liability for surface damage inflicted by aircraft must first determine who can be held liable under the regime and which types of aircraft are covered by the regime.

The first question involves the qualification of two entities, the operator and the owner of the aircraft, which can be one and the same if the operator happens to own the aircraft. As a starting point for defining the operator, the general definition of the entity of an aircraft operator under international public air law can be of use. In Annex 10/II of the Chicago Convention 1944, an *aircraft operating agency* has been defined as 'the person, organization or enterprise engaged in, or offering to engage in, an aircraft operation.' As will be described in more detail in Chapter 4, national air regimes in this field refer

108 *See* paragraph 3.3.2 of this study.

varyingly to entities such as the operator or custodian of aircraft in their specific regimes of liability in this field. Although slight variations prevail per regime, the operator is generally perceived as the person or entity who actually *uses* the aircraft, for instance as an airline involved in a scheduled international air service.[109]

The owners of the aircraft, on the other hand, need not necessarily be the same entities as the operators, for instance in cases of charter and lease agreements. Under leasing agreements, the term 'owner' can refer to a number of potential entities engaged in the financing of aircraft, such as lenders, investors, and lessors of aircraft. Lessors on their part can be divided into financial and operational lessors, although the latter category is strictly speaking not a financier due to the nature of the lease.[110]

As financiers of aircraft are generally not involved in the operational aspects of the flight of the aircraft, the chances of their implication in liability suits are evidently more remote than those of the operators of aircraft. However, owners of aircraft may be implicated in certain cases, for instance for supplying a defective aircraft or aircraft components or for improper maintenance, if they are obliged to provide such a service under the conditions of the lease. More alarmingly, they may even be implicated for the mere fact that they are perceived as the so-called deepest pocket from which to seek compensation.[111]

These distinctions between operators and owners of aircraft imply that the legislature should clearly exclude the category of owners from his absolute or strict liability regime if the owners are not the same entities as the operators of aircraft. In this context, the example of Article 2 (3) of the Rome Convention of 1952 can serve as a crafty piece of legislation, which reads:

> The registered owner of the aircraft shall be presumed to be the operator and shall be liable as such unless, in the proceedings for the determination of his liability, he proves that some other person was the operator and, in so far as legal procedures permit, takes appropriate measures to make that other person a party in the proceedings.

Dependant on the exact basis and regime of liability, the legislator will subsequently have to determine whether and to what extent other parties can be held liable under the regime, such as the servants or agents of the aircraft

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109 Although difficulties can arise if the term 'operator' does not make clear if the person who has control of the aircraft or the person who profits economically from the aircraft is covered; in France, for instance, legal opinion is divided on this question whether the custodian (of 1384 CC) or the person in control of the aircraft or the person who profits economically is meant, *see* P. le Tourneau, L. Cadiet, Droit de la Responsabilité 810 (1996).

110 *See* R.D. Margo & A.T. Houghton, *The Role of Insurance in Aviation Finance Transactions*, *in* G.F. Butler *et al* (Eds.), Handbook of Airline Finance, Aviation Week US, at 279 (1999).

111 Margo & Houghton at 284.

operator or unlawful users. Next, the legislator has to define the term aircraft and determine which types of aircraft should fall under the scope of the absolute or strict liability regime. In order to do so, he could implement a general definition of the term 'aircraft' in his national aviation law regime in order clarify which objects in the skies do and which do not fall under the regime. Such a definition can also help to demarcate the boundaries of third party liability in air law on the one hand and space law on the other hand. The latter field makes use of the term 'space objects' in that context.[112] A number of general definitions of the term aircraft derived from various sources could serve as examples in that context:

Aircraft

1 A (or any) machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface[113]
2 An aeroplane, helicopter or airship[114]
3 A device that is used or intended to be used for flight in the air[115]

In conjunction with the general definition of aircraft, the legislator will have to specify what types of aircraft fall under the scope of the regime. Dependant on policy motives, he could opt for categories such as (inter)national civil, general, military, and state aircraft.

From the perspective of both aviation in general and its potential victims, the most fair option would be to include the broadest possible scope of types of aircraft in order to create a level playing field for all parties concerned. Especially in potential collision cases between differing types of aircraft, the rationale of such an option becomes clear. For in such cases, a regime of joint and several absolute or strict liability could be enacted, in which third parties suffering harm could opt for claiming from either of the aircraft involved in the accident or incident on a similar basis and regime of liability. In chapters

112 State liability for surface damage inflicted by so-called 'space objects' is covered by the *Convention on International Liability for Damage Caused by Space Objects, of March 29, 1972*. Although the term 'space object' has not been defined in the Convention, it becomes apparent that the term includes component parts of space objects as well as its launch vehicle and parts (Article I sub d Convention). *See* L.P. Wilkins, *Substantive bases for recovery for injuries sustained by private individuals as a result of fallen space objects*, 6 Journal of Space Law 161, at 162 (1978). *See also* R.E. Alexander, *Measuring damages under the Convention on International Liability for Damage caused by Space Objects*, 6 Journal of Space Law 151, at 151-159 (1978); R. Bender, Space Transport Liability, National and International Aspects 129-157 (1995); I.H.Ph. Diederiks-Verschoor, *Comparisons Between Air Law and Space Law Concerning Liability for Damages Caused by Aircraft and Space Objects*, ZLW 385, at 385-392 (1979).

113 *See* Annex 1,2,3,6/I/II/III,7,8,11,13,16/I of the Chicago Convention, PANS RAC (ICAO Doc 4444/13 (RAC-Rules of the Air and Air Traffic Services), and JAR-1. The Dutch Aviation Code also makes use of that definition, *see* Article 1.1 sub j. Wet Luchtvaart.

114 *See* JAR-145.5.

115 *See* FAR-1.

3 and 4, the manner in which international and national regimes have dealt with these issues will be described in more detail.

2.10 LIMITATION OF LIABILITY

Liability regimes based on fault or negligence give rise to unlimited liability of the person or entity that was at fault or negligent. 'Unlimited' liability means that victims are then entitled to full compensation of their damages.

A fictitious legislator could validly argue that one or more of the seven arguments previously raised in favor of absolute or strict liability should suffice to make regimes based on absolute or strict liability unlimited as well. For the combination of absolute or strict and unlimited liability would then simply serve the purpose of facilitating the process of obtaining full compensation from the entities addressed by the regime. As a *quid pro quo* for the severe basis of liability, rights of redress and subrogation from other potentially liable parties could be attributed to those entities by the legislature. The presumed and desired effect of such a regime of absolute or strict liability would be to channel liability to the operator of the aircraft vis-à-vis third parties.[116] Dependant on the circumstances of the case, the operator can subsequently seek redress from other potentially liable parties, such as producers of the aircraft or its components.

However, if a fictitious legislator is of the opinion that a combination of absolute or strict and unlimited liability would be to much to bear for aircraft operators, he could also opt for a *legally* limited system of liability based on policy reasons of protectionism. The rationale would then be that limited liability is perceived as a *quid pro quo* for absolute or strict liability. Article 6:110 BW of the Dutch Civil Code can serve as a general example of a provision, which makes such a legal limitation of liability possible and reads:

> Maximum liability amounts can be set by regulation, so that the liability which may arise from damage does not exceed that which can be reasonably be covered by insurance. Separate amounts can be fixed according to, amongst others, the nature of the event and of the damage, and the ground for liability.[117]

Notably, a link has been made between legal limitation and insurability as well as the ground for liability, which indicates that the Dutch legislature is not permitted to enact levels of legal limitation at random.

In the field of international air law, the idea of legal limitation of liability was first launched during the discussions on the Rome Convention of 1933.[118]

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116 *See on this notion also* paragraph 3.10 of this study.
117 The translation has been derived from Haanappel & Mackaay at 275.
118 *See* paragraph 3.2 of this study.

Drion has enumerated eight general justifications for limitation of liability in international air law in his famous thesis on the subject.[119] These are:

1 Analogy with maritime law with its global limitation of the shipowner's liability.

The first ground is mainly derived from the early stages of development of air law, which were influenced by maritime law principles. However, the mere fact that maritime law applies certain regimes based on limited liability is not in itself considered to be a strong enough argument to automatically apply limitation to aircraft.[120]

2 Necessary protection of a financially weak industry.

The second argument refers to the support of new industries, such as aviation in its early stages, by means of lenient liability regimes for airlines, which used to be mostly owned or subsidized by states in the past. Although perhaps attractive from the perspective of such states, the argument is weakly founded when perceived from an economic and policy point of view. For if industries cannot carry their own losses or compensate the potential harm they might inflict by their enterprises, their right to carry on becomes questionable in whatever stage of development.[121]

3 Catastrophic risks should not be borne by aviation alone.

The third argument, holding that catastrophic risks should not be borne by aviation alone, focuses on the potential extent of surface damage after extremely serious accidents. The notion is that if damages exceed all normal proportions, such disasters can no longer be qualified as mere aviation risks that should be borne by aviation alone, but on a larger, more national scale. Although this argument reveals a certain protectionism of the aviation industry, it has definitely regained validity in the aftermath of the terrorist attacks of September 11, 2001 on the United States.

The Bush Administration has acknowledged the validity of this argument by signing into law the so-called *Air Transportation Safety and System Stabilization Act*. The Act aims to preserve the financial viability of the U.S. airline industry on the one hand and to provide partial compensation for victims of the terrorist attacks on the other hand. The Act provides that the liability of the implicated airlines "shall not be in an amount greater than the limits of the liability coverage maintained by the air carrier" for all claims resulting from the terrorist related aircraft crashes of September 11. By means of Title

119 *See* H. Drion, Limitation of Liabilities in International Air Law 12 *et seq*. (1954).
120 Drion at 13-14.
121 Drion at 14-16.

IV of the Act, the so-called *September 11th Victim Compensation Fund* has been created, which has been described as a "fast-track administrative procedure for recovery from the Government of economic and non-economic losses incurred by victims and their families."[122]

4 Necessity of the carriers or operators being able to insure against these risks.

The argument of insurability establishes a link between the limitations of insurance liability policies and the extent of legal limitation. By making such a link, the problem is subsequently transformed into the question who should bear potential losses in excess of insured and legal limitations of liability: the implicated aircraft operators or the victims of an aircraft accident or incident? Within the framework of 'normal' aviation accidents or incidents not brought about by acts of terrorism, the most evident bearers of such risks seem to be the parties engaged in the activity of flying as opposed to third parties.

5 Possibility for potential claimants to take insurance themselves.

As opposed to many other forms of potential liability that can arise in society, such as traffic situations in which members of society can both be tortfeasors as well as victims, the risks imposed by aviation to third parties are almost uniquely one-sided. Practically no better example than the problem of surface damage inflicted by aircraft can serve to refute the argument that all potential victims as opposed to the operators of aircraft, should take out insurance coverage against the risks imposed by aviation.

6 Limitation of liability as a counterpart to the aggravated system of liability imposed upon the carrier and operator (the *quid pro quo* argument).

The previously discussed *'quid pro quo'* argument has proven to be a heavy price for unification of international private air law in this field, as the system of legal limitation of the Rome Convention of 1952 has been based on relatively low levels of limitation which are difficult to escape from legally. The inherent fallacy of this argument, especially on an international level, will be explored in greater detail in Chapter 3 of this study.

122 *See Air Transportation Safety and System Stabilization Act*, Pub L. No. 107-42 § 401 *et seq.* (2001), 49 U.S.C. § 40101 (2001). *See also* Zuckert Scoutt & Rasenberger, *Aviation Advisor, Special Edition #1 of September 24, 2001,* at 1-3; *see also* paragraph 5.10 of this study.

7 Avoidance of litigation by quick settlements.

The notion of avoidance of litigation by limitation of liability is based on the presumption that claimants would rather prefer a swift settlement of part of their damages to the burdens and risks of the far more long-run route of litigation for total compensation. The argument may hold a certain degree of truth, but only if the limited amount offered as a settlement comes close enough to the total amount of potential compensation obtainable through litigation to be of interest.

8 Unification of the law with respect to the amount of damages paid.

The last justification, unification of the law in respect of damages paid, will be dealt with in greater detail in Chapter 3 of this study in conjunction with the previously mentioned *'quid pro quo'* argument. At this point, common sense suffices to reveal the impossibility of such an endeavor in view of the extreme differences in living standards and potential damage awards worldwide.

In general, legal limitation of liability proves to a concept full of pitfalls. If a fictitious legislator should opt for such a system in this field anyhow, he could do so by linking levels of limitation of liability to certain weight categories of aircraft. As a general rule, the legislator is also advised to leave actions based on fault liability or negligence open to claimants in order to claim for damages that exceed the limitations thus enacted, as a matter of fair play. Only in exceptional cases of catastrophic risks posed by war and terrorism, which should not be borne by aviation alone and may prove to be difficult to insure, should legal limitation of liability thus play a role in this field.

Articles 153 and 154 of an elder version of the Aviation Law of Argentina (1954) can serve as an example of a regime based on limited liability in this field:[123]

> Article 153.
>
> The operator of an aircraft shall be liable with respect to each accident up to a total amount computed at the rate of one hundred and fifty thousand pesos in national currency (then $150.000) for each kilogram of the weight of the aircraft. The weight of the aircraft shall include the total maximum load capacity as stated in the certificate of airworthiness.
>
> However, the liability of the operator may not be less than one hundred and fifty thousand pesos in national currency (then $150.000) nor more than one million two hundred thousand pesos in national currency (then $1.200.000). One third of

123 Aviation Code of Argentina, Promulgated August 4, 1954; Law No. 14,307, passed July 1954 (published in Boletin Oficial, Aug. 18, 1954), *in* Air Laws and Treaties of the World, An Annotated Compilation Prepared for the Committee on Science and Astronautics, U.S. House of Representatives, Eighty-Seventh Congress, First Session, May 11, 1961, 22-23 (1961).

> such amount shall be used for payment of the damage caused to property, and the remaining two thirds for the payment for injuries to persons, but in the latter case the compensation may not exceed one hundred thousand pesos in national currency ($100,000) for each person injured.
>
> Article 154.
>
> If several persons have sustained damage in the same accident and the total amount due to be paid exceeds the limits provided in the preceding article, there shall be a proportionate reduction of the amount due to each person in order that the aforesaid total limits may not be exceeded.

The regime immediately reveals that inflation-correction is necessary from time to time. Furthermore, the inherent problem how to divide the total limit between the categories of personal injury and property damage is revealed. Whatever ratio is opted for cannot conceal a certain randomness.

2.11 INSURANCE

Third party liability insurance in the field of aviation raises a number of questions. Firstly, how can third party liability insurance be defined and what is its scope of coverage? These issues will be dealt with in subparagraphs 2.11.1 and 2.11.2. Secondly, the question arises on which grounds third party liability insurance should be made compulsory by the legislature. This issue will be dealt with in subparagraph 2.11.3. On the basis of these issues, a number of final observations on insurance will be made in 2.11.4.

2.11.1 Third party liability insurance in the field of aviation

Although policies may vary, aviation insurers will generally indemnify the insured parties (in this case, the operators of aircraft)[124] for 'all sums which the insured shall become legally liable to pay as damages in respect of bodily injury, whether fatal or otherwise, and damage to property caused by the insured aircraft or by any person or object falling therefrom.'[125] Aside from direct bodily injury, coverage can also include 'sickness, disease, mental

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124 Evidently other parties, such as airports, can also obtain third party liability insurance coverage, *see* D.S. Hansell, Introduction to Insurance 90 (1996).

125 *See* Lloyd's Aircraft Policy AVN. IA 14.11.73, Section II (Legal Liability to Third Parties); *see also* R.D. Margo at 251. Margo refers to AVN (Aviation policy or policy clause) 1C and 20. AVN 1C limits the cover to compensatory damages and requires that the bodily injury and property damage be 'accidental'(s II, §1). AVN 20 only refers to 'damages' and requires bodily injury and property damage to be 'caused by an occurrence'. An occurrence is defined as to include an accident (s I, Coverages A and B).

anguish due to an accident arising out of the ownership, maintenance, or use of any aircraft specifically described in the policy.'[126]

The amount of coverage that can be obtained in aviation insurance liability policies is limited to certain maximum levels. Dependent on factors such as the type of operation and contractual preference of the insured party, the latter can either opt for specific coverage per category of potential liability or for a single limit that covers all potential claims arising from 'any one accident' or 'any one occurrence'.[127] In the first case, separate liability coverage can be obtained for the categories '(a) bodily injuries excluding passengers', '(b) passenger bodily injury', and '(c) property damage.' In the second case, the coverage for these three categories is combined in a single limit policy, which has the advantage of simplification and reduction of administrative costs. An alternative single limit may also be available for categories (a) and (c), if the operation does not involve the transportation of passengers.[128] The maximum coverage per category or as a single limit will vary according to the demands of the aircraft operator at hand.[129]

Upon indemnifaction of the insured by the insurers, the insurers obtain the rights of recovery that the insured may have against third parties on the basis of the doctrine of subrogation. The insured is subsequently required to take all necessary steps to enforce such rights. The doctrine merely aims to prevent that the insured recover more than full indemnity. The same system applies in the relationship between insurers and reinsurers.[130]

2.11.2 Exclusions

In view of the combination of potential scenarios of surface damage, liability regimes, and questions of insurability, it should be stressed that policies usually

126 A.T. Wells, Introduction to Aviation Insurance 68 (1986).

127 The term '(any one) occurrence' is generally defined in the policy as 'an accident, happening or event or a continuous or repeated exposure to conditions occurring during the policy period which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured'. The term '(any one) accident' is related to passengers and requires the criteria of 'unlooked-for mishap or…untoward event', which causes bodily injury or death of the passenger, *see* Margo at 245-246.

128 Wells at 68. The single limit policy may also include insurance of the hull, and provide a combined hull and liability insurance policy, *see* R.L. Carter, Reinsurance 450 (1979).

129 Wells gives examples of limits per category (based on figures of 1986): (a) bodily injury excluding passengers: $100.000 per person/$300.000 each occurrence; (c) property damage: $100.000 each occurrence; or a single limit including passengers varying from $1.000.000 to $200.000.000 for major carriers, *see* Wells at 68-69. Nowadays, a great number of major airlines carry insurance on a single limit basis for amounts from $1 to 2 Billion (Information based on an interview with Mr. F. Husman of KLM airlines); *see also* N.K. Baden, *The Japanese Initiative on the Warsaw Convention*, 61 JALC 437, at 464 (1995-1996); Margo at 407.

130 Margo at 421 *et seq*.; Wells at 71. Reinsurance will not be dealt with in this study; *see on this topic,* Margo at 491 *et seq*.; Carter at 448 *et seq*.

do not cover claims 'directly or indirectly occasioned by noise (whether audible to the human ear or not), vibration, sonic boom and associated phenomena.'[131] However, specific coverage for noise or associated phenomena is available under separate policies in the London market.[132]

Margo gives the example of a case of noise-related damage and the inherent problems of proof involved in such a case. The case involves an aircraft flying at a low level, which could cause a horse to take fright and run into a fence, due to a combination of the noise and sight of the aircraft. If there are two proximate causes (sight and sound), the claim will be excluded under the policy. However, if the injury is caused by the concurrent operation of both sight and sound, the loss may be attributed to a risk, which is insured.[133]

Other general exclusions include claims 'directly or indirectly caused by pollution and contamination, electrical and electromagnetic interference, and interference with the use of property, unless caused by or resulting in a crash, fire, explosion, collision or recorded in-flight emergency causing abnormal aircraft operation.'[134] Pollution or contamination by aircraft of airports and their vicinity is also generally excluded, unless such environmental damage occurs as a consequence of an immediate or sudden accidental event.[135]

Liability for crop spraying is an altogether different field of coverage, which is only insured by a small number of insurers. Even then, a great number of risks relating to crop spraying have been excluded, such as injury to or destruction of crops, pastures, trees or tangible property, etc.[136]

In view of the problems posed by terrorism, a number of general exclusions under Lloyd's policy are of interest. These hold that the underwriters are not liable 'whilst the Aircraft is being used for any illegal purpose or for any purpose other than those stated in the Schedule and as defined in the Definitions,' or 'whilst the Aircraft is being piloted by any person other than as stated

131 Margo at 252. 'Sonic boom' has been defined as 'the acoustic event which is a manifestation of the shock wave system generated by an aircraft when it flies at a speed greater than the local sound velocity' *in* ICAO Do 9064, SBC/2 (1973). Claims based on sonic boom will generally be excluded under AVN 46B, the so-called Noise and Pollution and Other Perils Exclusion Clause, App 624.

132 Margo at 255. The coverage can be obtained through AVN 47, Noise Coverage Policy, App 625. The policy covers compensation in respect of accidental bodily injury (whether fatal or not) or accidental physical damage to or destruction of property (including animals) caused by the noise of an identified aircraft as specified in the policy. Notably, claims based on nuisance and/or compensation for the taking, use of or acquisition of rights to property or airspace and/or any other direct or indirect consequences of aircraft noise are not covered.

133 Margo at 252, *in reference to Lloyd instruments Ltd v Northern Star Ins Co Ltd* [1987] 1 Lloyd's Rep 32.

134 Margo at 253, *in reference to* AVN 1C, s II, §2(e) jo AVN 46B.

135 Margo at 256-257; *see also* Justice Derrington & R.S. Ashton, The Law of Liability Insurance 603 *et seq*. (1990).

136 Margo at 254-255.

in the Schedule except that the Aircraft may be operated on the ground by any person competent for that purpose.'

A whole series of exclusions is provided for claims caused by occurrences such as

> war, invasion, acts of foreign enemies, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection, martial law, military or ursurped power or attempts at usurpation of power, any hostile detonation of any weapon of war employing atomic or nuclear fission and/or fusion or other like reaction or radioactive force or matter, strikes, riots, civil commotions or labour disturbances, any act of one or more persons, whether or not agents of a sovereign Power, for political or terrorist purposes and whether the loss or damage resulting therefrom is accidental or intentional, any malicious act of sabotage, confiscation, nationalisation, seizure, restraint, detention, appropriation, requisition for title or use by or under the order of any Government (whether civil military or de facto) or public or local authority', and last but not least, 'hijacking or any unlawful seizure or wrongful exercise of control of the Aircraft or crew in flight (including any attempt at such seizure or control) made by any person or persons on board the aircraft acting without consent of the Insured.[137]

Margo points out that such exclusions were introduced by the London Market by means of the so-called war and hijacking risk exclusion clause AVN 48 B, after the Israeli raid on Beirut airport on 28 December 1968. However, aircraft operators are able to obtain coverage in respect of hull and liabilities against higher premiums for certain of these risks on the basis of so-called *Extended Coverage Endorsements.* Apart from the category 'any hostile detonation of any weapon of war employing atomic or nuclear fission and/or fusion or other like reaction or radioactive force or matter', such risks will then be written back in the liability all risks policy. Such coverage can be obtained from the more specialized war insurance market through so-called aviation hull war and allied perils policies.[138] After the attacks on the United States of September 11, 2001, war risk insurers invoked their right to give seven days' notice of review of the rate of premium and/or the geographical limits of the policy. This action included a right to cancel the policy after this period if agreement could not be reached between the insurers and insured parties. In this specific case, the war risk insurers severely limited the maximum fleet aggregate limits for which the insured parties could be indemnified to 5% of the initial total limit. If it were not for the (temporary) guarantees on extended coverage made by the Member States under auspices of the European Community and the

137 *See* Lloyd's Aircraft Policy AVN. IA 14.11.73 Section IV (A) (General Exclusions Applicable to All Sections); *see also* E.R. Hardy Ivamy, Personal Accident, Life and Other Insurances 209 (1980).

138 *See* Margo at 325-330.

United States, that move of the war risk insurers would have effectively stopped the operation of most, if not all, international air transport.

2.11.3 Compulsory insurance

In view of the risks posed by aviation to passengers and third parties, the legislature can oblige aircraft operators to insure themselves against such liability risks as an extra financial safeguard for compensation of these potential victims. The idea of compulsory insurance has been inextricably linked to the problem of liability for surface damage from the early days of aviation to the present day. Specific insurance provisions can thus be found in applicable international law, European Community law, as well as in many systems of national law in this field, as will be seen in more detail in the next chapters.

As a general rule, the State of Registry requires aircraft operators authorized by that State to carry 'adequate insurance' on the basis of its national insurance requirements. Such requirements might also be supplemented by each State of operation.[139] Although not always formally compulsory, insurance coverage for third party liability will thus generally be at least implicitly required by most States, such as the United Kingdom.[140] Other examples of States with compulsory insurance requirements include Denmark, Norway, Germany, Canada, and the United States.[141]

Furthermore, such a requirement has been enacted on a supranational European Community level by means of the EC Council Regulation 2407/92 on Air Carrier Licensing of 1992. The Regulation obliges air carriers under European jurisdiction to insure themselves against liability for passengers,

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139 Notably, the regulations of most States need to be updated on the levels of required "adequate insurance", as these are often no longer in conformity with the levels of coverage actually obtained by aircraft operators in the world today; *see, e.g.*, paragraph 5.9 of this study on the third party liability insurance requirements posed by the United States in that context, which amount to a mere $ 20.000.000 per involved aircraft for U.S. and foreign direct air carriers. In reality, US and foreign air carriers are generally insured for all legal liability on the basis of the substantially higher single limit of $ 1.5 Billion; this information was provided by G.N. Tompkins, Jr.

140 Under UK law, for instance compulsory insurance against surface damage is currently not required formally, since the provisions on compulsory insurance as contained in Part IV of the Civil Aviation Act 1949 never came into force and have been repealed by section 128 of the Companies Act 1967 and by section 26 of the Civil Aviation Act 1968. However, applicants for air service licenses, will not be granted by the Civil Aviation Authority if that governmental agency is not satisfied that the financial arrangements made by the applicant are adequate for discharging any obligations he may have to meet while operating under the license (under section 65(2)(b) of the Civil Aviation Act 1982). This practically comes down to compulsory insurance under the Civil Aviation (Licensing) Act 1960, *see* N. Legh-Jones (General Ed.), MacGillivray on Insurance Law 852 (1997); *see also* J. Birds, Modern Insurance Law 395 (1997) and paragraph 4.5.3 of this chapter.

141 *See* Margo at 23-27.

luggage, cargo, and third parties.[142] In view of the binding nature of Council Regulations, this makes third party liability insurance compulsory for undertakings established in the European Union.[143]

2.11.4 Final observations on insurance

In the previous sub-paragraphs, a general outline has been given on the topic of third party liability insurance coverage in the field of aviation. When general policies are set-off to the previously discussed potential scenarios of surface damage, it becomes apparent that potential liability arising from those scenarios need not necessarily be covered by insurance. Important scenarios of surface damage which are not necessarily covered by insurance include those generated by noise, vibration, sonic boom, and associated phenomena, scenarios of general environmental damage not arising from aircraft accidents, and a number of scenarios relating to war, invasion, acts of terrorism, etc. In some of these cases, specific coverage can be obtained through specific extra policies. Aside from scope of coverage, insurance policies are always limited to certain levels of coverage, dependent on factors such as weight of the aircraft and type of operation.

Evidently, insurance coverage provides an important extra safeguard for compensation of damage to third parties. Thus, our fictitious legislator is well advised to enact regimes based on compulsory insurance coverage for third party liability in this field. The scope of such regimes should at least cover international and domestic civil and general aviation; military or state aircraft need not necessarily be included, since they are generally covered by the State directly. He is also advised to enact minimal levels of required coverage, for example on the basis of the maximum take-off weight of the type of aircraft at hand. In relation to the aforementioned European Community insurance requirements of EC Council Regulation 2407/92, it is of interest that a new proposal for a Regulation of the European Parliament and of the Council on insurance requirements for air carriers and aircraft operators is currently in an advanced drafting stage. The proposal aims to fill in the current open-ended insurance requirements of EC Council Regulation 2407/92 and broaden the scope of aircraft operators covered by current European Community law.[144]

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142 Article 7 EC Council Regulation 2407/92, OJ 1992 L240/1, as adopted on 24 Aug 1992.

143 Article 4(1)a of EC Council Regulation 2407/92. The Regulation only applies to carriers whose principal place of business is located in a member state and not to carriers with branches in member states (which would in effect encompass most of the international carriers worldwide), *see* J. Balfour, European Community Air Law 35 (1995).

144 *See* in more detail paragraph 4.7 of this study.

2.12 FINAL REMARKS AND CONCLUSIONS

In this Chapter, the problem of liability for surface damage inflicted by aircraft has been evaluated on a theoretical and legislative perspective. On the basis of the five general questions posed in the introductory Chapter of this study and the beginning of this Chapter, the various issues at stake in this field have been dealt with.

First, the range of conduct of aircraft that can inflict surface damage has been taken into account by dividing that range of conduct into three main scenarios. These scenarios varied from actual aircraft accidents to potential damage caused by normal overflight.

Second, the option of subjecting liability for surface damage to the general headings of fault liability under civil law or negligence under common law has been discussed. The main criteria for fault liability and negligence have been evaluated, as well as the general defences available under these bases of liability. The previously mentioned scenarios of conduct have subsequently been linked to fault liability and negligence in order to assess the arguments in favor and against application of these general headings of liability to the problem of surface damage inflicted by aircraft. A link between the rights of overflight and the rights of property owners has been made in that context. One of the main problems turned out to be that fault liability or negligence could be difficult to prove under the more serious scenarios of surface damage, even with the aid of doctrines such as *res ipsa loquitur*. As an alternative, the fictive legislator could opt for regimes based on absolute or strict liability in order to circumvent the problems that victims may face when having to prove fault or negligence. The justifications for such bases of liability in the field of air law have been subsequently enumerated and analysed. As a preliminary conclusion, these stricter bases of liability generally seemed more justifiable in this field than application of general fault liability or negligence. Furthermore, the preferred scope of such stricter bases of liability has been evaluated by linking the bases of absolute or strict liability to the earlier described scenarios of conduct of the aircraft. This assessment revealed that at least the first scenario of accidents, not necessarily the second scenario of too low overflight, but definitely not the third scenario of normal overflight should fall under the scope of an absolute or strict liability regime.

This line of reasoning brought the third main question into range, namely which person(s) should be subjected to such an absolute or strict liability regime and which types of aircraft should be covered by such a regime. As a general rule, the operator as opposed to the owner of the aircraft should be subjected to the regime, which, from a perspective of a level playing field for both aircraft operators and third parties, should encompass the broadest possible scope of types of aircraft.

The fourth question focused on the arguments in favor of and against limitation of liability of the regime. The main arguments for such legal limita-

tions generally turned out to be invalid or outdated. However, the terrorist attacks on the United States of '9/11' have shed a new light on the argument that catastrophic risks should not be borne by aviation alone. In such extreme cases, possible solutions can lie in the exclusion of such scenarios from the scope of the regime of absolute or strict liability altogether, in limited liability within the regime up to levels of obtainable insurance coverage, and/or in solutions outside of any liability regime, *e.g.* by means of specific governmental compensation funds.

Finally, the fifth question on the feasibility of compulsory insurance coverage for third party liability necessitated a brief examination of the coverage obtainable under liability policies. In view of the fact that compulsory insurance can provide an extra safeguard for compensation of potential victims, the legislature of the State of Registry would be well to enact compulsory insurance regulation in this field, as is mostly the case in practice. It should be borne in mind that the fact that insurance coverage is limited should not necessarily lead to the conclusion that the underlying liability regime should be legally limited as well. That specific lack of correlation will be dealt with in greater detail in the next Chapter of this study.

A final problem that has not been addressed in this Chapter concerns the question whether a separate third party liability regime in this field should be solely based on national law or if such a regime should (also) be unified on an international or supranational European Community level in view of the cross boundary nature of aviation in order to create a more level playing field for those aircraft operators addressed by the regime. That issue will be explored in Chapters 3 and 4 of this study on the basis of the actual regimes in force in international air law and in a number of national air laws in this field.

3 Liability for surface damage inflicted by international civil aviation under international air law

3.1 INTRODUCTION

Any legislature faced with the problem of having to codify a liability regime for surface damage inflicted by aircraft or not will have to take various considerations into account. In the previous chapter, such considerations have been evaluated on a theoretical level. The fictitious legislator turned out to basically have two main options. He could either leave the problem to the general rules of fault liability or negligence or other general applicable headings of liability or opt for a specifically codified regime based on absolute or strict liability. In the latter case, he will have to determine which persons or entities should be subjected to the regime and which types of aircraft fall under the scope of the regime. Furthermore, he will have to determine the scope of the absolute or strict liability regime in terms of scenarios of potential conduct of the aircraft covered by it. And finally, he will have to determine if the regime should be based on limited or unlimited liability and if the persons or entities subjected to the regime should be obliged to take out third party liability insurance coverage. These main points of consideration are more or less identical for any legislature on a national level. However, the problem of liability for surface damage inflicted by aviation can also be partly looked upon from an international angle, as international civil aviation falls under jurisdiction of the international legislature. The rationale for such an approach to the problem is that international civil aviation is by its very nature a cross boundary activity, which could justify a certain level of international uniformity in this field. This Chapter will focus on the question how the international legislature has dealt with the problem by means of various international air law instruments and why these instruments have ultimately failed to attract a substantial number of ratifications.[1]

In comparison with the aforementioned similar considerations that have to be taken into account by national legislatures, the international legislator also has to deal with the extra problem of jurisdiction and the more practical problem of having to find common ground between the delegates from States

1 ICAO, the international legislature in the field of international civil aviation, is a specialized agency of the United Nations. ICAO came into being on 4 April 1947, after the 26th ratification of the Chicago Convention of 1944 was received (on 5 March 1947), *see* www.icao.org/icao/en/takeoff.htm.

participating in the drafting process on all issues that are dealt with. The past and present international air law instruments in this field consist of:

1 *the International Convention for the Unification of Certain Rules relating to Damage caused by Aircraft to Third Parties on the Surface, Rome, 29th May, 1933*, hereinafter cited as the Rome Convention of 1933;
2 *the Brussels Protocol of 1938*, hereinafter cited as the Brussels Protocol of 1938;
3 *the Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface, Signed at Rome, 7 October 1952*, hereinafter cited as the Rome Convention of 1952;
4 *the Protocol to Amend the Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface, as adopted and signed at Montreal on 23 September 1978*, hereinafter cited as the Montreal Protocol of 1978.[2]

Of these instruments, only the Rome Convention of 1952 and the Montreal Protocol of 1978 are in force.[3] However, since the Rome Convention of 1952 is an amended version of the Rome Convention of 1933 and since certain differences between the two can be of interest for future legislative attempts to revise the current instruments in force, both Conventions will be taken into account whenever deemed of comparative value.

The topics that will be dealt with in this chapter have been divided in the following manner. First, a brief historical review of the system of Rome will be given in order to clarify the current status quo (3.2). Next, the basis and scope of liability of the Rome Conventions will be discussed in relation to the potential scenarios of surface damage (3.3). The persons or entities and types of aircraft subjected to the regime of the Rome Conventions and the defences they can invoke will subsequently be enumerated (3.4). The systems of limitation of liability of the Rome Conventions will then be dealt with (3.5), followed by the provisions on insurance (3.6). The provisions on jurisdiction of the Rome Conventions will then be compared and evaluated (3.7). Finally, the regimes of the Rome Conventions as a whole will be briefly recapitulated (3.8).

Next, the final official attempt to amend the Rome Convention of 1952 by means of the Montreal Protocol will be discussed (3.9). The proposals to do so as drafted under auspices of the International Law Association will subsequently be dealt with (3.10). The chapter will end with a summary of the current status quo and proposed amendments. The latest attempt to revise the Rome Convention of 1952 by means of a new Draft Convention that was

2 In this Chapter, a reference will often be made to the 'system of Rome' for practical purposes. However, it should be borne in mind that only the Rome Convention of 1952 has gained a reasonable number of ratifications.
3 The Rome Convention of 1952 entered into force on 4 February 1958 and was ratified or adhered to by 45 Parties as of July, 2003. The Montreal Protocol of 1978 entered into force on 25 July 2002 and was ratified or acceded to by 8 parties as of July, 2003, *see* the status of both instruments at www.icao.org.

prepared by the ICAO Secretariat in 2003 will also be discussed in that context. Some final observations on the feasibility of an international regime in this field in the first place can serve as an introduction to the alternative of (supra) national solutions, which will be discussed in Chapters 4 and 5 (3.11).

3.2 A BRIEF HISTORICAL REVIEW

The story of the system of Rome begins with national aviation laws. After the First World War, the existing divergence of national aviation laws prompted a number of international organizations to lobby for unification of various fields of private air law. This led to the French initiative of the First International Conference on Private Air Law, which was held in Paris in 1925. During this Conference, a motion was accepted to form an International Technical Committee of Aerial Legal Experts, known officially as the *Comité International Technique d'Experts Juridiques Aériens* (or C.I.T.E.J.A). This Committee, which was to study the various fields of private air law, divided those fields amongst four Commissions. The so-called Third Commission was assigned to the problem of liability for surface damage.[4] From 1927 to 1933, the Third Commission aimed to reconcile the different existing national aviation law regimes in that field in order to find consensus on a new international instrument, which was to be known as the Rome Convention of 1933.[5]

In approximately the same period of time, a parallel move toward more uniformity in air law was made in the 'New World' of the Americas, where a number of States had formed an organization known as the Pan American Union. During its Fifth Pan American Conference in Santiago de Chile in 1923, the so-called Inter-American Commercial Aviation Commission was appointed, which prepared a draft instrument on a number of aviation rules in Washington in 1927. After certain modifications, the draft instrument, known as the Pan American Convention, was adopted during the Sixth Pan American Conference in Havana in 1928. Contrary to the move toward unification that was set in motion in Europe, the problem of liability for surface damage was left to the discretion of national laws in Article XXVIII of the Pan American Convention.[6]

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4 This problem was divided into three main areas of study for the Third Commission: (1) damage and liability to third parties in taking-off, landing and jettison; (2) limits of liability; and (3) insurance, *see* K.W. Colegrove, International Control of Aviation 99 (1930).

5 *See* J.J. Ide, *The history and accomplishments of the International Technical Committee of Aerial Legal Experts (CITEJA)*, 3 JALC 27, at 35 (1932).

6 K.W. Colgrove at 88-92. The Pan American Convention is also known as the Habana Convention on Commercial Aviation of Feb. 20, 1928. The Convention came into force on Aug. 26, 1931 for the United States (Treaty Series, No. 840), *see* H.S. Leroy, *Observations on Comparative Air Law*, 8 ALR 273, at 274 (1937).

Back in Europe, the Third Commission was in the process of drafting the Rome Convention of 1933. In that context, the excellent comparative overview that was compiled by Kaftal of a number of national aviation laws of the time is of interest in order to comprehend what the Third Commission was up against.[7] Kaftal took the national aviation laws of Austria, Bulgaria, Chile, Denmark, Finland, France, Germany, Great Britain, Hungary, Italy, Mexico, Norway, Poland, Salvador, Siam, Sweden, Switzerland, Czechoslovakia, (17 states of the) USA, the USSR, and Yugoslavia into account.[8] Upon comparison of these 21 aviation laws, it becomes apparent that the majority were based on regimes of absolute liability of the aircraft owners, (unlawful) possessors, or operators of aircraft. These entities were generally only permitted to invoke the defence of contributory negligence in order to escape liability. Only the Austrian, British, Mexican, Polish, and Czeco-Slovakian aviation laws were based on a presumption of fault.[9] Furthermore, these aviation laws were practically all based on unlimited liability with the exception of the German aviation law.[10] It is also of interest to note that the majority of these aviation laws did not prescribe guarantees in the form of insurance or security deposits. And those regimes that did prescribe such guarantees did not automatically link such requirements to a legally limited regime of liability.[11] Ergo, a great number of States had adequately covered the problem of liability for surface damage inflicted by aircraft in their national aviation laws in the drafting period of the Rome Convention of 1933. In most cases, such regimes were based on victim-oriented regimes of absolute and unlimited liability, and in some cases backed up by compulsory insurance requirements. The standard of a (presumption of) fault had only been adopted in a minority of these regimes.

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7 A. Kaftal, *The problem of liability for damages caused by aircraft on the surface*, 5 The Journal of Air Law 179, at 179-232 (1934).

8 Austria: Law of Dec. 10, 1919; Ordinance of the Minister, Sept. 23, 1925; Bulgaria: Law of July 23, 1925; Chile: Decree of May 15, 1931; Denmark: Law of May 1, 1923; Finland: Law of May 25, 1923; France: Law of May 31, 1924; Germany: Law of Aug. 1, 1922; Ordinance of July 19, 1930; Great Britain: Air Navigation Act 1920; Hungary: Ordinance of Dec. 30, 1922; Italy: Decree-Law of Aug. 20, 1923; Mexico: Law on General Means of Communications and Transit, Aug. 31, 1931; Norway: Law of Dec. 7, 1923; Poland: Decree of March 14, 1928; Salvador: Decree of May 17, 1923; Siam: Law B. E. 2465 (1922); Sweden: Law of May 26, 1922; Switzerland: Decree of Jan. 27, 1920; Czecho-Slovakia: Law of July 8, 1925; U.S.A. (17 States): Uniform State Law of Aeronautics, 1923-1929; U.S.S.R.: Air Code of April 27, 1932; Jugoslavia: Law of Feb. 22, 1928, *see* Kaftal at 230.

9 The Italian Law has been remarkably divided into three bases of liability: absolute liability for objects thrown from the plane, a presumption of fault for objects falling from the plane, and droit commun for take-off, landing and fall of the plane, *see* Kaftal at 230.

10 Kaftal at 198 and 231.

11 Only the laws of Austria, Bulgaria, Denmark, Germany, Norway, Switzerland, and Czecho-slovakia oblige the person potentially liable under the law to carry certain guarantees, *see* Kaftal at 231.

In retrospect, the Third Commission would have been wise to follow the guidelines of absolute and unlimited liability thus provided for by a majority of the national aviation laws of the time. For then the Third Commission would not have opted for a regime based on limitation of liability, which was to haunt the drafters of all future instruments within the system of Rome forever after. The idea of limitation of liability was backed up by resolutions of the International Chamber of Commerce (ICC) and the International Air Traffic Association (IATA), but was initially outvoted in favor of unlimited liability by 12 to 7 votes during the Fourth Session of CITEJA in 1928. However, it was finally settled upon during the next session after compromises made by those delegates in favor of unlimited liability.[12] Thus, the concept of limitation of liability stood at the basis of the draft version of the Rome Convention of 1933, which was approved in Budapest in 1930.[13]

Protectionism of aircraft operators in the form of a legal limitation of their liability for surface damage had thus won the day, which was to be backed up by compulsory insurance or other guarantees, as urged upon by the Swiss Delegation of the time. A recommendation on the possibility of direct actions of the victims of surface damage against insurers was also accepted. This lead to a final draft of the Rome Convention of 1933 based on absolute, limited, and compulsory insured liability of the operators of aircraft. However, the possibility of direct actions of third parties against insurers turned out to be an obstacle for a number of delegates. For such an option could lead to situations in which third parties would be able to invoke more rights against the insurers than the insured operators of aircraft themselves. These objections led to the codification of the Brussels Protocol of 1938, in which a number of extra defences for insurers were enacted. Although the Brussels Protocol of 1938 can formally be qualified as an integral part of the system of Rome, it is generally regarded as a dead letter in aviation insurance practice and in legal dogma, since it was only ratified by two States.[14]

In view of the lack of number of ratifications of the Rome Convention of 1933 and the Brussels Protocol of 1938, a new Sub-Committee of the Legal Committee of the newly formed International Civil Aviation Organization (ICAO) was appointed in 1947 to revise these pre-war instruments.[15] This involved a rather detailed process of preliminary groundwork by the Sub-Committee, which included the sending of a questionnaire to all member States. The questionnaire consisted of questions on issues such as the preferable basis and regime of liability, limitation of liability, collisions of aircraft, and

12 Ide at 35.

13 Ide at 39.

14 *See* E.G. Brown, *The Rome Conventions of 1933 and 1952: Do they point a moral?*, JALC 418, at 423-424 (1960/61).

15 During the Second World War, the annual meetings of the C.I.T.E.J.A. did not take place. After the Second World War, the C.I.T.E.J.A. was abolished and succeeded by the ICAO on the basis of the Chicago Convention of 1944, *see* Brown at 424-425.

insurance.[16] The responses to the questionnaire were so alarmingly diverse that no preliminary draft could be made on the basis of these responses. After a re-examination of the main issues at stake, another questionnaire on the sole issue of limitation of liability was sent to all member States by the Sub-Committee. Despite the almost predictable divergency of responses to the second questionnaire, the so-called Taormina Draft was made, which was the main foundation of the new Rome Convention of 1952.[17] Despite the detailed overhaul of its predecessor of 1933, the Rome Convention of 1952 was still based on similar pillars of absolute and limited liability, although the limits were substantially raised. A greater number of ratifications could not obscure the fact that none of the major aviation countries such as the United States, France, or the United Kingdom felt inclined to adhere to the Rome Convention of 1952.[18] The core objections that were raised against issues such as limitation of liability, the lack of clarity on potential recoverability of nuclear damage and damage caused by sonic boom, and the choice of the single forum of the place of the accident, erased any chance of substantial success of the Rome Convention of 1952. The final official attempt to amend the Rome Convention of 1952 by means of the Montreal Protocol of 1978 essentially only managed to raise the limits set out in the Convention. However, it has not been ratified widely either.[19]

Apparently, the story of the system of Rome has not ended yet. For the Legal Committee of ICAO recommended to include the subject of possible modernization of the Rome Convention of 1952 in its Work Programme of 2001. Another questionnaire on the subject was subsequently sent to the member States.[20] This has led to a *Draft Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface*, which was prepared by the ICAO Secretariat and considered by the ICAO Secretariat Study Group on the Modernization of the Rome Convention in April and September 2003. The (revised)

16 *See for the questionnaire* ICAO Legal Committee, Third Session, 1949, Minutes and Documents (1949), at 243 –247.

17 *See* the Synthesis of Replies to the Second Questionnaire, ICAO Legal Committee, Fifth Session, 1950, Minutes and Documents (1950), at 265-280. The responses clearly indicate a substantial divergence of opinion on the combinations of weight of the aircraft and corresponding limits of liability. The Taormina Draft was gradually modified during subsequent drafting sessions held in Montreal (1950), Mexico City (1951) and finally Rome (1952).

18 France and the United Kingdom merely signed the Rome Convention of 1952 at 7 October 1952 and 23 April 1953 respectively; the United States did not even bother to sign, *see* the status of the Rome Convention of 1952 as of July, 2003, at www.icao.org.

19 The Montreal Protocol of 1978 has only been ratified or adhered to by Azerbaijan, Brazil, Burkina Faso, Guatemala, Kenya, Morocco, Niger, and Suriname, *see* the status of the Montreal Protocol of 1978 as of July, 2003 at www.icao.org.

20 *See* ICAO's State letter LE 3/14.2-01/62 of 15 june 2001 on the Study of the Modernization of the Rome Convention of 1952 – damage caused by foreign aircraft to third parties on the surface, and the attached questionnaire.

Secretariat Draft No. 2 of 1 August 2003 will be dealt with in paragraph 3.11 of this study on the basis of the findings of this Chapter.[21]

3.3 BASIS AND SCOPE OF LIABILITY

3.3.1 Basis of liability

Although the exact wording varies, both of the Rome Conventions have clearly been based on absolute liability. For Article 2 of the Rome Convention of 1933 stipulates that 'damage caused by an aircraft in flight to persons and property gives a right to compensation on proof only that the damage exists and is attributable to the aircraft.' 'In flight' has been defined as the period 'from the beginning of the operations of departure until the end of the operations of arrival'.[22] Absolute liability also encompasses 'damage caused by an object of any kind falling from the aircraft, even in the event of the proper discharge of ballast or of jettison made in case of necessity' and 'damage caused by any person on board the aircraft.' However, the latter scenario has been excluded if caused by 'an act unconnected with the management of the aircraft committed intentionally by a person not being a member of the crew, and without the operator or his servants or agents having been able to prevent it.' This means that the operator cannot be held absolutely liable automatically for damage caused by unlawful seizure or hijacking of the aircraft.[23]

Similarly, Article 1(1) of the Rome Convention of 1952 entitles compensation to third parties 'upon proof only that the damage was caused by an aircraft in flight or by any person or thing falling therefrom.' 'In flight' has now been defined more precisely as the period from the moment when power is applied for the purpose of actual takeoff until the moment when the landing run ends.'[24]

3.3.1.1 Rationale for absolute liability

In its deliberations on the preferable basis of liability for the Rome Convention of 1933, the C.I.T.E.J.A chose to ignore the existing variations in bases of liability within national regimes in the field. Instead, the CITEJA took what was perceived as the common international interest into account by creating a 'new'

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21 *See* ICAO Legal Bureau, Memorandum of 07/08/03 on the Third Meeting of the ICAO Secretariat Study Group on the Modernization of the Rome Convention, Montreal, 3 to 5 September 2003 (SSG-MR/3) and the enclosed working paper SSG-MR/3-WP/1 – *Revised Draft Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface*.

22 *See* Article 2(3) Rome Convention of 1933.

23 *See* Article 2(2) sub a and b Rome Convention of 1933.

24 *See* Article 1(2) Rome Convention of 1952.

regime based on absolute liability. The following four arguments were raised in favor of absolute liability by the Rapporteur:

a. the eminent position of the aircraft toward third parties on the surface;
b. the impossibility of the victim of proving negligence of the operator in the majority of cases;
c. the use of a thing (aircraft), which involves new risks and special dangers, obliges the operator to certain guarantees toward other persons;
d. objective liability is the corollary to overflight above private property.[25]

The basis of absolute liability was also favored by the Sub-Committee of the Legal Committee of ICAO, which was appointed to revise the Rome Convention of 1933 in 1947. The Sub-Committee chose to support absolute liability despite the suggestion that such an extreme measure to protect third parties from the risks incidental to aviation were no longer justified on the grounds that air transport had developed rapidly since the nineteenthirties and had become such a common factor and vital part of economic life. The Sub-Committee rejected this line of reasoning and justified its support for absolute liability on the grounds that the trend of the time pointed toward absolute liability for damage caused by aircraft, railways, and other forms of transport in various European countries.[26]

A subsequent questionnaire that was sent to the member States and two international organizations on the revision of the Rome Convention of 1933 revealed that fourteen States were in favor of retaining the basis of absolute liability of the Rome Convention of 1933.[27] Only a few States such as the United States and Canada were opposed to the basis of absolute liability. The United States held that the operator should be liable for surface damage only if unable to prove that he had taken 'all measures to avoid damage and all events leading thereto which an operator exercising the highest degree of care would have taken under the circumstances'.[28] In the end, absolute liability was settled upon despite these reservations of a minority of addressed States.

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25 *See* Goedhuis, Handboek voor het Luchtrecht 281-282 (1943). These arguments are comparable to a number of those raised in favour of absolute or strict liability in paragraph 2.7 of this study.

26 *See* Report submitted by the Sub-Committee entrusted with the study of the revision of the Rome Convention and of the Brussels Protocol and inter-related matters (Approved by the Legal Committee on June 5, 1948) and distributed as Doc. 6011, LC/108, 18/6/48, *in* Annex IV to ICAO Legal Committee, Second Session, 1948, Minutes and Documents (1948), at 129, hereinafter cited as the Report.

27 *See, for the contents of the questionnaire* ICAO, Legal Committee, Third Session, 1949, Minutes and Documents (1949), at 243-247. Australia, Belgium, Brazil, Denmark, Finland, France, Italy, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the Union of South Africa, and the United Kingdom turned out to be in favour of absolute liability, *see* ICAO Legal Committee, Fourth Session, 1949, Minutes and Documents (1949), at 174.

28 *See* ICAO Legal Committee, Fourth Session, 1949, Minutes and Documents (1949), at 174-175.

3.3.2 Scope of absolute liability

If one links the three main scenarios of conduct of aircraft that are capable of inflicting surface damage to the bases of absolute liability of both Rome Conventions, the following picture emerges:[29]

Scenario 1. Surface damage inflicted by 'direct contact' or 'impact' of the aircraft or parts, objects, chemicals, or persons from the aircraft

Surface damage inflicted under this scenario is covered by the regimes of both of the Rome Conventions. In case of a genuine accident of an aircraft, the criteria of (any) damage caused by an aircraft in flight to persons and property on the surface are met upon proof of a causal connection between the damage and the accident. Things or persons falling from the aircraft are also covered by the absolute liability regimes of both Conventions.[30]

The scope of the first scenario has deliberately been narrowed down by means of the criteria of 'direct contact' or 'impact'. For the Sub-Committee responsible for the redrafting of the Rome Convention of 1933 initially suggested the following scope of absolute liability as opposed to the mere criterion of 'in flight' of the Rome Convention of 1933:

> Damage arising from *contact* between an aircraft or anything falling therefrom, and any person or object on the surface shall give a right to compensation by the mere fact that it is established that the damage exists and that it was caused by the aircraft or anything falling therefrom during the period of taxiing immediately prior to and for the purpose of taking off, during take-off, actual flight, landing and taxiing immediately after landing until the terminal or mooring or parking place is reached.[31]

The advantage of such a formulation would have been that the scope of absolute liability was then clearly not meant to cover damage caused by noise of aircraft at all.[32]

The (sub-)scenario of *collisions* of aircraft causing damage is also covered by both Rome Conventions.[33] For Article 6 of the Rome Convention of 1933 and Article 7 of the Rome Convention of 1952 provide that the operators of

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29 *See* paragraph 2.2 of this study for the foundation of these scenarios.

30 *See* Article 2 of the Rome Convention of 1933 and Article 1 of the Rome Convention of 1952.

31 The Report at 133.

32 The more broad formulation that was ultimately opted for in Article 1 of the Rome Convention of 1952 seems to indicate that the scenario of damage caused by noise was intended to fall under the scope of the regime to a certain degree; that scenario will be dealt with in more detail under the second scenario of potential surface damage.

33 Despite ideas of the time on a separate Convention on aircraft collisions *('Convention pour l'unification de certaines règles relatives à l'abordage aérien')*, *see* Goedhuis at 305.

colliding aircraft can be held liable jointly and severally under the conditions and limitations of the Convention. In view of the limited liability regimes of both Conventions, certain collision cases could give rise to problems. If an aircraft of a State party to the Rome Convention of 1952 collides with an aircraft of which the State of registration is not party, the question could arise if the operator of the latter could profit from the regime and limitations of liability of the Rome Convention of 1952. If interpreted strictly, this would not be the case.[34] However, Drion has argued that such a scenario could be covered by the regime of the Rome Convention of 1952 on the grounds that that would promote adherence to the Convention. Such an interpretation would correspond with the aim of more international uniformity in this field.[35] Inclusion of such a scenario seems to stretch the scope of the regime of the Convention a bit far and implicitly raises an important objection against the limited liability regime of the Rome Convention of 1952. For the chances are greater that third parties will prefer to file claims against the other (non-signatory) operator of the two colliding aircraft on the basis of an applicable unlimited and more lenient national regime as opposed to filing claims against the (signatory) operator on the basis of the Rome Convention of 1952.[36]

Scenarios 2 & 3. Surface damage inflicted by flight in non-conformity with air traffic regulations; too low general or sudden overflight (2). Surface damage inflicted by normal overflight (3).

The question to what extent the scenario of surface damage inflicted by flight in non- conformity with air traffic regulations is covered by the Rome Conventions has never been resolved satisfactorily. A closer scrutiny of the wording of Article 2 (1) of the Rome Convention of 1933 seems to indicate that this scenario falls under the scope of absolute liability as it reads: 'damage caused by an aircraft in flight to persons or property on the surface gives a right to compensation on proof only that the damage exists and that it is attributable to the aircraft.' In fact, such a wording could even cover damage caused by normal overflight in conformity with air traffic regulations.

The underlying question of scope of causation was addressed by the German delegation of the time, which suggested to limit the scope of the Rome Convention of 1933 to 'accidents' causing surface damage. According to the

34 For a strict application of Article 7 of the Rome Convention of 1952 indicates that the Convention only applies to the operators of aircraft whose mother-States have ratified the Convention. This means that other aircraft will be covered by the domestic law applicable to the case, *see* Shawcross & Beaumont, Air Law, paragraph V/112.

35 Drion, at 87-89.

36 In practice, plaintiffs will most likely file claims against both operators. But the point of the example is that the limited liability regime of the Rome Convention of 1952 will unjustly protect the operator that is covered by the regime of the Convention in comparison with the other operator involved in the collision.

German delegation, the term 'accidents' should also encompass cases of sudden overflight causing damage due to fright (for example, horses that are scared by sudden overflight of an aircraft and bolt, thereby killing someone), but not damage caused by frequent overflight. However, the German suggestion was not adopted by the Conference.[37]

As has been mentioned previously, the Sub-Committee responsible for redrafting the Rome Convention of 1933 initially suggested to limit the scope of recoverable damage to cases of damage arising from direct contact with the aircraft or things/persons/objects (falling) therefrom. Although most States supported that definition, the answers to a questionnaire revealed that some States found the criterion of 'contact' unsatisfactory, as it excluded damages caused by airstream of propellors, fire, explosion, or extraordinary noise. Initially, the Sub-Committee left the question open to the Legal Committee with the warning that such types of damage were unusual and would be difficult to prove.[38]

During the Fifth Session of the Legal Committee in Taormina in January 1950, the so-called Taormina Draft was adopted. The scope of absolute liability was defined as follows in Article 1 (1) of the Taormina Draft:

> Any person who suffers damage on the surface shall be entitled to compensation as provided in this Convention upon proof only that the damage was caused, *through contact, fire or explosion*, by an aircraft in flight or by any person or thing falling therefrom.[39]

Discussions on the preferable wording of the Taormina Draft continued in Montreal in June, 1950. The Swiss delegate commented that the drafting was not complete, since an aircraft flying at a low altitude could cause an avalanche by its airstream and thus bring about considerable surface damage. His suggestion to include the words "or by the airstream of an aircraft in flight" was initially adopted.[40]

The Drafting Committee subsequently came up with two drafting suggestions which incorporated items such as contact, fire, explosion, heat, chemical action, and disturbance of the air, but also added a third alternative, in which the problem of noise was addressed and excluded from the scope of the Convention.[41] Combined with the suggestion of the United Kingdom delegate

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37 Goedhuis at 288. Goedhuis points out that Ripert found it practically impossible to define the phrase 'accident' satisfactorily.

38 *See* ICAO Legal Committee, Fourth Session, 1949, Minutes and Documents (1949), at 241.

39 *See* ICAO Legal Committee, Fifth Session, 1950, Minutes and Documents (1950), at 347.

40 *See* ICAO Fourth Session of the Assembly, 1950, Legal Commission, Minutes and Documents (1950), at 57-65.

41 *See* ICAO Fourth Session of the Assembly, 1950, Legal Commission, Minutes and Documents (1950), at 164.

to add "or the passage of aircraft in normal flight",[42] the final outcome of the suggested revisions of Article 1(1) of the Taormina Draft by means of the Montreal Draft read:

> Any person who suffers damage on the surface, *other than damage due to noise or to passage of aircraft in normal flight*, shall be entitled to compensation as provided by this Convention upon proof only that the damage was caused directly by an aircraft in flight or by any person or thing falling therefrom.[43]

The Montreal Draft was transformed into the Mexico City Draft during the Seventh Session of the Legal Committee and stood at the basis of the Rome Convention of 1952. In the final redrafting procedures, the codified certainty of non-recoverability of damage caused by noise was unfortunately eliminated from the wording of Article 1(1) of the Rome Convention of 1952 by the Drafting Committee. However, damage caused by mere overflight in conformity with air traffic regulations remained excluded from the scope of absolute liability. This brief enumeration of the drafting history of the Rome Convention of 1952 seems to imply that damage caused by the noise arising from overflight in non-conformity with air traffic regulations was intended to be excluded from the scope of the Convention, although this is not entirely certain.[44]

Summarizing, the not quite resolved question thus remained whether surface damage arising from noise inflicted by aircraft flying in non-conformity with air traffic regulations was meant to be covered by the absolute liability regime of the Rome Convention of 1952 or not. Inclusion of this scenario would correspond with the wish of the German delegation to include cases of sudden fright to people or animals due to sudden noise of aircraft flying too low on a one-time basis. Exclusion would seem more in line with the wishes of those responsible for redrafting the Rome Convention of 1933 in a later stage. The question of potential recoverability of damage caused by noise resurfaced in combination with questions on the recoverability of damage caused by sonic boom during the deliberations on the Montreal Protocol of 1978. However, that important issue remained unresolved there as well, as will be seen in more detail in paragraph 3.8.[45]

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42 *See* ICAO Fourth Session of the Assembly, 1950, Legal Commission, Minutes and Documents (1950), at 166.

43 *See* 'Draft Convention on Damage Caused by Aircraft to Third Parties on the Surface as Revised by Legal Commission on Fourth Session ICAO Assembly', *in* ICAO, Fourth Session of the Assembly, Final Report of the Legal Commission (1950), at 11-20.

44 *See* ICAO Conference on Private International Air Law, 1952, Volume II, Documents (1953), at 229.

45 Remarkably, this problem was linked to Chapter V (Application of the Convention and General Provisions) and not to discussions on Article 1 of the Rome Convention of 1952. A proposal made by the Sub-Committee of the Legal Committee to insert an extra Article 24A which read: "This Convention shall not apply to damage caused by noise or sonic boom produced by an aircraft in flight" was rejected during the 22 Session of the Legal

3.4 PERSONS OR ENTITIES LIABLE UNDER THE CONVENTIONS. DEFENCES. RIGHTS OF RECOURSE. AIRCRAFT.

3.4.1 The operators of aircraft

Under both Rome Conventions, liability is primarily attributed to the operator of the aircraft, although the definitions of this entity vary slightly per Convention.[46] The Rome Convention of 1933 defines the operator as 'any person who has the aircraft at his disposal and who makes use thereof for his own account'.[47] The ambiguity of that definition made Goedhuis remark that the issue would hopefully be settled more clearly in the future.[48] One of the problems of the definition is that its criteria of 'disposal', 'use', and 'own account' have been codified in a cumulative as opposed to an alternative fashion.[49]

After rigorous study of various options by the Working Group 'Operator' in 1950, a more complex definition was construed for the Rome Convention of 1952. The operator was now defined as

> the person who was making use of the aircraft at the time the damage was caused, provided that if control of the navigation of the aircraft was retained by the person from whom the right to make use of the aircraft was derived, whether directly or indirectly, that person shall be considered the operator.[50]

The definition was further refined by adding that

> a person shall be considered to be making use of an aircraft when he is using it personally or when his servants or agents are using the aircraft in the course of their employment, whether or not within the scope of their authority.[51]

Committee, *see* 'Verslag van de Nederlandse Delegatie naar de Diplomatieke Conferentie tot Herziening van het Verdrag van Rome van 1952, betreffende Schade door Luchtvaartuigen (te Montreal van 6 – 23 september 1978)' (Report of the Dutch Delegation on the Diplomatic Conference to revise the Rome Convention of 1952), at 13 *et seq*.

46 *See* Article 4(1) of the Rome Convention of 1933 and Article 2(1) of the Rome Convention of 1952.

47 *See* Article 4(2) of the Rome Convention of 1933.

48 *See the discussions referred to by* Goedhuis at 299-301. One of the problems can serve as an example: the Rapporteur of the time was of the opinion that the operator was the person who had the right to employ the captain as well as to provide the aircraft with fuel; however, under certain agreements on use of the aircraft, those two conditions could be divided between the involved parties.

49 *See* Drion, at 144-145 on this issue. His advise would be to bring an action against all persons who could potentially be held as the operator.

50 *See* Article 2(a) of the Rome Convention of 1952; Drion at 143 *and, on the Working Group 'Operator',* ICAO Fourth Session of the Assembly, 1950, Legal Commission, Minutes and Documents (1950), at 313-331

51 *See* Article 2(b) of the Rome Convention of 1952.

The rather remarkable and complicating extra scenario of a person who only had the exclusive right to use the aircraft for a period of maximally fourteen days dating from the moment when the right of use commenced was added to the definition. If such a person caused damage while using the aircraft, he could be held jointly and severally liable with original operator from whom such right was derived under the regime of the Convention.[52] Essentially, the core meaning of the definition of the term operator seems to point primarily to the person in actual control of the aircraft, that is, whose crew was operating the aircraft at the time of the damage.[53]

3.4.2 The owners of aircraft

Although not specifically defined, the owners of aircraft can be held liable only if they are presumed to be the operators of those aircraft upon proof to the contrary under both Conventions.

Under the Rome Convention of 1933, the owner is deemed to be the operator of the aircraft if the name of the operator has not been registered in the aeronautical register or on some other official document. Under the Rome Convention of 1952, the registered owner is presumed to be the operator

> unless, in the proceedings for the determination of his liability, he proves that some other person was the operator and, in so far as legal procedures permit, takes appropriate measures to make that other person a party in the proceedings.[54]

3.4.3 Unlawful users

Unlawful users, defined as persons who make use of the aircraft without consent of the operator of the aircraft, can be held liable jointly and severally with the operator under the regimes of the Rome Conventions, unless the operator proves that he has exercised due care to prevent such use.[55] Thus, the operator can escape liability if he proves that he was not negligent or at fault in relation to the unlawful use. This means that the standard of fault or

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52 *See* Article 3 of the Rome Convention of 1952.

53 Drion points out that in practice, the definition of the term 'operator' of the Rome Convention of 1933 does not differ substantially from that of the Rome Convention of 1952, *see* Drion at 143-145.

54 *See* Article 4(3) of the Rome Convention of 1933 and Article 2(3) of the Rome Convention of 1952.

55 *See* Article 5 of the Rome Convention of 1933 and Article 4 of the Rome Convention of 1952. Note that the wording of the articles varies slightly (the defence of due care of Article 4 originated from the notion of the operator having not taken all proper steps to prevent the unlawful use of Article 5).

negligence, and not that of absolute liability, prevails for the operator in cases of unlawful use under both Conventions and then only within the limits of liability set out in the Conventions. In effect, the provisions on unlawful use thus offer operators of aircraft the protection of a limited liability regime based on a presumption of fault or negligence.

The unlawful user should be distinguished from the person who '*wrongfully takes* and makes use of an aircraft without the consent of the person entitled to use it (the operator).' For if such a person causes damage, his liability shall be unlimited.[56]

This second category points to actual hijackers of an aircraft, who are thus deprived of the advantages of legal limitation of liability.[57] Unfortunately, the victims are not likely to profit much from unlimited liability of hijackers of aircraft. This can be due both to the extreme difficulty of claiming from such individuals in general as well as to their presumable lack of assets to cover the damage they inflicted, assuming that the filing of such claims can be done successfully in the first place.[58]

An interesting and complex problem for the potential future of the system of Rome has arisen due to the terrorist attacks of September 11, 2001 on the United States. In light of the catastrophic damage inflicted by the use of aircraft as manned bombs in those attacks, the question for the future will be on which basis of liability and to what extent the original operators of such aircraft can be held liable for such acts.[59]

3.4.4 Defences and rights of recourse

Under the absolute liability regime of the Rome Convention of 1933, the main defence of the operator is that of contributory negligence of the injured party.[60]

Under the absolute liability regime of the Rome Convention of 1952, the number of defences was expanded by holding that a person otherwise liable under the Convention shall not be liable if the damage is the direct consequence of armed conflict or civil disturbance, or if such person has been

56 *See* Article 12(2) of the Rome Convention of 1952.
57 Drion at 322.
58 Unless perhaps sufficient evidence can be put forward that links the hijackers to a responsible State, although this may prove difficult in practice, *see* Wassenbergh at 117. Referring to the Lockerbie aviation disaster, Wassenbergh points out that Libya cannot be condemned to compensate the victims.
59 *See* sub-paragraph 3.11.2 of this study.
60 *See* Article 3 of the Rome Convention of 1933.

deprived of the use of the aircraft by act of public authority.[61] Another implicit defence against unlawful use holds that if the operator can prove that he has exercised due care, he cannot be held jointly and severally liable with the unlawful user, as has been described in the previous sub-paragraph.

The regime of the Rome Convention of 1933 does not prejudice the question whether the operator has a right of recourse against the author of the damage.[62] The Rome Convention of 1952 takes the rights of recourse a step further and makes such rights applicable to all persons potentially liable under the Convention against any other person.[63]

3.4.5 Aircraft types

A definition or specification of the term 'aircraft' is not given under the Rome Conventions, which leaves that issue to the discretion of national courts.[64] Both Rome Conventions merely stipulate that their regimes do not apply to military, customs, or police aircraft.[65]

3.5 Limitation of liability

The most remarkable and elemental characteristic of the system of Rome concerns the fact that it is has been based on a legal limitation of liability of the operator. In this paragraph, the concept of limitation of liability will be divided in subparagraphs on the rationale for limitation of liability (3.5.1), the chosen system of limitation (3.5.2), the apportionment of limits (3.5.3), and the potential escape routes to unlimited liability (3.5.4). The effects of limitation of liability on insurance and jurisdiction will be taken into account in subsequent paragraphs (3.6 and 3.7).

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61 *See* Article 5 of the Rome Convention of 1952. *See also* Article 6 of the Rome Convention of 1952 on the defence of contributory negligence, which was maintained, albeit with a different wording than under the Rome Convention of 1933. Note that Article 8 of the Rome Convention of 1952 specifically allows a number of other mentioned parties aside from the operator to invoke the defences, such as the owners that are presumed to be operators of Article 2(3) of the Rome Convention of 1952.

62 *See* Article 7 of the Rome Convention of 1933.

63 *See* Article 10 of the Rome Convention of 1952.

64 *See* Goedhuis at 285; *see also* paragraph 2.9 of this study on definitions of aircraft derived from other sources, such as the Chicago Convention of 1944. The possible consequence of leaving this issue to the discretion of national courts is that variations in scope of aircraft that are deemed to be covered by the Convention may occur between different national courts. Such variations in scope also exist in national aviation legislation; *see in that context* paragraph 4.3 of this study.

65 *See* Article 21 the Rome Convention 1933 and Article 26 Rome Convention 1952.

3.5.1 Rationale for limitation of liability

As has been touched upon in paragraph 3.2 of this Chapter, the origins of the limited liability regime of the Rome Convention of 1933 largely lie in the protectionistic attitude of the IATA and the ICC of the time toward aviation. From the moment the idea of legal limitation of liability was launched, none of the instruments within the system of Rome managed to escape from its clutches. Its fundamental role can clearly be derived from the preamble of the Rome Convention of 1952 which informs the reader that the drafters were

> moved by a desire to ensure adequate compensation for persons who suffer damage caused on the surface by foreign aircraft, *while limiting in a reasonable manner the extent of liabilities incurred for such damage in order not to hinder the development of international civil air transport*, and also convinced of the need for unifying to greatest extent possible, through an international convention, the rules applying in the various countries of the world to the liabilities incurred for such damage.

Even without the aid of any minutes or documents that record the drafting history of the Rome Convention of 1952, the application of plain logic makes clear that such a desire cannot be accomplished fairly on an international level. This is due to the fact that the potential level of damage and subsequent compensation to persons and property can vary enormously per State or even part of a State. A foreign aircraft that comes down in a town in Ethiopia will cost a fraction of the amount of compensation due for a similar aviation accident in a town of comparable size in the United States. This is because the living standards and thus the potential level of damage of inhabitants of Ethiopia and the United States vary vastly. The extent of potential surface damage is bound to vary not only in a geographical sense, but also in the course of time. For the aforementioned aviation accidents in both the United States and Ethiopia would have led to a far lesser degree of liability exposure three decades ago than now, due to factors such as inflation and changing living standards. The point is that if one compares potential victims of surface damage worldwide and in time, it becomes apparent that limitation of liability is the one aspect of an international liability regime that cannot be unified worldwide satisfactorily. For such a unification would place the potential victims in poorer countries in a more advantageous position than those in more developed countries. This is due to the fact that the former have a far greater chance of receiving 'adequate compensation' than the latter as their level of suffered damage is more likely to fall fully or to a far greater extent within the legal limitations set out in the regime of the Convention.[66] Ergo, any form

66 This argument has also been raised by Drion in his enumeration of justifications for legal limitation of liability. The aim of unification of the law with respect to the amount of damages to be paid has been rejected by him on the grounds that it would be inappropriate to unify the amount of damages to be paid in case of death or injuries, as local views and

of limitation of liability has a strong chance of falling under the actual damage suffered in an international aviation accident or incident, especially in the more developed countries of the world. To coin the phrase, such a regime can never create a level playing field either for aviation or its potential victims.

The other notion of the preamble, which holds that limitation of liability is necessary in order not to hinder the development of international civil aviation, also seems remarkable in light of the fact that national air laws in this field were largely based on unlimited liability in the drafting period of both Rome Conventions. The development of international civil aviation seems not to have been seriously hindered by such regimes, which were mostly based on unlimited liability.[67]

3.5.2 The chosen systems of limitation

Aside from the impossibility of fairly limiting liability on an international basis in general, a great number of specific problems can arise when the legislature sets out to codify a system of limitation. The most elementary problem concerns the problem how to limit liability adequately.

Under the regime of the Rome Convention of 1933, the operator could be held liable for each occurrence up to an amount of 250 francs for each kilogramme of the weight of the aircraft, whereby the limit of the operator's liability was not be less than 600,000 francs, nor greater than 2,000,000 francs.[68] This rather straightforward classification system in which weight of the aircraft was combined with certain levels of limitation was transformed into a more complex system by the drafters of the Rome Convention of 1952. On the basis of replies to a second questionnaire sent out by the Legal Committee on the sole issue of limitation of liability, the foundation for the revised system of limitation was codified in the so-called Taormina Draft, which stood at the basis of the Rome Convention of 1952.[69] Under the Rome Convention of 1952, the following system of limitation was codified in Article 11(1):

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circumstances of a social and economic character are of such importance in that field, *see* Drion at 42.

67 A synthesis of national laws that was made in the drafting period of the Rome Convention of 1952 revealed that the laws of thirty-three States contained special provisions on the topic of third party liability and the laws of eighteen other States did not; of the laws that did, the majority was based on absolute liability; and that, irrespective of the basis of liability, all the laws were based on unlimited liability, but for the six States which had ratified the Rome Convention of 1933 and three other States (of which the specific laws were not yet in force at the time of the survey), *see* ICAO Legal Committee, Fifth Session, 1950, Minutes and Documents (1950), at 281-295.

68 *See* Article 8(1) and (2) of the Rome Convention of 1933.

69 *See* Syntheses of Replies to The Questionnaire on the Limits of Liability in Relation to the Rome Convention, ICAO Legal Committee, Fifth Session, 1950, Minutes and Documents (1950) at 265-280; Brown at 426. These sources reveal the divergency of views on this issue.

1 Subject to the provisions of Article 12, the liability for damage giving a right to compensation under Article 1, for each aircraft accident and incident, in respect of all persons liable under this Convention, shall not exceed:
   a. 500 000 francs for aircraft weighing 1000 kilogrammes or less
   b. 500 000 francs plus 400 francs per kilogramme over 1000 kilogrammes for aircraft weighing more than 1000 but not exceeding 6000 kilogrammes;
   c. 2 500 000 francs plus 250 francs per kilogramme over 6000 kilogrammes for aircraft weighing more than 6000 but not exceeding 20 000 kilogrammes;
   d. 6 000 000 francs plus 150 francs per kilogramme over 20 000 kilogrammes for aircraft weighing more than 20 000 but not exceeding 50 000 kilogrammes;
   e. 10 500 000 francs plus 100 francs per kilogramme over 50 000 kilogrammes for aircraft weighing more than 50 000 kilogrammes.

Furthermore, the liability in respect of loss of life or personal injury was limited to 500 000 francs per person killed or injured in Article 11(2) of the Rome Convention of 1952.

Upon reflection of this system of limitation of liability approximately fifty years after its drafting, the amounts evidently seem outdated both in terms of chosen levels and mode of expression (the Gold Franc) anywhere in the world.[70] But that it is not the main point, for the legislature could devise ways in which such limits could be corrected from time to time in order to keep up with changing economic circumstances and inflation.[71] The point is far more that a correlation has been presumed between the weight of an aircraft, a certain limit of liability, and actual damage, whereas such a correlation need not necessarily exist. In other words, the presumption that a Boeing 747 is capable of inflicting far more substantial surface damage than a Fokker 50 due to the differences in weight of both aircraft may not be automatically valid, but will depend on the circumstances of the aviation accident or incident at hand. If, for instance, the Boeing 747 and Fokker 50 both crash into a nuclear plant in an identical fashion, the ultimate effect would be strongly comparable in terms of damage if the plant breaks down after impact with both the heavier and the lighter aircraft. And even if a correlation between weight of the aircraft and subsequent damage does exist, such a correlation is certainly not in exactly the same ratio as codified in Article 11 of the Rome Convention of 1952.

In short, this means that any chosen level of limitation is essentially arbitrary. Even if legally limited tiers of liability are linked to the argument of capped insurability of third party liability, the subsequent legal limitations of liability are difficult to codify fairly, as will be explored in more detail in paragraph 3.6.

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70 The franc has been defined as a currency unit consisting of 65,5 milligrammes of gold of millesimal fineness 900 in Article 11(4) of the Rome Convention of 1952 .

71 Although such updates would evidently still leave the impossibility of fairly creating a uniform system of limitation intact.

3.5.3 Apportionment of limits

Aside from the more or less arbitrary correlation between weight of the aircraft and limitation of liability, other problems will arise in the process of codifying a system of limitation. One of those problems concerns the distribution of the limits between the damage categories of personal injuries and property damage, especially in cases of surface damage that exceed those limitations.

Under Article 8(3) of the Rome Convention of 1933, a division was made whereby one-third of the amount of maximum liability was to be appropriated to compensation for damage caused to property and the other two-thirds to compensation for damage caused to persons. In the latter case, the compensation payable was not to exceed 200,000 francs per person. In cases of excess damage above the limits set out in Article 8, the compensation due to each person was to be reduced proportionately so that the total would not exceed the limits.[72] Despite the fact that a certain randomness between the categories of personal injuries and property damage is clearly perceivable, such a division does make clear that the drafters of the Rome Convention of 1933 were of the opinion that personal injuries deserved a greater part of the total limit than property damage.

Another inherent problem of distribution of limits concerns the question what is to be done if the level of property damage remains under the legal limits, whereas the limits for personal injuries are exceeded by the actual level of personal injuries. Would it then be possible to transfer the property damage 'excess coverage' to the side of personal injuries by means of a process referred to as reversability? If interpreted strictly, such reversability would not be possible under the regime of the Rome Convention of 1933.[73] However, such a rule would seem fair from a more modern perspective. For as a system of legal limitation of liability already protects the operator to a great extent, the least one would expect is that compensation is paid to the full amount of limitation set out in the regime, if this would otherwise mean that certain victims are left uncompensated.

As has been the unfortunate case with a great number of the revisions of the Rome Convention of 1933, the problem of apportionment was also complicated in Article 14 of the Rome Convention of 1952. The Article reads:

> If the total amount of the claims established exceeds the limit of liability applicable under the provisions of this Convention, the following rules shall apply, taking into account the provisions of paragraph 2 of Article 11:
>
> a. If the claims are exclusively in respect of loss of life or personal injury or exclusively in respect of damage to property, such claims shall be reduced in proportion to their respective amounts.

72 *See* Article 9 of the Rome Convention of 1933.
73 Goedhuis at 308-309.

b. If the claims are both in respect of loss of life or personal injury and in respect of damage to property, one half of the total sum distributable shall be appropriated preferentially to meet claims in respect of loss of life and personal injury and, if insufficient, shall be distributed proportionately between the claims concerned. The remainder of the total sum distributable shall be distributed proportionately among the claims in respect of damage to property and the portion not already covered of the claims in respect of loss of life and personal injury.

Again, a rather randomly chosen system of division between the main categories of personal injury and property damage becomes apparent. In that context, Drion raised the question if the special limit per person killed or injured should be applied before or after claims for death were reduced by the global limitation per aircraft, which can make rather a difference, and was not clarified by the drafters of either Rome Convention.[74]

All in all, the aforementioned systems of apportionment of limits between personal injuries and property damage seem outdated and often difficult to apply in practice, especially in complex cases of 'mixed' surface damage with various categories and degrees of both personal injuries and property damage. The problems inherent to apportionment thus illustrate yet another complicating factor to regimes based on limited liability.

3.5.4 Escape routes to unlimited liability: gross negligence or wilful misconduct

Up to this point, it has become apparent that both Rome Conventions have been based on a combination of absolute and limited liability. Limited liability was justified as a quid pro quo for the severe basis of absolute liability and was perceived necessary in order not to hinder the development of international civil aviation. As has been established, the unwanted effect of limited liability on an international level is that it can lead to discrepancies in levels of compensation worldwide, as potential damages can vary so enormously per State. Furthermore, the national air laws in this field of the time indicate that they were practically all based on absolute and unlimited liability or *at worst* on unlimited regimes based on a presumption of fault or negligence, without apparently disturbing the development of international air transport at all. A combination of these facts would lead to the inescapable conclusion that the fairest and most logical escape route from the absolute and limited liability regimes of both Rome Conventions would lie in proof of fault or negligence of the operator. For having to prove fault or negligence would have been the worst case scenario for claimants under a number of national aviation

74 Drion at 175-181.

laws of the time anyhow, as they could generally rely on absolute and unlimited liability on the basis of those national third party liability regimes.

However, the drafters of both Rome Conventions made a remarkable move in their choice of escape routes from limited to unlimited liability. For they opted for proof of gross negligence or wilful misconduct in order to escape from limited to unlimited liability.[75] This was an even more severe basis of liability than that of 'normal' fault liability or negligence!

Under the regime of Article 14(a) of the Rome Convention of 1933, the operator could not profit from the limited liability regime of the Convention if it was proven that the damage resulted from the gross negligence ("*faute lourde*") or wilful misconduct ("*dol*") of the operator, or his servants or agents, except when the operator could prove that the damage resulted from negligence in the pilotage, handling or navigation of the aircraft, or, where his servants or agents are concerned, that he had taken all proper steps to prevent the damage.

The means of escape from limited liability have not been made any easier under the regime of Article 12(1) of the Rome Convention of 1952. Liability of the operator could then only become unlimited upon proof of a deliberate act or omission done with the intent to cause damage by him or his servants or agents, provided that the latter were acting in the course of their employment and within the scope of their authority.[76]

Bearing in mind that one of the main points of creating a regime based on absolute and limited liability is that proof of negligence or fault of the operator can be difficult to furnish, the demand of having to prove gross negligence or wilful misconduct in order to escape from the limitations of the regime seems absurd to say the least. At most, one would expect plaintiffs to be able to fall back on the general rules of negligence or fault liability in order to obtain full compensation from the operator if fault or negligence of either the operator or his servants or agents can be proven. However, the apparent point at the time was that if the limits were banished even in cases of slight fault, the whole point of the quid pro quo regime would be lost: for then, plaintiffs could easily circumvent the regime's limits once the slightest degree of fault was successfully established.[77]

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75 The other being that the operator has not furnished one of the securities prescribed by Article 14(b) of the Rome Convention of 1933.

76 The Rome Convention of 1952 has not made things easier. Liability of the operator only becomes unlimited if he or his servants are proven to have committed a deliberate act or omission done with the intent to cause damage, "provided that in the case of such act or omission of such servant or agent, it is also proved that he was acting in the course of his employment and within the scope of his authority."

77 *See* Goedhuis at 309-312.

3.6 INSURANCE

Without legislative interference in this field, operators of aircraft would be free to choose to either fly uninsured or insured. In case of flying uninsured, the effect would be that the operator is obliged to compensate potential damage for which he can be held liable from his own assets. In case of flying insured, the insurers would be obligated to indemnify the operator on the basis of the conditions stipulated in the insurance contract between the insurers and the operator. The amount due will depend both on the level of damages suffered and on the level of obtained insurance coverage. If the actual damage exceeds the level of coverage, the amount in excess of coverage may have to be compensated by the operator. The chain of events that follow in the aftermath of an insured aviation accident in which surface damage arises makes clear that at least formally there is no relationship whatsoever between the third parties that suffer damage and the insurers. The third parties will have to claim from the operator of the aircraft, who on his part will file a claim with his insurers. The insurers will subsequently have to indemnify the operators, who in turn will compensate the third parties. Even if the insurers of potential liable parties create a fund from which they compensate the victims directly, this does not establish a formal delictual relationship between the victims and the insurers of the implicated aircraft.

One could argue quite convincingly that the legislator should leave it up to operators of aircraft to take out insurance or not, since most aircraft operators will most likely not take the risk of flying uninsured. The question then arises why and how the international legislator has interfered in the free forces of the aviation insurance market and has set out to regulate third party liability insurance for operators of aircraft in the Rome Conventions.

In the preliminary drafting work on the Rome Convention of 1933, a link between its proposed absolute and limited liability regime and insurability was made by reasoning that only a limited liability regime could be covered by insurance against reasonable premiums.[78] This led to the following regime of liability. The main rule held that every aircraft that fell under the scope of its regime should be insured for the liability limits set out in article 8 of the Convention in respect of third party liability. Detailed rules were subsequently given on where such coverage should be obtained and on the possibilities of substituting insurance for other guarantees on the basis of the municipal laws of the Contracting States.[79] Proof of such coverage was to

78 *See* Goedhuis, at 283-284. A remarkable early objection raised by the Swiss delegation held that insurers could even take on the risk of unlimited liability without a substantial raise in premiums, but this was unfortunately outvoted, so that the limited liability regime won the day for the C.I.T.E.J.A.

79 *See* Article 12 of the Rome Convention of 1933. The other guarantees can be money deposits made with a State institution or with an authorised bank or bank guarantees from such a bank.

be substantiated either by an official certificate or by an official entry in one of the documents carried on board the aircraft.[80] A remarkable extra safeguard against not taking out such compulsory insurance or providing other guarantees was built in by ruling that the operators' liability would then become unlimited.[81]

The possibility of direct actions of third parties against insurers turned out to be a controversial aspect of the system. Such a possibility had been introduced during the drafting period of the Rome Convention of 1933, but had met with opposition from a minority of the delegates of the time. Their objections justly held that it would be unfair toward insurers if third parties could potentially invoke more rights against them than the insured operators, for example if the insurance contract between the insurer(s) and the operator had expired. Since these obstacles were not overcome, the possibility of a direct action was left open in Article 16 of the Rome Convention (on choice of jurisdiction for claims).[82]

The obstacles raised against direct actions led to codification of the Brussels Protocol of 1938, in which the following extra defences of insurers against third parties were enacted under article 1(1) of the Brussels Protocol:

a. that the damage occurred after the insurance ceased to have effect;
b. that the damage occurred outside the territorial limits of the coverage, unless flight outside such limits was due to force majeure or to a justifiable deviation or negligence in pilotage;
c. that the damage was a direct consequence of international armed conflict or civil disorder.

Aside from these defences, insurers were allowed to invoke the similar defences available to the operators of aircraft under the Rome Convention of 1933 against claims from third parties.[83] However, the Brussels Protocol of 1938 became of little to no importance to the system of Rome, since it was only ratified by two States.[84]

Thus, the question whether a direct action would be possible was left unresolved and had to be reconsidered by the drafters of the Rome Convention of 1952 in the late nineteenforties. Whereas a certain simplicity was maintained in the insurance and security requirements of the Rome Convention of 1933, the Rome Convention of 1952 turned out far more complex and detailed in that respect. In Chapter III of the Rome Convention of 1952, the rules on

80 *See* Article 13 of the Rome Convention of 1933.
81 Article 14 sub b of the Rome Convention of 1933 proved a barrier for ratification for a great number of parties, *see* Drion at 21.
82 *See* J.G. Sauveplanne, Luchtvaartverzekering 132-133 (1949).
83 Sauveplanne at 137.
84 Margo at 17.

insurance and security were codified in highly detailed Articles 15 through 18. The main points of these provisions will be enumerated briefly.

The general rule holds that Contracting States *may* require the operators of aircraft of other Contracting States to be insured for damage up to the limits set out in the Convention.[85] The term 'may' indicates that the compulsory nature of the provisions on insurance and security of the Rome Convention of 1933 was abandoned in favor of facultative enforcement by Contracting States.

Detailed rules on the status of insurers and alternative guarantees to insurance were also enacted, including specific rules on insurance certificates, which the authorities of one Contracting State were able to demand from operators of aircraft from another Contracting State which flew over that State.[86] Furthermore, insurers were granted a number of extra defences, aside from the standard defences available to the operators of aircraft. These were:

a. that the damage occurred after the security ceased to be effective;
b. that the damage occurred outside the territorial limits provided for by the security, unless flight outside those limits was caused by force majeure, assistance justified by circumstances, or an error in piloting, operation or navigation.[87]

However, if the security ceased to be effective, a legal continuation in force was enacted for the sole benefit of third parties in the following cases:[88] if the security expired during a flight, it was to be continued in force until the next landing specified in the flight plan, but no longer than twentyfour hours; and if the security ceased to be effective for any reason other than expiration or a change of operator, it was to be continued until fifteen days after notification to the appropriate authority of the State which certifies the financial responsibility of the insurer or the guarantor that the security had ceased to be effective, or until effective withdrawal of the certificate of the insurer or the certificate of guarantee.[89]

Thus, third parties maintained the right to file direct actions against insurers or guarantors (a) where the security was continued in force under

85 *See* Article 15(1) of the Rome Convention of 1952.

86 *See* Article 15(2)-(9) of the Rome Convention of 1952. The drafters have left nothing to chance by even providing for detailed scenarios of cases where the State overflown has reasonable grounds for doubting the financial responsibility of the insurer or of the bank which issues a guarantee. Such a state may request extra evidence of financial responsibility. If this is not satisfactory, a specific arbitral tribunal can even be called upon to look into the case, *see* Article 15(7) of the Rome Convention of 1952 for this fascinating exercise in over-regulation.

87 *See* Article 16(1) of the Rome Convention of 1952. These provisions were clearly inspired by the prewar system of the Rome Convention of 1933 and the Brussels Protocol of 1938.

88 *See* Article 16(4) of the Rome Convention of 1952.

89 *See* Article 16(1)(a) of the Rome Convention of 1952.

the provisions of paragraph 1 (a) and (b) of Article 16, and in case of (b) the bankruptcy of the operator.[90] Potential bankruptcy of the operator is perhaps the only solid reason for direct actions in the first place. For direct actions can prevent that indemnification of operators of aircraft by insurers, which is meant for third parties, will be partly or wholly swallowed up by claims from creditors of the bankrupt operator. However, Article 18 of the Rome Convention of 1952 provides a feasible solution for this specific problem, which rules out the necessity of direct actions. For it holds that any sums due to an operator from an insurer shall be exempt from seizure and execution by creditors of the operator until claims of third parties under the Convention have been satisfied.

But the more structural question on the complex insurance and security provisions of the Rome Convention of 1952 remains why they have been codified at all, as they have not even been made compulsory. This point was also raised by the Dutch delegation in a later stage during the deliberations on the Montreal Protocol of 1978, although the delegation acknowledged that their potential adverse effects were inconsequential in view of their non-compulsory nature.[91]

3.7 JURISDICTION

The limited liability regimes of both Rome Conventions have had important effects on their jurisdictional provisions, especially on those of the Rome Convention of 1952. In this paragraph, the provisions on jurisdiction and their rationale will be taken into account. First, the two competent forums of the Rome Convention of 1933 will be discussed (3.7.1). Next, the rationale for the move back to a single competent forum under the Rome Convention of 1952 will be examined (3.7.2). And finally, some suggestions on jurisdiction will be made for the future (3.7.3).

3.7.1 *Forum rei* and *forum delicti*

The Rome Convention of 1933 provided the plaintiff with a choice between the judicial authorities of the defendant's ordinary place of residence and those

90 *See* Article 16(5) of the Rome Convention of 1952.

91 See 'Verslag van de Nederlandse Delegatie naar de Diplomatieke Conferentie tot Herziening van het Verdrag van Rome van 1952, betreffende Schade door Luchtvaartuigen (te Montreal van 6 – 23 september 1978)' (Report of the Dutch delegation on the Diplomatic Conference to revise the Rome Convention of 1952) at 16 *as well as* the instruction of the Dutch government in Attachment V to the Report.

of the place where the damage was caused.[92] In view of the fact that the operator was protected by a regime of limited liability, a problem could have arisen if claims were filed simultaneously before more than one competent court. In order to preserve its limited liability regime, the Rome Convention of 1933 provided the following solution to this problem. If several plaintiffs were to file claims before more than one competent court, the defendant was permitted to give evidence of the total amount of the outstanding claims and liabilities before each of these courts in order to prevent that his legal limit of liability under the Convention were exceeded.[93]

There is a lot to be said for the jurisdictional solution of the Rome Convention of 1933, for it provides a reasonably fair balance between the interests of defendants that are served by the advantages of the *forum rei*, as well as most of the plaintiffs, that can also opt to file claims before the nearby *forum delicti* of the place of the aircraft accident or incident.[94] Even the solution for the potential problem of rewards in excess of the limited liability regime by more than one competent court seems feasible, aside from reservations to a limited liability regime in general. Why then were the provisions on jurisdiction of the Rome Convention of 1933 not simply maintained in the Rome Convention of 1952? That issue will be discussed in the next sub-paragraph.

3.7.2 *Forum delicti* as the single forum

During the drafting process of the Rome Convention of 1952, all competent courts but one were eliminated: the court of the country where the damage occurred.[95]

Why a single forum? Toepper has enumerated several reasons for adopting such a solution. First, the fact that the limited liability regime of the Rome Convention of 1952 had to be protected; for if a proportional reduction of claims was to be made, this could best be done by one court. Second, the notion that a foreign aircraft of a Contracting State, which inflicts surface damage in another Contracting State, will generally affect the nationals of the latter State. The courts of the Contracting State in which the damage has arisen

92 *See* Article 16 of the Rome Convention of 1933. Article 16 has been codified without prejudice to any direct action on the part of the injured third party against the insurer in all cases where such a direct action lies: this means that in such cases, extra tribunals may be competent to deal with such cases.

93 *See* Article 11 of the Rome Convention of 1933.

94 In other Conventions, similar provisions on jurisdiction have been enacted; *see, for instance,* Article 19 of the *Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (Lugano, 21 June 1993).* Under Article 19, actions can be brought at the court of the place where the damage was suffered or where the dangerous activity was conducted or where the defendant has his habitual residence.

95 *See* Article 20(1) of the Rome Convention of 1952.

are thus considered the most appropriate and practical for filing claims from the perspective of the nationality of the victims. The latter argument can be substantiated by the notion that cases of surface damage in airports in which potential victims of many nationalities are involved has always been an exceptional one.[96] Third, the more implicit argument in favor of a single forum that the operator of a foreign aircraft which flies within the boundaries of another State and makes use of its navigational aids and facilities, should also accept the court decisions of that State. And fourth, that the single forum has the practical advantages of reducing legal costs and facilitating the production of evidence.[97]

However, the drawbacks of a single forum seemed to have outnumbered its advantages by far, which became apparent in Article 15 of the Taormina draft of the Rome Convention of 1952, in which the single forum was first introduced.[98] One of the main problems was that Article 15 of the Taormina draft aimed to create a uniform procedure of enforcement of foreign judgments for claimants. The idea was that claimants would be able to enforce collection of the judgment made by the court of the place where the damage occurred (*loci delicti*) in whatever contracting State the operator had its assets. However, such a multilateral Convention that recognized and could enforce foreign judgments had no precedent at the time.[99] Aside from that lack of precedent, the procedural rules set out in Article 15 of the Taormina draft raised a great number of technical difficulties. For Article 15(4) of the Taormina draft read:

> Where any final judgment is pronounced by a competent Court in conformity with this Convention, whether in the presence of the parties or in default of appearance, on which execution can be issued according to the law applied by the Court, execution shall be issued in each of the other Contracting States upon presentation of a copy of the judgment authenticated in accordance with the law of the State where the judgment was pronounced. The merits of the case may not be reopened.

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96 In modern times, on the other hand, cases of many nationalities suffering damage in one country could prove to be a more common reality than in the fifties and not only in airports, but also for instance in large international firms operating worldwide and attracting an international workforce, *see in that context* sub-paragraph 3.7.3 of this study.

97 *See* A. Toepper, *Comments on Article 20 of the Rome Convention of 1952*, 21 JALC 420, at 421-422 (1954).

98 *See* 17 JALC 194, at 194-199 (1950), for the text of the Taormina Draft.

99 *See* J.C. Cooper, *Recognition of Foreign Judgments under Article 15 of Proposed Revision of Rome Convention*, 17 JALC 212, at 212 *et seq* (1950). Cooper enumerates the many attempts that have been made by experts in international law to agree on a legal basis for a multilateral recognition of foreign judgments. These started during a session of the Institute of International Law in 1878, but were all to no avail due to all sorts of technical problems, such as the extent to which the procedure and other conditions of the judgment may be examined by the court from which the execution of the judgment is requested.

The exact requirements of the summary procedure (comparable to exequatur) by which the court presented with the judgment of the court of the *loci delicti* could enforce that judgment were not specified at all. Could, for instance, the defendant be heard before his assets were executed? Specifically for common law jurisdictions unfamiliar with the exequatur-procedure, a number of problems would have arisen under the regime of Article 15 of the Taormina draft. For common law jurisdictions generally required plaintiffs to commence a new proceeding against defendants before their national courts, in which the foreign judgment merely functions as evidence to substantiate their claims.[100]

Aside from such procedural difficulties, the single forum raised a number of constitutional problems relating to the requirements of due process in the United States. For the rules of due process required that the defendant must have had the opportunity to be heard and defend his case before the foreign court that dealt with the case. An unresolved issue remained if the rather open-ended wording of Article 15 of the Taormina draft could meet these constitutional requirements.[101] In view of the American opposition, Article 15 of the Taormina draft was modified in two drafting stages (Montreal, June 1950 and Mexico City, 1951) into the rather complexly formulated Article 20 of the Mexico City draft. In the new Article 20 of the Mexico City draft, a number of exemptions to execution of a foreign judgment were provided for.[102] The exemptions of Article 20(6) read:[103]

> the provisions of paragraph (4) of this Article shall not be deemed to require the issue of execution if the court applied to for execution is satisfied that:
> a. the judgment was given by default and that the defendant did not acquire knowledge of the proceedings in sufficient time to act upon it;
> b. the defendant was not given a fair and adequate opportunity to defend his interests;
> c. the judgment is in respect of a cause of action which has already, as between the same parties, formed the subject of another judgment which is recognized under the law of that court is final and conclusive;
> d. the judgment has been obtained by fraud of any of the parties;
> e. the right to enforce the judgment is not vested in the person by whom the application for execution is made;
> f. the judgment is one which is contrary to the public policy of the State in which that court is located.

These exemptions were literally implemented in article 20 (5) (a-e) and 20(7) of the Rome Convention of 1952.[104] In the end, however, these amendments

100 Cooper at 215.
101 Cooper at 218-219; *see also* Brown at 427.
102 Brown at 427-428.
103 *See* 18 JALC 98, at 98-108 (1951), for the text of the Mexico Draft.
104 Article 20(7) of the Rome Convention of 1952 corresponds with article 20 (6) sub f of the Mexico Draft.

were not to diminish the controversy of the single forum, especially for the United States. Ultimately, the choice for a single forum can thus be pointed out as one of the main obstacles to adherence to the Rome Convention of 1952 for a number of States.

3.7.3 The future. An extra *forum actoris*?

In retrospect, one of the main reasons for the choice of the single forum of the *loci delicti* under the Rome Convention of 1952 turned out to be the notion that the limited liability regime of the Convention would be best distributed by one court. This notion can serve as yet another argument against an international regime based on limited liability in this field: for under an international regime based on unlimited liability, the potential problem of more than one competent court rewarding compensation in excess of the legal limitations would simply not arise. Therefore, a re-introduction of the two competent courts of the Rome Convention of 1933 seems to provide the most feasible solution for any update of the Rome Convention of 1952. Such a solution would again rebalance the interests of potential defendants as well as most potential plaintiffs. Most, but not all potential plaintiffs. For a final problem remains unsolved in case of reintroduction of the aforementioned two competent tribunals. This problem can arise if the potential victim of surface damage is not a resident of the country in which the damage was inflicted. This could be the case if a foreign aircraft of a Contracting State causes damage in an international airport or a large multinational with an international workforce in another Contracting State. A question for the future of the system of Rome could be if such a plaintiff should be allowed to file a claim before a court of the country of his domicile (*forum actoris*) as an alternative to the *forum delicti* and *the forum rei* under certain conditions. Such an extra alternative has been contemplated during the deliberations on the Montreal Convention of 1999 in relation to international air carrier liability toward passengers. The so-called fifth jurisdiction was ultimately added to the four competent courts of Article 28 of the Warsaw Convention in Article 33 of the Montreal Convention of 1999. The fifth jurisdiction gives access to the courts of the country of principal or permanent residence of the passenger in case of damage resulting from his death or injury if certain cumulative conditions are met.[105] It should be borne in mind that these cumulative condi-

105 The conditions that have to be met have been codified in Article 33 (2) of the Montreal Convention of 1999, which reads: 'in respect of damage resulting from the death or injury of a passenger, an action may be brought before one of the courts mentioned in paragraph 1 of this Article (which is meant to refer to the original four jurisdictions of article 28 of the Warsaw Convention), or in the territory of a State Party in which at the time of the accident the passenger has his or her principal and permanent residence and to or from which the carrier operates services for the carriage of passengers by air, either on its own

tions are tailored to the specific contractual relationship between passengers and air carriers and can thus not be automatically applied to the delictual relationship between third parties and aircraft operators. However, the alternative of such an extra jurisdiction based on the principal or permanent residence of the victim could perhaps make a revised Rome Convention more attractive for a number of potential adhering States in the future. The United States may very well insist on such an extra alternative in view of its comparable lobby for a fifth jurisdiction during the deliberations on the Montreal Convention of 1999. The American tourist abroad that is injured by a foreign (non-US) aircraft of another nationality than that of the country where the American is staying would then be able to file his claim before a court within the United States. In order to prevent that the interests of potential plaintiffs are thus outweighed by those of potential defendants, certain conditions could be linked to such an extra jurisdiction, for instance that the operator of the aircraft operates to or from the place of principal or permanent residence of the plaintiff.[106]

Recapitulating, a transformation of the single forum into at least the options of both *forum rei* and *delicti* is recommended as a legislative move for future revision of the Rome Convention of 1952. As an afterthought, the alternative of a *forum actoris* could be considered for specific cases wherein the victims are not permanent residents of the country in damage is suffered. However, it should be borne in mind that a number of reservations can be made against that last option, since the *forum actoris* is generally considered to be 'exorbitant' in international cases. Introduction of such an extra alternative would therefore require the enactment of one or more extra links between the operator of the implicated aircraft and the country of principal or permanent residence of the potential victim.[107]

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aircraft, or on another carrier's aircraft pursuant to a commercial agreement, and in which that carrier conducts his business of carriage of passengers by air from premises leased or owned by the carrier itself or by another carrier with which it has a commercial agreement..'.

106 The Montreal Convention of 1999 makes use of the 'principal and permanent residence' of the passenger and not his nationality. The principal and permanent residence is defined as the one fixed and permanent abode of the passenger at the time of the accident in article 33 (3) sub b of the Montreal Convention of 1999. Note that national due process requirements within the United States may also have to be met in order to file a claim before an American court.

107 *See* J.A. Pontier, Onrechtmatige daad 15 (2001). Pontier points out that the forum rei is considered to be the most natural forum for the defendant to defend his case as opposed to the exorbitant forum actoris. The latter is considered to much of a burden for defendants, as it is located abroad.

3.8 A RECAPITULATION OF THE ROME CONVENTIONS

The main characteristics of the Rome Conventions of 1933 and 1952 have been discussed in the previous paragraphs. As has been established, neither has been greatly successful in terms of number of ratifications.

From the nineteen-sixties onward, the question thus arose for the ICAO Legal Committee how the failure of the Rome Convention of 1952 could be transformed into success. Before delving into the official and unofficial attempts that have been made to update the regime of the Rome Convention of 1952, a brief recapitulation of its main points will be made in this paragraph. Such an exercise is deemed useful in order to comprehend what the future holds for the system of Rome.

The following seven core and in some cases controversial characteristics of the Rome Conventions have been evaluated in the previous paragraphs of this chapter:

1 *The basis of absolute liability*. Despite opposition by a number of delegations, the basis of absolute liability has been established to be one of the most fundamental pillars of both Rome Conventions. The policy-based rationale for absolute liability has been elaborated upon in this Chapter as well as Chapter 2. An international basis of absolute liability holds a certain timeless quality of protecting the interests of third parties worldwide against potential difficulties of having to furnish proof of fault or negligence of the operators of international aircraft that inflict damage to third parties on the ground. For any feasible future of the system of Rome, one of the main difficulties will lie in convincing important opponents of absolute liability, such as the United States, of the feasibility of absolute liability. For if it were to be abandoned in favor of an international basis of fault or negligence, the whole point of the system of Rome would be lost.

2 *The scope of liability.* The scope of absolute liability of the Rome Convention of 1952 has not been entirely resolved. The question to what extent damage caused by noise and sonic boom should fall under the regime will have to be dealt with in the future. The problem of potential nuclear damage has been considered in that context by the drafters of the Montreal Protocol of 1978, as will be seen in more detail in the next paragraph.

3 *Defences*. Although no major difficulties have arisen in conjunction with the available defences under the regime of the Rome Convention of 1952, the terrorist attacks of September 11, 2001 on the United States have made clear that potential defences against damage caused by unlawful use and the wrongful taking of aircraft may regain importance in the future. In view of the enormity of the potential surface damage that can be inflicted by terrorist attacks in which aircraft are used as manned bombs against surface targets, the question may even be to what extent such scenarios

can be covered by any future international liability regime at all or should be partly or wholly excluded.[108]

4 *Limitation of liability*. As a cornerstone of the entire system of Rome, the legally limited liability regime of both Conventions can be pinpointed as its main burden at the same time. For the limited liability regime has affected other important areas of the Rome Convention of 1952 as well, such as its provisions on jurisdiction and the severe escape route from limited to unlimited liability by means of proof of gross negligence or wilful misconduct of the operator. Despite its rationale as a protective *quid pro quo* for absolute liability, such a regime cannot be implemented fairly on an international level since potential surface damage can vary so greatly worldwide and in the course of time. These problems all point to the only feasible solution: a transformation of the limited liability regime into a regime based on unlimited liability. Perhaps the only feasible exception to that rule could lie in a limited liability regime for acts of unlawful interference, war, or terrorist acts on the grounds that catastrophic risks should not be borne by aviation alone, which has been evaluated as a justifiable reason for legally limiting liability.[109]

As will be seen in the following paragraphs of this Chapter, the problem of limitation of liability in general has been approached differently in the Montreal Protocol 1978 and in the drafting suggestions made under auspices of the International Law Association to update the Rome Convention of 1952. Both lines of approach hold important lessons for the future of the system of Rome.

5 *Insurance.* The complexly formulated but non-compulsory provisions on insurance or other financial guarantees of the Rome Convention of 1952 have been established to be in need of reconsideration. The fallacy of the link between legal limitation of liability and the fact that insurance coverage is also capped should be exposed in the future. The most logical alternative seems to lie in simplification and a transformation into a compulsory regime of insurance requirements or other guarantees for international operators of aircraft for certain minimal levels of coverage. However, the liability and insurance requirements need not necessarily be combined in a single instrument in view of their different legal nature.

6 *Jurisdiction.* The single forum of the *loci delicti* of the Rome Convention of 1952 has been exposed as a controversial choice, which was largely based on the limited liability regime of the Convention. Preferably, it should be abandoned in favor of a combination of the *forum delicti* and the *forum rei*

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108 *See* sub-paragraphs 3.11.2 and 3.11.3 of this study on the latest suggestions made in the new ICAO Draft Convention of 2003 on liability relating to acts of unlawful interference, war or terrorists acts.

109 *See* paragraph 2.10 sub 3 and sub-paragraph 3.11.3 of this study.

of the Rome Convention of 1933. If certain conditions are met, the extra alternative of the *forum actoris* could also be considered.

7 *Necessity.* Put here as a final point of attention, the problem of necessity concerns the question if an international convention is necessary at all in view of the notion that (supra) national alternatives could suffice in this field. This question will be dealt with in the final paragraph of this chapter as an introduction to such (supra) national alternatives, which will be discussed in the next chapter.[110]

In future attempts to revise the system of Rome, these core characteristics will have to be re-addressed. Next, the main existing attempts to revise the regime of the Rome Convention of 1952 will be evaluated as a preliminary exploration to future attempts to do so.

3.9 THE MONTREAL PROTOCOL OF 1978

3.9.1 Introduction

The lack of success of the Rome Convention of 1952 in terms of number of ratifications and the perceived necessity of amendment in general induced the ICAO Council to instruct the Legal Committee to re-examine the regime of the Rome Convention of 1952. In 1967, the Legal Committee focused on three main controversial issues of the regime on the basis of preliminary work done by a Legal Subcommittee. These issues concerned the recoverability of damage from sonic boom, nuclear damage, and the problem of limitation of liability. The Legal Committee was divided on the question whether sonic boom should be recoverable under the Convention and could not take a position on nuclear damage. Furthermore, it was of the opinion that the Legal Subcommittee would not be able to update the limitation provisions of the Convention on its own. After six years in which ICAO considered other more urgent matters concerning the Warsaw Convention, a report on the matter was filed by the Subcommittee and considered by the Legal Committee in 1973. On the basis of the findings of the report, a new Subcommittee was set up. The new Subcommittee also failed to provide solutions for the problems raised by limitation of liability and the question of recoverability of damage caused by noise or sonic boom. However, certain Articles of the Rome Convention of 1952 were amended on the basis of the report of the new Sub-Committee during the 22nd Session of the Legal Committee in 1976.[111] A more definitive

110 *See* sub-paragraph 3.11.6 of this study.

111 *See* ICAO Legal Committee, 22nd Session, 1976, Volume II, Documents (1977), at 51-554. Certain amendments were made to articles 2, 11, 15, 16, 17, 20 and a suggestion was made to delete articles 22 and 29 of the Rome Convention of 1952. On the limitation of article 11, the remark was made that the amounts of the limits of liability were to be studied by

draft was made during the 23rd Session, which took the latest developments on lease, charter and interchange of aircraft into account.[112]

This preliminary work preceded the International Conference on Air Law held in Montreal in September 1978, in which the Montreal Protocol of 1978 was adopted. The Conference was attended by delegates of 58 States and observers of the International Air Transport Association (IATA), the International Federation of Airline Pilots Association (IFALPA), the International Law Association (ILA), and the Palestinian Liberation Organization (PLO).[113]

3.9.2 The provisions under reconsideration

During the International Conference on Air Law held in Montreal in September 1978, the Rome Convention of 1952 was reviewed per Article on the basis of the proposed amendments made by the Legal Committee during the 22nd and 23rd Sessions. In this sub-paragraph, an overview of the main points under reconsideration will be given on the basis of a similar division as made in paragraph 3.8 of this Chapter. The final outcome of the Montreal Protocol of 1978 will be taken into account in sub-paragraph 3.9.3.

1 *The basis of absolute liability*. The basis of absolute liability was not a point of discussion or controversy for the Conference.[114]

2 *The scope of liability*. The scope of absolute liability was a point of consideration for the Conference. The main problem concerned the question if damage caused by noise or sonic boom should fall under the scope of absolute liability of Article 1 of the Rome Convention of 1952. For this issue had not been settled prior to the Conference by the Legal Committee or its Legal Subcommittees. The problem led to diverging opinions. A number of States, such as the United States, Canada, Great Britain, and the Netherlands were in favor of excluding damage caused by noise and sonic boom from the scope of the Convention. France on the other hand, turned out to be in favor of inclusion, and was backed up by a number of States such as Brazil and Argentina. At the end of the day, the suggestion of bringing damage caused by noise or sonic boom within the scope of absolute liability did not reach the required majority of 2/3 of the votes during the Plenary Meeting. Thus, the question whether the Rome Convention of 1952

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the diplomatic conference with a view to reach a decision on an acceptable increase of these limits (expressed in Special Drawing Rights).

112 *See* G.F. Fitzgerald, *The Protocol to Amend the Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface (Rome, 1952) Signed at Montreal, September 23, 1978*, McGill Annals of Air and Space Law 29, at 32-36 (1979).

113 *See* the Final Act of the International Conference on Air Law held under the auspices of the International Civil Aviation Organization at Montreal in September 1978.

114 Fitzgerald at 38.

as amended by the Montreal Protocol of 1978 is applicable to noise and sonic boom remains unresolved to this day.[115]

3 *Defences*. The defences available under the absolute liability regime of the Rome Convention of 1952 were not considered to be an important issue during the Conference.[116]

4 *Limitation of liability.* The deliberations on limitation of liability that were made during the Conference provide an interesting and convincing example of the futility of such an exercise on an international level. For if one starts deliberating on the appropriate level of limitation instead of on the feasibility of an international system of liability based on legal limitation in the first place, such an exercise will be predictably futile. During the Conference, a number of delegations favored a regime based on unlimited liability, such as the United States, Canada, and the United Kingdom. On the other hand, the delegations in favor of a limited liability regime ventured widely diverging opinions on how to transform the existing limits of the Rome Convention of 1952 to more acceptable levels for 1978. Bearing in mind that their suggestions were merely based on their own preconceived ideas on level of necessary protection of their national operators, the following amusing variety of suggestions saw the light of day.[117] Brazil and Ecuador favored an increase of the exiting limits by five times, Argentina and Chile by six times, and France, Japan, and Norway by ten times. A 'reasonable increase' of the limits was considered adequate by the Federal Republic of Germany and the U.S.S.R and a 'moderate increase' by Spain and the Ukrainian S.S.R; 'very high limits' were propagated by Ireland, Sweden, and Switzerland.[118] The Dutch delegation linked the weight of 320,000 kilo of the Boeing 747 to a limit of $ 28,000,000, which amounted to ten times the original limit of the Rome Convention of 1952. In the sixth meeting of the Commission as a Whole that amount was accepted as a maximum tier of limitation.[119]

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115 *See* 'Verslag van de Nederlandse Delegatie naar de Diplomatieke Conferentie tot Herziening van het Verdrag van Rome van 1952, betreffende schade door luchtvaartuigen (te Montreal van 6 – 23 september 1978)' (Report of the Dutch Delegation on the Conference to revise the Rome Convention of 1952), at 13-14.

116 Some proposals were made to amend certain defences. The IATA, for instance, suggested to amend the defence of contributory negligence in a manner that took the pre-existing physical condition of the third party that suffered damage into account, *see* Fitzgerald at 40; however, none of these amendments were adopted.

117 This was also due to the fact that the Conference was not based on any hard economic data on matters such as insurance and levels of coverage, etc. For the only paper containing such data (which was submitted by the International Law Association) had no official status, *see* Fitzgerald at 44 and 50.

118 Fitzgerald at 41.

119 Fitzgerald at 43-45.

Similar discussions evolved on the weight categories expressed in Article 11 of the Rome Convention of 1952. A number of delegates preferred a reduction of the existing number of weight categories and a number wanted to add extra categories. Divergence of opinion also prevailed on the limit of liability per person as enacted in Article 11 (2) of the Rome Convention of 1952. Suggested alternatives ranged from $ 40,000 to $ 240,000.[120]

At the end of the day, the discussions on the appropriate levels of limitation culminated into four main proposals made by the U.S.S.R., Norway, Argentina and a block of eleven other South American States, and France. These proposals were discussed in the ninth and tenth meeting of the Commission as a whole and were to be unified by a specific working group on the matter. The working group came up with two options. The first option was based on a relatively small increase of the limits as preferred by the South American block and the second alternative was based on a relatively greater increase of the limits as propagated by France.[121] The final outcome was based on a compromise between these two alternatives.[122]

Another amendment which was made during the Conference concerned the manner in which the limits were to be expressed. The *Poincaré* Gold Franc of the Rome Convention of 1952 was substituted by the more modern Special Drawing Rights (SDR) of the International Monetary Fund (IMF).[123]

5 *Insurance*. The insurance provisions of the Rome Convention of 1952 were evaluated during the Conference. However, the Swiss-Norwegian proposal to make them compulsory was rejected. More successful amendments included the deletion of Articles 15(3)-(6) and a simplification of Article 15(7), which was transformed into a new Article 15(2). The defences available to insurers were also simplified.[124]

6 *Jurisdiction*. Despite the objections against the single forum of the State where the damage occurred, the provisions on jurisdiction were not amended in structurally. Only a number of slight technical amendments to Article 20(4) were made.[125]

7 *Necessity.* If the relatively small number of approximately 60 delegations that participated in the Conference is taken as a yardstick, the impression of relative unimportance of the Protocol that had already became apparent

120 Fitzgerald at 42-43.

121 The first (South American) proposal was based on an upper limit of $24,951,000 for a Boeing 747 and a personal limit of $125,000; the second (French) proposal was based on an upper limit of $28,622,000 for a Boeing 747 and a personal limit of $250,000, *see* Fitzgerald at 50-51.

122 *See* paragraph 3.9.3 of this study.

123 Fitzgerald at 46-47. In September 1978, 1 SDR equalled approximately $ 1.3.

124 Fitzgerald at 55-59.

125 Fitzgerald at 59-60.

by the lack of popularity of the Rome Convention of 1952 is strengthened. The more important aviation-generating nations, such as the United States and Great Britain, hardly even participated in the discussions at all and the Protocol was hardly ratified. The probable reasons for this overall lack of enthusiasm will be evaluated in more detail at the end of this Chapter.

3.9.3. The final outcome

The final outcome of the Conference, the Montreal Protocol of 1978, reveals that the only major amendment of the Rome Convention of 1952 that was achieved consisted of a raise of its limits, which were now expressed in Special Drawing Rights. The main new categories of Article III (1) of the Montreal Protocol of 1978 were:

a. 300 000 Special Drawing Rights for aircraft weighing 2000 kilograms or less;
b. 300 000 Special Drawing Rights plus 175 Special Drawing Rights per kilogram over 2000 kilograms for aircraft weighing more than 2000 but not exceeding 6000 kilograms;
c. 1 000 000 Special Drawing Rights plus 62.5 Special Drawing Rights per kilogram over 6000 kilograms for aircraft weighing more than 6000 but not exceeding 30 000 kilograms;
d. 2 500 000 Special Drawing Rights plus 65 Special Drawing Rights per kilogram over 30 000 kilograms for aircraft weighing more than 30 000 kilograms.

According to Article III (2) of the Protocol, liability in respect of loss of life or personal injury was not to exceed 125 000 Special Drawing Rights per person.[126]

Article 14 of the Rome Convention was deleted and replaced by Article IV, which specified the manner of division of the limitations set out in the Protocol if the total amount of damage exceeded these limitations. If such claims were exclusively in respect of loss of life or personal injury or exclusively in respect of damage to property, they were to be reduced proportionately (Article IV(a)). If claims were made in both categories, the total sum distributable was to be appropriated preferentially to meet proportionately the claims in respect of loss of life and personal injury. The remainder, if any, of the total sum distributable was subsequently to be distributed proportionately among the claims in respect of damage of property.'(Article IV(b)). The formulation of the latter scenario was open-ended and left the

126 States not member to the International Monetary Fund were allowed to fix the limits on the basis of so-called monetary units. A monetary unit corresponded to sixty-five and a half milligrammes of gold of millesimal fineness nine hundred in 1978, *see* Article III (4) of the Montreal Protocol of 1978.

question on how to divide the limits between the two main categories of personal injury and property damage to the discretion of the courts.

Minor amendments were also made to the insurance provisions of Chapter III of the Rome Convention of 1952, but which failed to reach a compulsory status under the Protocol.[127] A more important modification held that the Convention shall not apply to nuclear damage.[128]

As a whole, the final outcome of the Montreal Protocol of 1978 makes clear that the only substantial change to the regime of the Rome Convention of 1952 consisted of an increase of its limits of liability, including a raise of the limit for personal injury. And the limited liability regime has been labeled as the key attribute as well as the key problem to the entire system of Rome. Limitation can simply not be codified fairly on an international basis in any fashion due to the fact that damage to persons and property can vary so enormously worldwide. Furthermore, any choice of limits can be qualified as random, since the correlation between weight of the aircraft and subsequent damage need not necessarily exist. As has been proven by the Montreal Protocol of 1978, the amendment of the system of Rome by means of potentially endless updates of its limited regime of liability is therefore predictably futile. Moreover the resistance against limited liability regimes in this field by important potential adherents to the system of Rome such as the United States has become apparent. The inevitable question then arises how to amend the system in a more satisfactory manner in order to meet the needs of the future. In that context, the proposals made under auspices of the International Law Association in the eighties can help provide interesting alternatives.

3.10 THE INTERNATIONAL LAW ASSOCIATION PROPOSALS

3.10.1 Introduction

Aside from the official legislative route taken by the international legislature in the field of third party liability from the twenties up to the drafting of the Montreal Protocol of 1978, the Air Law Committee of the International Law Association (ILA) made a proposal to integrate the regimes of contractual and delictual liability of international air operators and air carriers into one instrument in 1967. The proposal was based on the pillars of absolute, unlimited, and secured liability and resulted in three separate reports by Bodenschatz

127 *See* Articles V, VI, VII, and VIII of the Montreal Protocol of 1978. One of the main changes consisted of a transformation of the term 'security' into 'guarantee.'

128 *See* Article XIV of the Montreal Protocol of 1978. The suggestion for this amendment was made by the French delegation, *see* 'Verslag van de Nederlandse Delegatie naar de Diplomatieke Conferentie tot Herziening van het Verdrag van Rome van 1952, betreffende Schade door Luchtvaartuigen (te Montreal van 6 – 23 September 1978)' (Report of the Dutch Delegation on the Diplomatic Conference to revise the Rome Convention of 1952, at 12.

on surface damage, by Guldimann on aerial collisions, and by Rosevaer on air carrier's liability. These reports were presented during the next ILA Conference in Buenos Aires in 1968. After a number of years with more urgent matters on the agenda, the topic of third party liability resurfaced during the Madrid Conference of 1976 in the form of a report on a single convention which was presented by Mankiewicz. This report was transformed into a Memorandum on an Integrated System of Aviation Liability and distributed among a working group on this subject. The working group revised the report, which was subsequently submitted to the Air Law Committee during the 59th Conference of the International Law Association in Belgrade in 1980.[129] The report contained the following three guidelines for further work by the Air Law Committee:

1 There shall be an integrated system of civil aviation liability in international carriage by air and in respect of surface damage;
2 All claims shall be channeled through respectively the carrier and the operator of the aircraft;
3 Compensation for personal injuries, including death, shall be based on the principle of absolute, unlimited and secured liability.

The first 17 points of the report contained an evaluation and criticism of the limited contractual liability regime of the system of Warsaw and will not be dealt with in further detail. Nor will the in itself interesting idea of an integrated system of contractual and delictual liability be expounded upon in more detail, as these two main branches of international private air law have remained on different legislative tracks in reality to this day. However, points 18 to 22 of the report are of interest for this study as they dealt specifically with the problem of surface damage. According to that part of the report, the problem of liability to third parties raised similar questions as those raised in the field of liability to 'second' parties, the passengers of international air carriers. Moreover the Rome Convention of 1952 was deemed totally obsolete, despite its 'cosmetic surgery' by means of the Montreal Protocol of 1978.[130]

The central assumption of the report was that the solution to the problem of liability for surface damage would lie in an international regime based on a combination of absolute and unlimited liability of the aircraft operator or carrier, which was to be backed up by compulsory insurance or other financial guarantees. Such a regime would enable victims to claim directly from the implicated aircraft operator or carrier. Certain scenarios of potential damage that were covered by other Conventions were exempted from the regime, for example those involving nuclear damage. Ideally, claims against other poten-

129 *See* the International Law Association, Report of the Fifty-Ninth Conference, Belgrade (1980), at 471-472. The working group consisted of Böckstiegel, Bodenschatz, Chaveau, Guldimann, Manciewicz, Matte, and Nys.

130 *See* the International Law Association, Report of the Fifty-Ninth Conference, Belgrade (1980), at 473-480.

tially liable parties aside from the implicated aircraft operator(s) or carrier(s) would be legally blocked or at least discouraged. The fact that the regime was to be based on unlimited liability of the aircraft operator or carrier was felt to provide for sufficient disincentive to claim from other potentially liable parties anyhow. It was held that rules of subrogation would enable liable aircraft operators or carriers to reclaim from such other liable parties proportionately dependant on the circumstances of the case.[131] As the quantum of potential surface damages would largely depend on the place of the aviation accident or incident, the report held that a combination of the *forum loci* and *lex loci* would not give rise to great problems.[132]

On the basis of the report, a revised report which included two draft proposals on appropriate instruments was drawn up. These proposals will be discussed in the next sub-paragraph.

3.10.2 The two draft proposals

Two draft proposals on an integrated system of aviation liability were submitted to the 60th Conference of the International Law Association which was held in Montreal in 1982.

The first draft consisted of a Protocol of four articles, which was drawn up by Manciewicz. The Protocol aimed to modify any existing international or national instrument in the field of aircraft operator or carrier liability vis-à-vis passengers or third parties. Such a modification would transform the applicable regime into one based on absolute and unlimited liability of the aircraft operator or carrier and was meant to channel the liability to the aircraft operator or carrier on a mandatory basis. In return those entities would be subrogated wholly or partly for compensation granted to passengers or ground victims in case of (co-) liability of other parties.[133]

The second draft was drawn up by Bin Cheng and Dutheil de la Rochère and a Working Group and consisted of an entire Draft Convention. The Draft Convention aimed to unify the fragmented contractual and delictual systems of international private air law of Warsaw and Rome into one Convention. The Draft Convention consisted of a first part on international carriage by air ('Part One') and a second part on surface damage caused by foreign aircraft

131 *See* the International Law Association, Report of the Fifty-Ninth Conference, Belgrade (1980), at 484.

132 *See* the International Law Association, Report of the Fifty-Ninth Conference, Belgrade (1980), at 483. It should be remarked that this assertion has not proven to be entirely true in the past in view of the objections raised to the single forum by mainly common law jurisdictions, as has been described in paragraph 3.7 of this study.

133 *See* Bin Cheng, *News from international organisations, International Law Association – An integrated system of aviation liability: draft protocol and convention*, VIII Air Law 126, at 126-127 (1983).

('Part Two'). The aim of this division was that both parts of the Draft Convention could be treated and accepted as separate conventions. Contrary to the regime of the aforementioned Protocol, liability was not channeled to the aircraft operator or carrier on a mandatory basis under the Draft Convention. During the Air Law Working Session of 3 September 1982, Bin Cheng remarked that a practical, *de facto* type of channeling was intended.[134]

The suggested amendments of 'Part Two' of the Draft Convention will be discussed on the basis of the division into main areas of importance of the regime of the Rome Convention of 1952 as described previously in paragraph 3.8 of this Chapter.[135]

1 *The basis of absolute liability*. The basis of absolute liability of Article 1 of the Rome Convention of 1952 was retained under the Draft Convention.[136]
2 *The scope of liability*. The scope of absolute liability of Article 1 of the Rome Convention of 1952 was broadened as to cover all damage, including supersonic damage by a slight rewording of the Article. The exemption of potential damage caused by aircraft flying in conformity with air traffic regulations was retained. This seems to imply that damage caused by too low flight in non-conformity with air traffic regulations was also to be covered by the regime of the Draft Convention. Unfortunately, that nuance was not specified by the drafters.[137]
3 *Defences*. The defences of Article 4, 5, 6, as well as references to the defences available to the owners of aircraft under Article 8 of the Rome Convention of 1952 were left intact in identical Articles 4, 5, 6, and 8 of the Draft Convention.[138] In accordance with the channeling principle, the aircraft operator or carrier was provided with a right of recourse against other (co)liable third parties, such as the producers of aircraft or aircraft components.[139]
4 *Limitation of liability*. In order to provide for a system based on unlimited liability, the Articles 11 to 14 on limitation of liability of the Rome Convention of 1952 were simply deleted in the Draft Convention.[140]

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134 *See* Bin Cheng (1983), at 126-127; the International Law Association, Report of the Sixtieth Conference, Montreal (1982), at 583-584.
135 The text of the Draft Convention is contained in the International Law Association, Report of the Sixtieth Conference, Montreal (1982), at 557-582. Part Two, 'Surface Damage by Foreign Aircraft', is a redraft of the Rome Convention of 1952, *hereinafter cited as* the Draft Convention.
136 *See* Article 1 of the Draft Convention.
137 *See* Article 1(1) of the Draft Convention and the comments on Article 1, at 574-575. Note that the exclusions of the Rome Convention of 1952 have been left intact, *e.g.* aerial collisions (Article 24), and nuclear damage (Article 27), *see* Bin Cheng (1983), at 132.
138 *See* the Draft Convention at 575-576.
139 *See* Bin Cheng (1983), at 132.
140 *See* the Comments to Chapter II – Extent of Liability of the Draft Convention, at 577.

5 *Insurance*. Contrary to the facultative insurance requirements of the Rome Convention of 1952, the Draft Convention enacted a mandatory system and restored the term "security".[141] The new Article 15 of the Draft Convention read:

> Article 15.
> 1. Every operator is required to maintain insurance or other forms of security including guarantees covering his liability for such damage as may arise under this Convention in such amount, of such type and in such terms as the State of registry of the aircraft and the State of the operator, if they be different, may specify. The operator may be required by the State overflown to provide evidence that this condition has been fulfilled by producing appropriate certificate or certificates from the State or States concerned.
> 2. Direct action shall lie against the person furnishing financial security pursuant to the above paragraph, if the law of the competent court so provides.

Article 15 corresponded to Article 35A of Part 1 of the Draft Convention, in which a similar compulsory insurance regime for contractual liability of international air carriers was drafted.[142] The rationale for compulsory insurance can be found in the commentary on Article 35A, and applies similarly in relation to third party liability. In short, compulsory insurance coverage would ensure that potential liability of the aircraft operator or air carrier would be met. Technical details on matters such as the level of required coverage and the types of permitted security were left to the discretion of adhering States. The Draft Convention also allowed compensation funds or insurance pools to be created on a national, supranational, or international basis, which could be addressed whenever the damage arising from an aviation accident or incident was in excess of the compulsory level of coverage. The drafters pointed out that similar funds existed in the field of maritime insurance.[143]

The possibility of direct actions of third parties against insurers was left to the discretion of the law of the *lex fori*. According to Böckstiegel, such direct actions would channel liability through the implicated insurance companies. That could be advantageous for the implicated aircraft operators or air carriers, as their role in the aftermath of aviation accidents or incidents is then reduced and simplified. Evidently, a *de facto* type of channeling without a formal legal basis is also possible by simply authorizing insurance companies to take over the claims handling.[144] However, it

141 *See* the Comments to Chapter III – Security for Operator's Liability, at 577.
142 *See* the Draft Convention at 572-573. The wording of Article 35A of the Draft Convention was based on Article VII (1) and II (7) of the 1963 Vienna Convention on Civil Liability for Nuclear Damage.
143 *See* the Draft Convention, comments on Article 35A, at 573.
144 *See* the Draft Convention, comments on Article 35A, at 573.

should be noted that an important objection which was raised against direct actions in this study concerns the fact that it can lead to situations in which plaintiffs obtain more rights against the insurers than the insured parties themselves.

Another interesting but more controversial revision was drafted in Article 15A of the Draft Convention, which read:

> Article 15A. In cases where an operator and the person furnishing financial security pursuant to this Article both fail to meet their liabilities arising under this Convention, and in those cases where the State of registry and the State of the operator both allow the operator to obtain financial security only up to specified maxima, the State or States issuing the certificate of insurance or other forms of security shall be responsible for the liabilities of the operator and of the persons furnishing such financial security arising under this Convention to the extent to which such liabilities have not been met.

Article 15A would ultimately make the State of registry liable for scenarios where the operator and the insurer(s) both fail to meet their liabilities. It immediately becomes apparent that it would be an unwise move for States to only allow financial security coverage up to certain maxima as opposed to certain minima. The question also arises whether such a formulation is realistic in view of the fact that States are unlikely to resort to legally compulsory maxima anyhow.

The comments on this provision reveal that the drafters were inspired by precedents in the field of space law. The drafters were of the opinion that a regime based on secured liability will generally guarantee that compensation shall be paid, but that Article 15A of the Draft Convention would provide an extra safeguard by ultimately implicating the State of registry.[145] Despite the attractiveness of this provision from the perspective of potential victims, one can seriously question the willingness of adhering States to accept such a solution in view of the fact that far less aircraft are partly or wholly owned by States than in the past. Why then, should they automatically become implicated under the scenarios sketched by Article 15A?

That question has become particularly relevant in relation to the risks posed by terrorism in the aftermath of '9/11'. Although '9/11' has made clear that governments may resort to the creation of specific compensation funds or other forms of temporary aid of the aviation industry on a more or less facultative basis, it is highly questionable if any State will accept full liability to the extent that the liabilities of the implicated operators and their insurers have not been met in view of the potential enormity of the

145 *See* the Draft Convention, comments on Article 35B, at 573-574.

damage involved in acts of terrorism related to aviation.[146] Therefore, a system whereby State aid and/or other governmental measures are permitted on an ad-hoc basis would seem a more preferable and feasible alternative to automatic State liability in cases of excessive surface damage.

Article 15B of the Draft Convention completed the security provisions of the Draft Convention and read:

> Article 15B. Contracting States undertake to consult, if necessary under the auspices of the International Civil Aviation Organisation, with the view of establishing a common fund for the purpose of meeting the consequences of any catastrophic aviation accident, the incidence of which exceeds the capability of any individual State.

Again in light of the recent terrorist attacks on the United States, schemes by which such common funds are created have become of renewed interest for major aviation disasters that exceed the compensation capability of individual aircraft operators or even of States. The comments on this Article point out that the drafters were inspired by a similar, but more strongly worded provision of this nature as derived from the 1972 Space liability Convention. At the time of drafting, no similar common fund construction existed in air law.[147]

Generally speaking, the open question for the future would be to what extent States are willing to formally take over responsibility or liability of aircraft operators and their insurers in cases of catastrophic aviation accidents, which exceed all normal monetary expectations in terms of damage. The implication of States by the drafters can thus both be qualified as both the strong and weak point of these suggested amendments to the insurance and security provisions. Strong in the sense that the funding approach has become of renewed interest, and weak in the sense that automatic State liability would arise under the amendments in any case of failure of the implicated operators and their insurers to meet their liabilities. However, it should be remarked that such criticism is easy to express in hindsight, as nobody could have foreseen the new level of risk posed by terrorism prior to '9/11'. As a perhaps more feasible alternative for the aftermath of '9/11', a system whereby any reference to State responsibility is excluded by merely requiring that aircraft operators or air carriers should take out adequate insurance coverage up to certain minimal

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146 Apparently, Guldimann also expressed reservations on the subject, although these have not been specified in the comments, *see* the Draft Convention, comments on Article 35B, at 574. The comments also make clear that scenarios such as the terrorist attacks of '9/11' were clearly not foreseen by anybody at the time, as they read: "it should perhaps be mentioned that in practice, it is most unlikely that Article 35B(/15A) will ever be invoked. But here again, organisations such as ICAO can play a useful role in setting up compensation funds among members, which will no doubt be useful to those States which are anxious not to shoulder such contingent liabilities of their own."

147 *See* the comments to Article 15B of the Draft Convention, at 578.

(and not maximal) levels of coverage is recommended. Ad hoc measures could then be taken by States on a case by case basis in cases of surface damage which severely exceed normal levels of obtainable insurance coverage.

6 *Jurisdiction*. The 'single forum' of Article 20 of the Rome Convention was maintained in Article 20 the Draft Convention, albeit with slight amendments that deleted all references to limitation of liability.[148] In view of the problems that have arisen for mainly the common law jurisdictions in relation to the single forum during the drafting process of the Rome Convention of 1952, this can be qualified as a remarkable step by the Drafters. As has been described in this Chapter, one of the main arguments in favor of the single forum was that such a forum would be best equipped to apportion the legal limits of a limited liability regime amongst plaintiffs without interference from other competent courts in other Contracting States. For such a solution could lead to difficulties in view of the fact that more courts in different States would have to divide the applicable limit of liability between third parties that bring their case before these courts. Since the limited liability of the Rome Convention of 1952 has been abandoned in the Draft Convention, that rationale for a single forum has also vanished. A far more feasible solution thus seems to be to add at least the jurisdiction of the place of domicile or permanent residence of the aircraft operator or carrier to the single forum of the *loci delicti*. Such a solution would correspond with the provision on jurisdiction of the Rome Convention of 1933.

Taken as a whole, however, the regime of absolute, unlimited, and secured liability of 'Part Two' of the Draft Convention can be seen as a remarkable step forward in bringing the current system of Rome up to date, despite the fact that it has never seen formal codification. For it managed to finally break with any form of legal limitation of liability, which kept haunting the official instruments of the system of Rome. In the next sub-paragraph, the main objections raised against the innovations of the Draft Convention will be evaluated.

3.10.3 Objections raised against the ILA proposals

Despite the fact that the objections that were raised against the Draft Convention mostly referred to Part One (contractual liability), a number of points these objections are also of relevance for Part Two. The main objections were to:

148 *See* Article 20 of the Draft Convention, at 579-580.

The basis of absolute liability
The basis of absolute liability was attacked as being too novel for a number of States. These objections can be refuted on various grounds. First, the basis of absolute liability was agreed upon by most States in the process of codification of the system of Rome, as has been established in the course of this chapter. Second, such a basis of liability had already been enacted in a great number of national regimes in this field in the past, as has also been evaluated in this Chapter. And third, the argument raised by Bin Cheng can be mentioned that one of the States that most strongly objected to absolute liability, the United States, had agreed upon such a basis of liability in another international air law instrument, the Montreal Agreement of 1966. Ergo, the principle of absolute liability could very well be accepted by adhering States in the future.[149]

The channeling of liability to the operator
The channeling principle was criticized on the grounds of being too burdensome for the implicated aircraft operator or air carrier. Although this may be valid to a certain extent if such channeling of liability is made mandatory as under the Protocol drafted by Manciewicz, the Draft Convention does not forcefully channel liability to the operator. The line of reasoning of the drafters of the latter instrument simply holds that as the Draft Convention is based on absolute, unlimited, and secured liability of the aircraft operator or air carrier, the most logical step for claimants will subsequently be to claim from him and not from other potentially liable parties which are perhaps subjected to less favorable regimes of liability. Evidently the aircraft operator or air carrier should subsequently be permitted to (re)claim from any other liable party. But such a regime does not preclude claims made by victims from other parties.[150]

The principle of unlimited liability in view of its uninsurability
A number of reservations were made to the introduction of a regime based on unlimited liability. The reservations were based on the rationale that regimes based on unlimited liability are not insurable, since coverage provided by insurers will always be capped to certain levels of coverage. As no insurer can provide blanket coverage for third party liability, it follows that the legal liability of the operators of aircraft should also be capped by means of a legal limitation of his liability. The argument of cost of insurance premiums was

149 *See* Bin Cheng (1983), at 134. Notably, the United States have also ratified the Montreal Convention of 1999 on 5 September 2003, which is also based on a (two-tier) system of absolute liability, *see* the list of ratifications of international air law treaties at www.icao.org.

150 *See* the comments made by Bin Cheng during the Air Law Working Session of Friday, September 3, 1982, *in*: the International Law Association, Report of the Sixtieth Conference, Montreal (1982), at 583-585.

raised in that context, of which any economical analysis was unfortunately lacking at the time.[151] With this argument, the drafters' assurance that insurance premiums were relatively cheap was perhaps justly countered to a certain degree, as insurance premiums can fluctuate, dependant on the situation in aviation insurance markets and the specific risks involved. Insurance of war and terrorist risks, for instance, has evidently become troublesome after September 11, 2001.[152] The question remains if this argument is valid if taken in a broader sense. The point then becomes that the link between insurability, limited liability and surface damage cannot be made on an international level fairly for the simple reason that surface damage can vary enormously, as has been illustrated previously in this Chapter. As a main rule, a regime of absolute and unlimited liability combined with capped insurability should thus prevail. The risks posed by war and terrorism should be seen as exceptions to the rule, which grant special treatment.

The rationale for a combination of capped insurability and unlimited liability can also be derived from the notion that in absence of any specific regime in this field, fault liability under civil law or negligence under common law would also give rise to unlimited liability, which can only be insured up to certain levels. Under the regime of the Draft Convention, the basis of fault or negligence is simply transformed into the more severe basis of absolute liability in order to facilitate the process of claiming from the aircraft operator for its potential victims on the ground.

The fact that States were made guarantors to security under the conditions of the Draft Convention

As has been described in the previous sub-paragraph, the renewed security provisions of the Draft Convention could lead to liability of adhering States under the conditions set out in Article 15A. The objection against such a construction held that insofar as states were thus made guarantors, this was premature having regard to the state of development of international aviation of the time.[153] As has been touched upon briefly in the previous paragraph, this still is a valid objection, which is open to discussion in the future. The open question remains to what extent States will be willing to guarantee compensation in excess of obtainable insurance coverage or in excess of compensation that can be made by the operators themselves in major aviation

151 *See, e.g.,* the reservations made by Milde and Gertzler during the Working Session of Friday, September 3, 1982, *in*: the International Law Association, Report of the Sixtieth Conference, Montreal (1982), at 586 and 588-589.

152 Bin Cheng countered the argument of uninsurability by holding that the rise in premiums would be relatively small and that many countries had already introduced regimes of unlimited liability for carriers flying domestically, *see* Doo Hwan Kim, *Some Considerations of the Draft for the Convention on an Integrated System of International Aviation Liability*, 53 JALC 765, at 781 (1988).

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disasters. In response to the terrorist attacks on the United States of September 11, 2001, a great number of states worldwide have indeed agreed to cover the risks posed by terrorism in excess of the very limited coverage offered by insurers in reaction to those attacks. But, as will be seen in more detail in this study, such measures were only of a temporary nature.[154]

Despite these points of critique, the suggestions made under auspices of the International Law Association to update the system of Rome based on the pillars of absolute, unlimited, and secured liability as a whole are bold and refreshing and can serve as a useful basis for reconsideration of the system of Rome in the future. Perhaps the most important amendment lies in the brave abandonment of the system of limitation, which has proven to be such a burden to success in the past.

In the next and final paragraph of this Chapter, an overall evaluation of the system of Rome will be given, including a number of suggestions for its potential amendment in the future. The question of necessity of an international regime in this field will be addressed and can serve as an introduction to (supra) national alternatives to an international air law regime in this field.

3.11 FINAL REMARKS AND CONCLUSIONS

In this Chapter, the system of Rome has been described. As has become apparent, the system has not been successful if measured in terms of number of ratifications. However, the system of Rome has managed to raise the problem of liability for surface damage to an international legislative level. A final review of the main aspects of the regime can help point out its strong points and deficiencies, which may be of use for future attempts to update the system of Rome. As a matter of interest, the findings of this Chapter will be compared with the latest preliminary version of the *Draft Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface* as prepared by the ICAO Secretariat.[155] The instrument will be referred as the ICAO Draft Convention in order to distinguish it from the ILA Draft Convention in this comparison.

The findings of this Chapter will be evaluated in the following sub-paragraphs 3.11.1–3.11.6 on the basis of the main characteristics of the current system of Rome.

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154 *See in more detail* paragraph 5.10 of this study.

155 In the version of Secretariat Draft No. 2 of 1 August 2003, as contained in the Memorandum to the Members, ICAO Secretariat Study Group on the Modernization of the Rome Convention, SSG-MR/3-Memo/5, of 07/08/03.

3.11.1 On the basis and scope of absolute liability

As a central pillar of the system of Rome, the international basis of absolute liability of Rome can be qualified as the best option in view of the arguments raised in its favor in this study. In short, the basis of absolute liability helps simplify the process of obtaining compensation for damages from the operators of aircraft for victims of surface damage by eliminating the traditional requirements of proof of unlawfulness and/or fault or negligence of the operator. Unfortunately, the exact scope of absolute liability under the system of Rome has not been resolved entirely, due to uncertainties concerning the potential recoverability of damage caused by noise and sonic boom. That scope will have to be clarified in the future. It should be borne in mind that under the current phraseology of Article 1 of the Rome Convention, damage caused by flight in non-conformity with air traffic regulations seems to be recoverable, e.g. damage caused by too low overflight, although this was probably not the intention of the drafters. The drafters of the ILA Draft Convention suggested to encompass damage caused by sonic boom into the scope of absolute liability.

In view of the severe basis of absolute liability to which operators of aircraft are subjected under the system of Rome, it seems no more than justified to limit the scope of such liability as much as possible as a 'quid pro quo' to that severe basis. Preferably, only cases of actual impact of the aircraft or parts of the aircraft should be covered. For in case of genuine accidents, proof of fault or negligence will generally be more difficult to furnish than in cases of damage caused by (too low) overflight, due to factors such as the destruction of the aircraft. Even very serious cases of damage inflicted by noise or sonic boom due to mere overflight, which may cause damage to third parties on the surface, are preferably left to the general rules of fault liability or negligence or other applicable headings of liability for that reason.

In both preliminary versions of Article 3 of the ICAO Draft Convention, the basis of absolute liability has been retained by a literal application of Article 1(1) of the Rome Convention of 1952. This means that the question could still be raised if damage caused by flight in non-conformity with air traffic regulations falls under the scope of absolute liability, which, as has been argued, should not be the case.[156]

Notably, environmental damage has also been brought under the scope of absolute liability in the first preliminary version of Article 3. In view of the arguments raised in favor of a limited scope of absolute liability as a quid pro quo for its severity, the question of recoverability of environmental damage would largely depend on circumstances of the case. If construed narrowly as the costs of any reasonable measures to effect environmental clean-up in

156 *See* both versions of Article 3 paragraphs (1)(2) of the ICAO Draft Convention.

the aftermath of aviation accidents, a case could be made for inclusion.[157] However, a too broad scope of recoverability of environmental damage, especially in relation to cases in which the implicated aircraft do not crash, is not recommendable, as this could stretch the scope of absolute liability and subsequent legal causation too far.

3.11.2 On defences

The regime of the system of Rome has been qualified as absolute as it not only dispenses with fault, but also dispenses with the normal defenses available and does not necessarily require that the damage is caused by the person to be held liable under the regime.[158] Contributory negligence has been established to be one of the main defences available to operators of aircraft addressed by the system of Rome.

In view of the recent terrorist attacks of September 11 on the United States, the problem of wrongful use and subsequent potential liability of the operator for such wrongful use has regained enormous importance, especially if such wrongful use leads to such deliberately inflicted surface damage on a grand scale as in '9/11' through the use of aircraft as weapons of destruction. Most likely, a total exclusion of such cases from the absolute liability regime of the system of Rome would be the most appropriate course for the future, e.g. by encompassing the defence of an act of a third party into the absolute liability regime. Another option would lie in a severely limited liability regime for damage caused by acts of war and terrorism, of which the legal limitations should preferably be linked to obtainable insurance coverage for the risks posed by war and terrorism. The legal aftermath of really catastrophic events such as '9/11' could then be wholly or partly taken over by means of specific governmental compensation funds and kept outside of the realm of liability law as much as possible.

In the preliminary version of Article 12 of the ICAO Draft Convention, contributory negligence has been maintained as one of the most important defences available to operators of aircraft, albeit in a different wording based on the Montreal Convention of 1999. Damage relating to acts of unlawful interference, war, and terrorism has been limited to a maximum of 30 million SDRs in the first preliminary version of Article 4 of the ICAO Draft Convention

157 *See* ICAO Secretariat Study Group on the Modernization of the Rome Convention, Third Meeting, Montreal, 3 to 5 September 2003, SSG-MR/3-WP/2, Presentation by H. Kjellin on Article 3.3 Alt 3.4: Environmental Damage. Kjellin makes use of a standard definition of environmental damage, but also adds a possibility for encompassing the cost of measures needed to mitigate threats to the biological diversity, if applicable domestic law so permits.

158 *See* paragraph 2.6 of this study.

without any escape route to liability in excess of the limitation thus enacted.[159] In the second preliminary version of Article 4, a correlation between various weight categories of aircraft and levels of legal limitation in SDR has been established, although the exact amounts of limitation have not been filled in yet. Both alternatives provide a feasible solution, as long as the legal limitations set out in the future Convention are made to correspond with available insurance coverage for risks posed by war and terrorism. For that reason, a regulatory mechanism whereby the existing levels of legal limitation can be modified both downward and upward, is recommended.[160]

3.11.3 On limitation of liability

Although a great number of interrelated reasons can be given to explain the failure of the system of Rome, one of its most elemental flaws has been its regime of legally limited liability. Despite the fact that elder national third party liability regimes in this field were generally based on absolute, unlimited, and in some cases compulsory insured liability without apparent hindrance to the development of international civil aviation, the drafters of the Rome Convention of 1933 opted for an international regime based on limited liability. This choice has led to a great deal of practical difficulties, whereby the more structural problem that any form of limitation on a global scale is not possible to codify fairly due to the fact that potential damages can vary so much worldwide was never addressed. Examples of such practical difficulties included the problem of appropriate levels of limitation on the basis of varying weight categories, a fair apportionment of limits between the categories of personal injury and property damage, and the problem how the limited liability regime could be circumvented by claimants in order to obtain full compensation. As has been described, claimants would then have to prove gross negligence or wilful misconduct. That would mean a fallback on even more severe bases of liability than mere fault or negligence, the initial starting point of any regime. The unfairness of such severe bases becomes apparent if one takes into account that the whole point of introducing a regime based on absolute liability was that fault or negligence could be difficult to prove for surface victims in the first place.

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159 Note that the amount of 30 million SDR has been put between brackets in the Draft, as a mere suggestion for an appropriate level of limitation.

160 In the preliminary version of Article 5 of the ICAO Draft Convention, a system has been codified whereby the ICAO Council may modify the limits. Such a modification has been linked to the scenario of potential disruption of international civil aviation and in particular the availability of aviation insurance, which points to a downward modification. In my view, upward modification should also be possible, if insurance coverage for risks posed by war and terrorism is seen to expand in due course of time.

But above all, the key problem of limitation of liability on an international level is that it simply can never be made uniform fairly because surface damage can vary enormously due to the great variety in living standards worldwide. Inevitably, a regime based on unlimited liability seems to be the only feasible solution for the future. This was also perceived by the International Law Association, and has led to laudable proposals in which the element limitation was entirely abandoned.

In view of the fact that a great number of important aviation countries have based their national regimes in this field on unlimited liability as well, a potentially renewed international regime based on unlimited liability seems the only feasible, inescapable, and, of another great advantage, timeless alternative. For one of the inherent advantages of such a regime lies in the fact that the limits need never be updated anymore. Thus, the firm recommendation to future drafters involved in the amendment of the system of Rome under auspices of ICAO would be to transform the current system of limitation into an unlimited regime.[161]

The only justifiable exception to the rule of unlimited liability is provided by damage caused by acts of unlawful interference, war or terrorism. As a main rule, the ICAO Draft Convention has laudably managed to abandon the existing regime of limited liability in the first preliminary version of Article 3, which has been based on unlimited liability, with the exception of punitive or exemplary damages in paragraph 4. However, the alternative of the second preliminary version has been based on a two-tier absolute liability regime of 100 000 SDR, similar to the contractual liability regime to which air carriers have been subjected in relation to passengers under the Montreal Convention of 1999. As has been argued in paragraph 2.7 of this study, the least one would expect is a similar legal treatment of passengers and third parties. But a stronger case can be made for better treatment of third parties by means of an unlimited liability regime, as these have not even chosen to expose themselves to the risks of flying voluntarily.

As has been described in the previous sub-paragraph, the main exception to the rule of unlimited liability is provided by two alternative limited liability regimes for acts of unlawful interference, war, or terrorism.

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161 As a suggestion to soften the blow of unlimited liability, especially in cases of excessive surface damage, the Dutch Civil Code mechanism of Article 6:109 BW could provide a feasible solution for such cases. Under Article 6:109 BW, the judge seized of the case may reduce a legal obligation to repair damage if awarding full reparation would lead to clearly unacceptable results in the given circumstances, including the nature of the liability, the juridical relationship between the involved parties, and their financial capacity. However, such a reduction may not exceed the amount for which the tortfeasor has been covered for liability by (compulsory) insurance, *see* Article 6:109 BW (translated in English) *in*: Haanappel & Mackaay, at 275; *see also* F. de Vries, Wettelijke limitering van aansprakelijkheid 232-234 (1990).

3.11.4 On insurance

The insurance and security provisions of the Rome Convention of 1952 have proven to be complex, but non-compulsory. An important complicating factor that kept recurring during the drafting process of the system of Rome concerned the possibility of direct actions from third parties against insurers. The future holds two possibilities: either to abolish the insurance and security provisions of the regime entirely or to transform them into compulsory provisions. For if enacted in a non-compulsory manner, their point and use seem limited.

The compulsory alternative was opted for in the ILA Draft Convention, including the option of direct actions, if the law of the competent court so provides. However, the ILA Draft Convention went even further by holding States liable in cases where both operator and insurers failed to meet their liabilities and in case States of registry and the operator only allowed operators to obtain financial security up to specified maximum levels of coverage. Furthermore, an interesting addition to the insurance provisions was made by the suggestion to establish a common international fund that could meet cases of extreme surface damage, which vastly exceed normal insurance coverage and the financial potential of the implicated operators.

On the question of transforming the facultative insurance and security provisions of the Rome Convention of 1952 into a compulsory system, the answer should be affirmative for the simple reason that compulsory insurance provides an extra safeguard for compensation of potential liability of international air carriers. This would also correspond to the latest developments in the system of Warsaw, in which insurance has been made compulsory under Article 50 of the Montreal Convention of 1999. Details on how to fill in those insurance or security requirements could be left to the discretion of national laws.[162]

The possibility of direct actions is not recommended on the grounds that an insurance contract is primarily an agreement between the operator of an aircraft and the insurance company or companies on the other hand. If third parties are granted permission to claim directly from insurers, this could lead to the situation whereby third parties have more rights than the insured parties themselves, for instance if the insurance contract has expired or does not cover the specific types of damage that are being claimed, e.g. certain scenarios of damage caused by noise. Furthermore, direct actions can raise other difficulties

162 According to Article 50 of the Montreal Convention of 1999, States party to the Convention shall require their carriers to maintain adequate insurance covering their liability under this Convention. A carrier may be required by the State Party into which it operates to furnish evidence that it maintains adequate insurance covering its liability under this Convention. A similar provision, in which the term 'carrier' is transformed into 'operator', could easily transform the current complex facultative insurance chapter of the Rome Convention of 1952 into a more straightforward compulsory insurance provision.

in view of the fact that insurance coverage is always capped to certain tiers of maximum coverage. The question would then arise if third parties can still claim from the operator in excess of the claim made against insurers (up to the insured level of liability) or if such a possibility waived by direct actions. If such a possibility is indeed waived by direct actions, third parties would seem better off by claiming from the operator directly, who in turn is indemnified by his insurer(s). The option of insurers compensating victims voluntarily and directly is then left to the discretion of the parties concerned. The only apparent reason for allowing direct actions seems to lie in cases where the implicated operator faces potential bankruptcy. For in such cases, direct actions could prevent that indemnification by insurers to operators is wholly or partly swallowed up by the bankruptcy instead of being received by third parties for which such indemnification was ultimately meant. But that scenario has been covered adequately under Article 18 of the Rome Convention, which rules that any sums due to an operator from an insurer shall be exempt from seizure and execution by creditors of the operator until claims of third parties under the Convention have been satisfied. It is thus recommended to retain this provision, which would automatically diminish the need for direct actions.

Finally, it is deemed a bridge too far to create a provision by which certain States can automatically be held liable if operators and insurers fail to meet their liabilities, as has also been suggested by the International Law Association. This idea, derived from space law, seems better fit for the more State-related activities in outer space than the currently largely privatized field of international civil aviation. It is difficult to imagine States willing to accept such a provision in the future, specifically in light of the catastrophic risks posed by terrorism in the aftermath of '9/11'. At this point in time, ad hoc solutions in the form of governmental funds and/or temporary state aid seem more feasible alternatives to automatic liability of States in cases involving excessive surface damage.

Without any reference to potential State liability, Article 19 of the ICAO Draft Convention has managed to simplify the current complex, but non-compulsory insurance regime of the system of Rome by means of a compulsory alternative based on Article 50 of the Montreal Convention of 1999. The requirement is simply that States party to the Convention shall require their operators to maintain adequate insurance or other guarantees to cover their potential liability under the Convention. Evidence from the operator of this requirement may be demanded by other States party to the Convention in which he operates. This can be lauded as a step forward, especially since the possibility of direct actions has been abandoned completely.

3.11.5 On jurisdiction

The combination of limitation of liability and jurisdiction revealed another problem inherent to limitation of liability. For the limited liability regime of the Rome Convention of 1952 was considered to be best protected if only the court of the *loci delicti* was seized of the case and could thus solely distribute the applicable limits. However, this 'single forum' solution was opposed by common law jurisdictions such as the United States since it would lead to a far too advanced system of enforcement of foreign judgments that could not be matched to the requirements of common law of the time. In that perspective, a future regime based on unlimited liability has the inherent advantage of dispelling with the main reason for a single forum – the distribution of limits. Thus the abandoned *forum rei* of the Rome Convention of 1933 could easily be reintroduced. The more controversial *forum actoris* could also be considered, albeit under certain specified conditions in which extra links between the operator and the permanent residence of the victim are stipulated.

Unfortunately, Article 21 of ICAO Draft Convention currently holds that actions must be brought only before the courts of the State Party where the damage occurred. However, by agreement between claimants and defendants, action may also be taken before courts of any other State Party. For the reasons stated above, this solution seems meagre.[163]

3.11.6 On necessity

Perhaps the most fundamental question to the future of the system of Rome is its raison d'être in the first place. For national regimes often have covered and still cover the problem adequately as has been established in the second Chapter and will be elaborated upon in the next. Despite the advantages of harmonization, uniformity, and a so-called level playing field inherent to a fairly drafted international regime, the problem remains that the scope of such a regime only covers surface damage caused by certain foreign international civil aircraft. This implies that national legislators will also have to enact separate and compatible regimes of liability for all other foreign and national aircraft of different categories, e.g. military and private aircraft. Furthermore, the international nature of damage inflicted to third parties on the surface by aircraft is far less pronounced than the international nature of similar forms of damage inflicted to passengers by air carriers. For whereas third parties

163 In that context, the remark made by Donato on the preference for an extra alternative of the fora of the countries of the survivors and their relatives is of interest, *see* ICAO Secretariat Study Group on the Modernization of the Rome Convention, Third Meeting, Montreal, 3 to 5 September 2003, Comments on the Draft Text and Some Items to be Considered at The Third Meeting, presented by M. Donato.

will generally be of the nationality of, or at least have their permanent residence in, the place of the aviation accident, passengers will often be of far more varied origins. This implies that national law will generally be adequately equipped and if necessary tailor-made to serve the needs of both most potentially implicated aircraft operators as well as most potential victims, both in terms of liability law and damage law. Such considerations will be explored in greater detail in the next Chapter.

4 National liability regimes and insurance requirements for surface damage inflicted by aircraft and developments in European Community law

4.1 INTRODUCTION

4.1.1 Introductory remarks

After a description of the international air law in this field in the previous Chapter of this study, the next logical step would be to evaluate the supranational European Community law regime of liability and insurance requirements in force in this field. However, the former is currently non-existent and the latter merely stipulates that air carriers falling under the scope of Community law should be insured to cover liability in case of accidents, in particular in respect of passengers, luggage, cargo, mail and third parties.[1] However, the terrorist attacks in the United States of September 11, 2001 have put the problem of damage to third parties inflicted by aircraft on the agenda of the European Commission, but only up to the point of a more harmonized regulatory approach in respect of insurance requirements.[2] As the Commission is of the opinion that liability in this field has been sufficiently defined in the national laws of Member States, no legislative action is to be expected on a Community level in this field in the near future.[3] This implies that the problem of liability for surface damage will have to be evaluated on a national level for Member States as well as most other countries worldwide in view of lack of adherence to the current system of Rome. Once the proposed EC regulation on insurance requirements has been enacted, only those requirements will be harmonized on a Community level. In the meanwhile, national law largely prevails in this field.

The introductory chapter to this study opened with the example of the Bijlmer air disaster, which occurred in the Netherlands on 4 October 1992. In view of the current void of applicable international air law in this field in the Netherlands, the Dutch Civil Code would seem an ideal starting point

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1 *See* Article 7 of Council Regulation (EEC) No 2407/92 of 23 July 1992, OJ L 240, 24.8.1992. No further conditions or criteria on minimal amounts of coverage are specified.

2 *See* the European Commission Proposal for a Regulation of the European Parliament and of the Council on insurance requirements for air carriers and aircraft operators, Brussels 24.9.2002 COM (2002) 521 final; 2002/0234 (COD), hereinafter cited as European Commission Proposal.

3 *See* the Explanatory Memorandum to the European Commission Proposal at 5-6.

for the description of a number of national private air law regimes in this field. However, as of yet, the Dutch legislature has not codified such a specific private air law regime. This means that third parties in the Netherlands will have to rely on the general rules of fault liability in order to claim compensation from the operator(s) or owner(s) of the implicated aircraft. However, the idea has been launched to codify such a specific regime in Book 8, title 17 BW of the Dutch Civil Code, which was to be based on the system of Rome to a certain extent.[4]

The question now arises how such a specific regime could be codified satisfactorily on a national level. In order to address this question, a comparative overview of a number of national private air law regimes in this field can serve as examples on how such a regime can be construed. A choice has been made for a comparative overview of the relevant sections of the national private air laws of France, Germany & Austria, the United Kingdom, Switzerland, and Australia in a horizontal fashion. This specific range of countries has been selected in view of the fact that their legislation in this field was accessible for the author without causing substantial language problems, but is otherwise admittedly arbitrary. From a purely Dutch legislative perspective, all of the selected countries were deemed to be suitable for comparison with the Netherlands in terms of criteria such as importance of aviation and applicable economic standards, as they are all located within Europe with the exception of Australia. The latter has been specifically chosen in view of its relatively recent move to enact a national regime in this field. These regimes will be compared horizontally, by splitting them up in separate (sub-)paragraphs on the basis and scope of liability, persons liable, defences, limitation of liability, and insurance requirements. The rationale of such a horizontal approach is that the relevant items of each regime can thus be immediately compared with one another. Furthermore, such an approach roughly corresponds with the order of treatment of the previous chapters.

The national legislature can also deliberately decide not to codify any specific regime in this field at all and leave the problem to its general rules of negligence or fault liability. The rationale for that option can be derived from the developments in the United States, in which a general tendency can

4 *See* R. Cleton, *Aansprakelijkheid en schadevergoeding als nasleep van luchtvaartongevallen*, NJB 621, at 624 (1993). Cleton points out that the Dutch Civil Code strict liability regime of Article 6:173 BW does not apply to aircraft, since aircraft were excluded in anticipation of a more specific regime. The current gap in Dutch civil law in this field leads to the baffling situation that damage caused by a radio-controlled toy airplane is governed by the strict liability regime of Article 6:173 BW, whereas a fully loaded Boeing 747 that crashes into an apartment building is governed by the general rules of fault liability, *see* Stolker and Levine, at 60-61. *See also* W.J.G. Oosterveen *et al*., Vervoersrecht in Boek 8 BW, Preadvies van de Vereeniging 'Handelsrecht' en Nederlandse Vereniging voor Zee- en Vervoersrecht 13-14 (1997), on the idea of a specific liability regime in this field in Book 8 Title 17 BW of the Dutch Civil Code.

be observed to move away from absolute liability to negligence in this field. Therefore, the developments in this field in the United States will be dealt with separately in Chapter 5 of this study.

4.1.2 Order of treatment

This Chapter has been divided in two main parts. In the first part of this Chapter, a comparative overview will be given of the specific third party liability regimes that have been enacted in the aforementioned countries of Europe and Australia. An introductory paragraph (4.2) is followed by paragraphs and sub-paragraphs on the main areas of importance per regime. First, the basis of liability, defences, the person(s) or entities liable, and types of aircraft of the regimes under review will be reviewed (4.3). Next, the scope of liability of these regimes will be analysed (4.4). Finally, the question if the regime at hand is based on unlimited or limited liability will be addressed in combination with an analysis of the insurance or security requirements underlying the regime (4.5).

In the second part of this Chapter, the current developments under European Community law in this field will be described in more detail. After an introduction including a brief historical review (4.6), the EC proposal on insurance requirements for air carriers and aircraft operators will be discussed (4.7). Next, the question if a more harmonized Community approach to third party liability is feasible will be dealt with (4.8). A synthesis of the discussed national private air law regimes and developments in the European Community in this field will finalize the chapter. On the basis of this synthesis, a number of suggestions and observations will be made on the possibilities of legislation in this field on both a national and Community level (4.9).

PART 1 – NATIONAL REGIMES AND INSURANCE REQUIREMENTS

4.2 NATIONAL REGIMES. INTRODUCTION

Before embarking on a comparative overview of the national private air regimes in this field of France, Germany & Austria, the United Kingdom, Switzerland, and Australia, a brief introduction of the relationship between these specific regimes and the general rules of fault liability or negligence will be given per country. In some cases, a reference will also be made to the more general regimes of liability for things.

The brief introduction will be given in the following order: France (4.2.1), Germany & Austria (4.2.2), the United Kingdom (4.2.3), Switzerland (4.2.4), and Australia (4.2.5).

4.2.1 France

The main and broadly formulated heading of fault liability of Article 1382 of the French Civil Code holds that '*tout fait quelconque de l'homme qui cause à autrui un dommage, oblige celui par la faute duquel il est arrivé, à le réparer*' (anyone who, through his act, causes damage to another by his fault shall be obliged to compensate the damage). Article 1383 of the French Civil Code adds that '*chacun est responsible du dommage qu'il a causé (…) par sa négligence ou par son imprudence*'(everyone is responsible for the damage caused not only by his own act but also by his negligence or carelessness).[5]

In addition to these general rules of fault liability, a specific rule of liability for damage caused by things has been enacted in Article 1384(1) CC. For liability to arise, the act of the thing under custody of the '*guardien*' (custodian) must have caused the damage. Although Article 1384(1) CC was originally perceived as a rule of fault liability, this notion gradually transformed into a presumption of fault in various stages of French case law.[6]

A number of more specific regimes of liability have been enacted separately, e.g. for the operators of nuclear installations, cable cars, and aircraft.[7] Liability for surface damage inflicted by aircraft is currently governed by the aviation statute as instituted by means of Decree No. 67-333 of March 30, 1967.[8]

4.2.2 Germany and Austria

Under German civil law, a separate regime of liability for damage caused by things has not been enacted. This means that damage caused by things in general is governed by the general heading of fault liability of § 823 BGB of the German Civil Code. However, a number of statutory regimes based on absolute liability have been enacted for a number of (at one time) novel, dangerous, and risky enterprises or forms of transport. Examples include the specific liability regimes for railways and tramways, nuclear energy, and

5 The English translations of Articles 1382 and 1383 CC have been derived from W. van Gerven *et al.*, at 3.

6 *See* J. Flour & J-L. Aubert, Les Obligations 2 – Le fait juridique 217-223 (1997); Stone, s. 5: 24-26; Zweigert & Kötz, at 659-661.

7 *See* Sériaux, at 368. Liability of the operators of nuclear installations is regulated by means of a specific statute of 30 October 1986 (*L. 30 octobre 1986*); liability of the operators of cable cars is regulated by means of a specific statute of 8 July 1941 (*L. 8 juillet 1941*); *see also* Zweigert & Kötz, at 661.

8 The first predecessor of the current statute of 31 May 1924 was consolidated in the Decree of 30 November 1955, *see* Stone at 46. By means of the Decree No.67-333 of March 30, 1967, the former Decree was repealed, *see* Mazeaud-Tunc, Traité Théorique et Practique de la Responsabilité Civile Délictuelle et Contractuelle, Tome II, 458-460 (1970).

aircraft operators.[9] Liability of the operators of aircraft for surface damage is governed by §§ 33-43 and § 53 of the German Aviation Law (*Luftverkehrsgesetz* or *LuftVG*) of 14 January 1981.[10]

Similar regimes of absolute liability for various dangerous activities have been enacted under Austrian civil law.[11] When Austria became part of the Third Reich in 1938, the Austrian aviation laws were replaced by German ones.[12] This explains the similarities between section X, §§ 146-153 of the current Austrian Aviation Law (*Luftfahrtgesetz* or *LuftFG*) and §§ 33-43 and § 53 of its German counterpart.[13] Both regimes will be discussed jointly for that reason.

4.2.3 The United Kingdom

Under English common law various headings of liability can be distinguished, such as trespass, trespass to land and nuisance, and the more general tort of negligence.[14] Absolute liability has also developed into a separate heading of tort under the famous rule of *Rylands* v. *Fletcher*, which originated from nuisance.[15] Furthermore, a number of specific Acts cover various areas of potential liability. Examples include the Nuclear Installations Act (1965), the Animals Act (1971), and the Civil Aviation Act (1982).[16]

The territorial scope of the Civil Aviation Act encompasses England, Wales, Scotland, and Northern Ireland.[17] Liability for surface damage inflicted by

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9 Stone at s.19; B.S. Markesinis, The German Law of Torts, 695-696 (1994). Stone and Markesinis refer to the Prussian Railway Act (1838) as incorporated in the Imperial Act on Liability (1871) and the 'Act Relating to the Peaceful Use of Nuclear Energy and the Protection Against its Dangers' (1959). For more examples of specific strict liability regimes *see* W. Fikentscher, Schuldrecht (1997), at 804 *et seq.*

10 The first version of the Aviation Law of August 1, 1922 (BGBl. I, p. 681) has been amended and modified a number of times up to its current version of 14.1. 1981, BGBl. I 6l, *see* Fikentscher at 809.

11 Zweigert & Kötz at 657.

12 The elder German air laws were repealed with the first 'fully' Austrian Aviation Law of December 2, 1957, *see* Air Laws and Treaties of the World, An Annotated Compilation prepared for the Committee on Science and Astronautics, U.S. House of Representatives, Eighty-Seventh Congress, First Session, May 11, 218 (1961).

13 The latest revisions of the Austrian LuftFG, BGBl. Nr 253/1957 have been made in: Bundesgesetz: Änderung des Luftfahrtgesetzes, BGBl. I Nr. 73/2003 of 21-08-2003. The elder regime of §§19-29 has been replaced by section X in an earlier stage, which is in force since January 1, 1998 and is not applicable to cases that occurred before that date, *see* §173 (5) LuftFG. As the main material amendment consists of an update of the applicable limitation of liability, both regimes will be discussed jointly.

14 Van Gerven *et al*., at 3.

15 Winfield and Jolowicz at 443 *et seq*.

16 Zweigert & Kötz at 666.

17 *See* Lord Hailsham of St. Marylebone, Halsbury's Laws of England, Volume 2, 490-491 (1991).

aircraft is governed by paragraph s 76 of the Civil Aviation Act. However, liability for surface damage can also be based on other headings of tortious liability, such as trespass or nuisance, dependant on the circumstances of the case.[18] This chapter will merely focus on the statutory regime of liability for surface damage.[19]

4.2.4 Switzerland

Under Swiss civil law, specific regimes of statutory liability for various dangerous enterprises have been enacted aside from the general rules of tortuous liability. Examples include the Swiss law of railway liability (1905), the statute on liability for harm caused by the operation of low or high tension cables (1902), the Swiss pipeline law (1963), the law of explosives (1977), and the Federal Aviation Law (1948).[20] The Federal Aviation law of December 21, 1948 (*Bundesgesetz über die Luftfahrt*) contains a section on liability for surface damage inflicted by aircraft.[21]

4.2.5 Australia

As a federal state under the Commonwealth of Australia Constitution Act, Australia consists of six member states (New South Wales, Victoria, Queensland, Tasmania, South Australia, and Western Australia) and the federally administered Territories. The member states, with their separate constitutions, parliaments, and governments, have free competence over most areas of private and commercial law. Although Australia is thus governed by six different legal

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18 Hailsham at 490. Historically, the Air Navigation Act of 1919 'gave to His Majesty in Council the power to control and to make regulations for aerial navigation over the British Isles and adjacent territorial waters and to administer all matters relating to civil aviation.' The Air Navigation Act of 1920 repealed previous legislation and gave effect to the Convention of Paris. In the Act of 1920, specific provisions on third party liability were first enacted, *see* E.R. Gardner, *Comparative Air Law*, 20 JALC 34, at 34-38 (1953). For the text of these provisions, enacted in Section 9(1)/(2) of the Act of 1920, *see* W.M. Marshall Freeman, Air and Aviation Law 35-36 (1931).

19 For a detailed discussion of actions based on trespass and nuisance, *see* Shawcross and Beaumont, Issue 72, nr V/131-132; Reference is made to the landmark case of *Steel-Maitland* v. *British Airways Board (1981) SLT 110,* in which it was held that the owner of property would have a remedy if the noise and vibration generated by aircraft caused serious disturbance or substantial inconvenience without necessarily having to establish material damage to the property. *See also* paragraph 5.5 of this study for a description of trespass and nuisance under US common law in this field.

20 Zweigert & Kötz at 657-658.

21 The Swiss Federal Aviation law is officially known as the '*Bundesgesetz über die Luftfahrt*' (*Luftfahrtgesetz vom 21. Dezember 1948*), *see* O. Riese, Luftrecht (1949), at 377 *et seq*; *see also* F. Dessemontet, Introduction to Swiss Law 134 (1981).

regimes, they are very similar in practice, as they are all based on English common law.[22]

Australia is of interest for this study, as it has originally ratified the Rome Convention of 1952 by means of the Civil Aviation (Damage by Aircraft) Act 1958.[23] However, Australia has subsequently decided to renounce the Convention and to repeal the Act in order to enact a national Damage by Aircraft Act 1999.[24]

The territorial scope of the Damage by Aircraft Act 1999 extends to each external Territory and applies to acts, omissions, matters and things within Australian Territory.[25]

4.3 Basis of liability. Persons liable. Defences. Aircraft

In this paragraph, the basis of liability, persons liable, defences, and types of aircraft per regime under review will be discussed in various sub-paragraphs in the same order of appearance as in the previous paragraph of this study.

4.3.1 France

The French Aviation Decree of 1967 subjects the operator ('*l'exploitant*') of an aircraft to a regime of absolute liability for surface damage caused by the movements of the aircraft or by objects detached from the aircraft.[26] The regime of the Decree is stricter than the regime of liability for things of Article 1384 of the French Civil Code, as the defence of force majeure has been discarded under the Decree. The operator can only invoke the defence of contributory negligence.[27]

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22 Zweigert & Kötz at 221-222.

23 The Civil Aviation (Damage by Aircraft) Act, No. 81 of 1958 was enacted to approve ratification by Australia of the Rome Convention of 1952 and give effect to that Convention. The Act also covered the liabilities of certain operators of aircraft in respect of damage on the surface to which the Convention does not apply, *see* Articles 16-19 of the Act.

24 The government of Australia sent a notification of denunciation of the Rome Convention of 1952 to ICAO on 8 May 2000 and took effect on 8 November 2000, *see* the list of parties to the Rome Convention at *www.icao.int/icao/en/leb/rome1952.htm.*

25 Clause 9 of the Damage by Aircraft Act 1999. Aside from the Act, complementary state legislation covers intrastate operations (except for Queensland, in which such legislation is still in development), *see* Discussion Paper, *Consideration of The Ratification by Australia of the Convention for the Unification of Certain Rules for International Carriage by Air done at Montreal on 28 May 1999 (The Montreal Convention) and Related Aviation Insurance Matters*, Department of Transport and Regional Services, January 2001, at 9, hereinafter cited as Discussion Paper).

26 Article L.141-2 of the Decree.

27 Mazeaud-Tunc at 461.

A difference of opinion exists on the exact meaning of the term operator. Some writers hold the operator to be the person who profits from exploitation of the aircraft economically, whereas others define him as the person who is in actual control of the aircraft, comparable to the custodian of Article 1384 CC.[28]

In cases of unregistered charter agreements, both the operator and owner of the aircraft are jointly liable for surface damage.[29] By including the owner as a potentially liable party under unregistered charter agreements, the French legislature aimed to create an extra safeguard for compensation in cases of insolvent charter operators.[30] In cases of registered charter agreements, the owner of the aircraft can only be held liable if the claimant establishes that he was at fault.

The Decree applies to civil, military, and state aircraft. Aircraft have been defined as all machines capable of rising into- or circling in the air.[31]

4.3.2 Germany and Austria

The German and Austrian private air law regimes both subject the custodian/operator ('*Halter*') of the aircraft to a combination of absolute and limited liability for damage to persons and property arising directly from an accident ('*Unfall*') during the operation of the aircraft.[32]

The rationale for absolute liability is that third parties who do not benefit economically from aviation deserve the utmost legal protection against the potential harm that can be inflicted by aircraft.[33] Both the German and Austrian regime only allow the operator the defence of contributory negligence.[34]

In the German and Austrian aviation laws, the custodian/operator has been defined as the person who has the aircraft at his disposal for his own

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28 *See* P. le Tourneau & L. Cadiet, Droit de la Responsabilité, No. 3932 (1996). According to Mazeaud-Tunc, the operator is he who profits economically from the exploitation of the aircraft, *see* Mazeaud-Tunc at 462-463. In order to substantiate that definition, an interesting linguistic argument is put forward based on the meaning of the French verb '*exploiter*', which means '*faire valoir*' or '*tirer profit*', and not '*exercer un poivoir de commandement*'.

29 Article L.141-4 of the Decree.

30 Mazeaud-Tunc at 464.

31 Mazeaud-Tunc at 465-466.

32 § 33 LuftVG (Germany) and § 146 LuftFG (Austria), formerly § 19(1) LuftFG, for cases prior to January 1, 1998, *see* § 173(5) LuftFG. *See also* Stone at 45.

33 *See* W. Schwenk, Handbuch des Luftverkehrsrechts 692-693 (1996). .

34 *See* Giemulla/Schmid, Luftverkehrsgesetz – Frankfurter Kommentar zum Luftverkehrsgesetz, Band 1.2, LuftVG § 33 sub A (Allgemeines) 2 (1997); Koziol, Österreichisches Haftplichtrecht, II, 399 (1975). In cases of contributory negligence, the general rules of the German and Austrian Civil Code of § 254 BGB and § 1304 ABGB apply, *see* § 34 LuftVG and § 157 (formerly § 20) LufFG.

benefit.[35] In order to clarify the question who can be construed as the operator and who as the owner of an aircraft, an analysis of the underlying agreements between both parties may be necessary. In cases involving short use of the aircraft, both the user and the original operator that benefits from the aircraft economically can be defined as operator. Dependant on the circumstances of the case, these two entities can be held liable for surface damage on a joint and several basis.[36] Operators of colliding aircraft that cause surface damage are also subjected to joint and several liability under the German and Austrian regime.[37]

An unlawful user ('*Schwarzflieger*') of an aircraft can also be held liable for surface damage on the basis of the German regime of absolute liability. However, the legitimate operator can only be held liable if it was proven that he was at fault in relation to such unlawful use. But if the unlawful user was either employed by the operator or if the aircraft was entrusted to him by the operator, the legitimate operator can be held absolutely liable for the damage, without effecting the liability of the unlawful user under general rules of German tort law.[38] A similar regime has been enacted in the Austrian Aviation Law.[39]

Aircraft ('*Luftfahrzeuge*') have been defined broadly as instruments designed to move in the air and include various types of aircraft, such as helicopters, airships, and even model aircraft in the German Aviation Law.[40] The Austrian Aviation Law makes use of a similar definition, which encompasses a number of categories of aircraft lighter and heavier than air.[41] Notably, the operators of military aircraft are subjected to a combination of absolute and unlimited liability under both the German and Austrian regime.[42]

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35 Schwenk at 690; *see also* W. Wussow *et al.*, Unfallhaftpflichtrecht 530 (1996). For Austria, *see* Koziol at 395-396.

36 Schwenk at 690-691.

37 For the specific rules on apportionment of damages between the colliding aircraft, *see* § 41 LuftVG and § 840 BGB (1) and Schwenk at 700, 704-706. For the Austrian regime *see* §152 LuftFG (formerly § 27 LuftFG) and Koziol at 404.

38 § 33(2) LuftVG; Schwenk at 706-707.

39 § 147(2) (formerly §19(2)) LuftFG; Koziol at 399. Note that the Austrian legislator refers to '*unbefugte Benutzing*'.

40 *See* E. Wolf, Lehrbuch des Schuldrechts – Bd. 2, 687 (1978), referring to §1(2) LuftVG. The total list encompasses *'Flugzeuge, Drehflügler, Luftschiffe, Segelflugzeuge, Motorsegler, Frei- und Fesselballone, Drachen, Fallschirme, Flugmodelle, Luftsportgeräte, sonstige für die Benutzung des Luftraums bestimmte Geräte, Raumfahrzeuge, Raketen,* and *ähnlige Flugkörper*', *see* Fikentscher at 809 and Geigel, Der Haftpflichtprozeß 1118 (1993); note that the last three categories are only defined as aircraft whilst in airspace.

41 *See* § 11 LuftVG; covered categories include *Flugzeuge, Segelflugzeuge, Schwingenflugzeuge, Hubschrauber, Tragschrauber, Fallschirme, Luftschiffe*, and *Freiballone, see* Koziol at 395-396.

42 *See* § 53 LuftVG and § 151 (formerly § 29k) LuftFG; § 151 also applies to military model aircraft.

4.3.3 The United Kingdom

The main rule of statutory liability for material damage to persons or property caused by aircraft of the Civil Aviation Act reads:

> [Subject to subsection 3 below,] where material loss or damage is caused to any person or property on land or water by, or by a person in, or an article, animal, or person falling from an aircraft while in flight, taking off or landing, then unless the loss or damage was caused or contributed to by the negligence of the person by whom it was suffered, damages in respect of the loss or damage shall be recoverable without the proof of negligence or intention or other cause of action, as if the loss or damage had been caused by the wilful act, neglect or default of the owner of the aircraft.[43]

Subsection 3 reads:

> Where, however, material loss or damage is thus caused and the circumstances are such that damages are recoverable in respect of that loss or damage by virtue only of the foregoing provisions, and a legal liability is created in some person other than the owner to pay damages in respect of the loss or damage, the owner is entitled to be indemnified by that other person against any claim in respect of that loss or damage.[44]

As Shawcross and Beaumont have formulated it so eloquently, the rationale of this rather densely formulated statutory regime of liability was 'the removal of certain activities from the realm of common law trespass or nuisance if they only resulted in disturbance or inconvenience but to afford the aggrieved person a remedy, at least as effective as his common law remedy, in respect of the same activities if they caused material damage to him or his property.'[45]

Under the absolute liability regime, the owner can only invoke the defence of contributory negligence of the injured party in order to escape liability.[46]

As a main rule, the owner of the aircraft can be held liable under the statutory regime. However, 'where the aircraft concerned has been bona fide demised, let or hired out for any period exceeding 14 days to any other person by the owner, and no pilot, commander, navigator or operative member of

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43 Civil Aviation Act 1982 s 76(2); *see* Hailsham at 825.

44 Civil Aviation Act 1982 s 76(3); *see* Hailsham at 825.

45 Shawcross and Beaumont, Issue 72, V/136, referring to the English case law of *Steel-Maitland* v. *British Airways Board* 1981 SLT 110 per Lord Jauncey at 112.

46 It is noteworthy that if contributory negligence can be established by the defendant, this probably does not mean that his liability is altogether eliminated, but that his liability is apportioned according to the extent of the contributory negligence. Apportionment of responsibility has been regulated in the Law Reform (Contributory Negligence) Act 1945, which is applicable to the regime of statutory liability of the Civil Aviation Act 1982, *see* Shawcross & Beaumont, Issue 72, V/144.

the crew of the aircraft is in the owner's employment, the foregoing provisions have effect as if for references to the owner there were substituted references to the person to whom the aircraft has thus been demised, let or hired out.'[47] In other words, when those conditions are met, the actual operator can be held liable under the statutory regime. Otherwise, the owner is liable, even when the aircraft is lent by him to another or used by another without his knowledge or consent, albeit with a right of redress against such others.[48] In the aftermath of '9/11', the English legislature is advised to reconsider such a regime of absolute and unlimited liability of the owners of aircraft for (terrorist) acts of third parties.

With respect to the types of aircraft that are covered by the regime, the Air Navigation Order of 1995 does not make use of a general definition of the phrase 'aircraft', but contains a table of general classification of aircraft. Aircraft encompass all balloons, kites, gliders, airships, aeroplanes (landplanes, seaplanes, amphibians and self launching motor gliders), powered lift (tilt rotor) and rotorcraft (gyroplanes and helicopters). The regime is applicable to Crown aircraft, but not to military aircraft.[49]

4.3.4 Switzerland

The Swiss liability regime for surface damage inflicted by aircraft has largely been based on the international liability regime of the Rome Convention of 1933. The main difference lies in the abandonment of the system of limitation of liability of the Convention in favor of a regime based on unlimited liability.[50] The only defence available to the operators of aircraft under the absolute liability regime is that of contributory negligence.[51]

Under the regime, the operator ('*Halter*') of the aircraft can be held liable for damage to persons and property on the surface on condition that the damage was caused by the aircraft in flight. 'In flight' has been defined as the period from the beginning of take-off procedures to the end of the landing procedures.[52] Damage caused by bodies or by objects falling from the aircraft

47 Civil Aviation Act 1982 s 76(4).

48 *See* Hailsham at 825; *see also* Shawcross and Beaumont, Issue 72, V/145.

49 *See* Shawcross and Beaumont, Issue 72, V/3, referring to Air Navigation Order 1995, SI 1995/1970, Sch I, Part A; Civil Aviation Act 1982 s 76(2) also applies to Crown aircraft, see Civil Aviation (Crown Aircraft) Order 1970, SI 1970/289, art 2, as cited by Hailsham at 825; *see also* Haisham at 491, on the non-applicability of the Civil Aviation Act to military aircraft.

50 *See* Stone at 45-46; Riese at 377-378

51 Riese at 378. The general rules of contributory negligence of the Swiss Civil Code are applicable.

52 Article 64(3) LFG. Damage caused by an aircraft that is not 'in flight' has to be dealt with by means of the general rules of fault liability of the Swiss Civil Code, *see* Riese at 379.

also falls under the scope of the regime of absolute liability ('*reine Kausalhaftung*').[53]

The operator can also be held liable for damage caused by a person on board of the aircraft, albeit up to the limits of mandatory insurance if that person is not part of the crew. Such a scenario is the first exception to the principle of unlimited liability of the operator.[54] The second exception to that principle is given by the scenario of an unlawful user ('*Schwarzflieger*') that inflicts surface damage with the aircraft. In such a case, the unlawful user can be held liable in full; the operator, on the other hand, can only be held liable up to the limits of mandatory insurance coverage.[55] Notably, the operator can even be held liable for the damage caused by unlawful use if he has done everything possible to prevent such use.[56]

In cases of collision between two or more aircraft, the implicated operators can be held liable jointly and severally for potential surface damage.[57]

4.3.5 Australia

The Australian Damage by Aircraft Act 1999 aims to 'facilitate the recovery of certain damages for injury, loss, damage or destruction caused by aircraft or objects falling from aircraft in flight.'[58] Therefore, the general heading of negligence has specifically been abandoned in favour of a regime based on absolute liability.[59]

In respect of defences, the Act differs from the other regimes discussed in this Chapter, as the Australian legislature has not included the defence of contributory negligence, and has thus created one of the most severe regimes of absolute liability possible.

The operator and owner of the implicated aircraft can be held jointly and severally liable for surface damage caused by the aircraft in flight under the

53 Article 64(1) and (2a) LFG; Article 64 is based on Article 2 of the Rome Convention of 1933, *see* Riese at 378.

54 Article 64 (2b) LFG. Riese remarks that a joint and several liability is thus created between the operator and the person on board causing damage, including rules of redress and subrogation on the basis of the principles of the Swiss Civil Code, *see* Riese at 379.

55 Article 65 LFG.

56 Riese at 379. Riese remarks that the Swiss regime differs from that of Article 5 of the Rome Convention of 1933 in that respect. The regime would offer an interesting solution to cases such as the September 11, 2001 terrorist attacks on the United States, *see in greater detail* paragraph 5.10 of this study.

57 Article 66 LFG, which corresponds to Article 6 of the Rome Convention of 1933, *see* Riese at 379.

58 Clause 3 of the Damage by Aircraft Act 1999.

59 Clause 11 of the Damage by Aircraft Act 1999.

regime.[60] If an authorized operator does not have the exclusive right to use the aircraft for more than 14 consecutive days, the person who authorized its use can also be held liable under the regime.

In case of unlawful use, the person normally entitled to control (generally the operator of the aircraft) can also be held liable, unless he has taken all reasonable steps to prevent such unlawful use.[61] This seems to imply that negligence prevails for the operator in cases of unlawful use. In case of authorized or unauthorized use by an employee of the operator in the course of his employment, the employer is held to be the user of the aircraft.[62]

The Act applies to all types of aircraft as defined in the Civil Aviation Act 1988, with the exception of model aircraft.[63] The Act applies to Commonwealth aircraft (except Defence force aircraft), aircraft of Australian and foreign corporations, and other aircraft (foreign and non-foreign) engaged in international and interstate flights, flights within and to and from the Territories, and flights landing at or taking off from places acquired by the Commonwealth for public purposes.[64]

4.4 Scope of liability

All of the national aviation liability regimes under review have been based on absolute liability. In the following sub-paragraphs, the scope of absolute liability of these regimes will be dealt with on the basis of the three main scenarios of conduct of aircraft that can inflict surface damage.[65]

4.4.1 France

The scope of absolute liability of Article L.141-2 of the French Aviation Decree is broad and encompasses surface damage inflicted by movements of the

60 The term 'operator' has been defined in Clause 6 of the Damage by Aircraft Act 1999 as the person using the aircraft except where another person retains control of its navigation, after authorising its use. In this case, the person retaining control of the aircraft's navigation will be taken to be the operator. This means in practical terms that when use and control of an aircraft are not exercised by the same person (eg a "wet" lease or charter), the person who supplies the aircraft and crew is the one who would be liable as the operator.' Note also that the meaning of the phrase 'in flight' varies according to the type of aircraft involved, see Clause 5 of the Damage by Aircraft Act 1999.

61 Clause 10(2)(3) of the Damage by Aircraft Act 1999.

62 Clause 7 of the Damage by Aircraft Act 1999.

63 Clause 4 of the Damage by Aircraft Act 1999.

64 Clause 9 of the Damage by Aircraft Act 1999.

65 As described in paragraph 2.2 of this study.

aircraft or by objects detached from the aircraft. Movements include those unrelated to landing or take-off procedures.[66]

Firstly, the scenario of damage caused by impact of the aircraft or parts of the aircraft falls under the scope of the regime.[67] Secondly, the regime encompasses damage caused by objects thrown from board, even if that is deemed necessary for the safety of the flight, e.g. in order to lose ballast.[68] Both of these scenarios thus involve impact of (parts of) the aircraft or of objects thrown from the aircraft. Under these scenarios, the link between impact and subsequent personal injuries or property damage can be established relatively easily. The rationale for absolute liability is thus clearly based on the potential dangers posed by aviation to third parties on the surface. In that sense, it is remarkable that the Decree does not cover cases of collisions between aircraft which cause damage to third parties on the ground through impact of the implicated aircraft or parts of the aircraft. For in such cases, claimants have to fall back on the general rules of fault liability of Article 1382 CC.[69] A rule of joint and several absolute liability would have seemed more appropriate in that context.

The rather open-ended scope of the absolute liability regime is revealed in cases of nuisance or noise caused by overflying aircraft. As a general rule, aircraft have a right of overflight as long as they do not interfere with the rights of property owners.[70] However, property owners can claim for damages on the basis of the absolute liability regime, if they can establish a sufficient causal link between the damage and the movements of the aircraft. The requirement of such a link of causation has been deemed too difficult to allow claims based on the general noise or nuisance inherent to normal overflight. The scope of absolute liability has thus been narrowed down to extremely serious cases of damage inflicted by noise, such as sonic booms.[71] The French legal doctrines of "*inconvénients de voisinage*" and "*pré-occupation*" have also helped to narrow down the scope of absolute liability to extreme cases. Factors such as the 'wrongful' location of victims (e.g. near airports) have been used as a yardstick for denying compensation of claims based on 'normal' nuisance.[72]

66 *See* Mazeaud-Tunc at 466-467, citing Cour de Cassation Civ. 2, 6 janv.1955, D. 1955.593, J.C.P. 1955.II.8587 (1er arrêt); the case involved a driving aircraft hitting a stationary aircraft.
67 Mazeaud-Tunc at 467-468.
68 Mazeaud-Tunc at 467-468.
69 Stone at 46.
70 *See* Article L.131-1 and 2 of the Decree as cited by Mazeaud-Tunc at 469-470.
71 Mazeaud-Tunc at 469-470.
72 Le Tourneau & Cadiet, at No. 3937.

4.4.2 Germany and Austria

The scope of absolute liability of the German regime can be derived from § 33 (1) of the German Aviation Law (*LuftVG*), which reads:

> Wird beim Betrieb eines Luftfahrzeugs durch Unfall jemand getötet, sein Körper oder seine Gesundheit verletzt oder eine Sache beschädigt, so ist der Halter des Luftfahrzeugs verplichtet, den Schaden zu ersetzen.

Similarly codified, the scope of absolute liability of § 146 (1) (formerly §19) of the Austrian Aviation Law (*LuftFG*) reads:

> § 146 (1) Wird durch einen Unfall beim Betrieb eines Luftfahrzeuges oder motorisierten Flugmodells ein Mensch getötet oder am Körper verletzt oder an der Gesundheit geschädigt oder eine körperliche Sache beschädigt, so haftet der Halter für den Ersatz des Schadens.

In other words, when a person is killed, injured, or suffers from health problems or when property is damaged due to an *accident* that occurred during the *operation* of an aircraft, the operator of the aircraft shall be liable for the damage. The link between damage and operation of the aircraft must comply with the German or Austrian rules of causation.[73]

The question arises to what extent the scope of absolute liability is narrowed down by the terms 'operation' and 'accident'. These terms will be discussed in subparagraphs 4.4.2.1 and 4.4.2.2 respectively.

4.4.2.1 Operation of the aircraft

Under the German absolute liability regime, the scope of the term 'operation' (*'beim Betrieb'*) covers both damage caused by operational movements (*'Verkehrsvorgang'*) of the aircraft and damage caused by stationary aircraft. Operational movements start when passengers are in the process of embarking or disembarking or while the aircraft is being loaded or unloaded and end when the aircraft is parked or towed away and all activities related to the aircraft have ceased. Stationary aircraft have been encompassed in the definition of operation in view of their susceptibility to the forces of nature. For natural phenomena such as extreme gusts of wind can at times be forceful enough to cause certain types of aircraft to move on their own account and thus lead to damage to third parties.[74]

The Austrian criteria to determine whether an aircraft is in operation have been defined slightly more narrowly. For an aircraft is deemed to be in opera-

73 Schwenk at 693; Koziol at 396-397.
74 Giemulla/Schmid at 8-9.

tion whilst moving on the surface, which includes movements generated by natural phenomena, but not when it is merely in a stationary position. On the other hand, an aircraft that is stationary with rotating propellors is deemed to be in operation.[75]

4.4.2.2 Accident

In the German regime, the term accident ('*Unfall*') has been defined as '*ein plötzlich von außen kommendes unvorhersehbares, einen Personen- oder Sachschaden verursachendes Ereignis*', or a sudden external unforeseeable event causing personal injuries or property damage.[76] The Austrian definition comes close by defining an accident as *'eine durch äußere und plötzliche Einwirkung entstandene Schädigung'* (damage caused by an external and sudden force).[77]

What is the scope of the term 'accident'? Historically, the German Aviation law of 1922 merely covered genuine accidents and collisions of aircraft. On the longer run the question arose to what extent damage caused by nuisance could be brought under the scope of the regime.[78] For overflying aircraft can affect the property rights of landowners by the noise they produce. According to the general rule of § 905 BGB, the landowner has to bear such flights above certain altitudes. This corresponds with the rule that aircraft have a free right of passage through German airspace, insofar as not limited by law or regulations.[79] However, certain exceptions to the main rule have been granted to landowners, for example in cases of damage caused by sonic booms (*"Knallschleppe"*).[80] Such exceptions can fall under the scope of the term accident, if they cause serious forms of damage such as personal injuries or death to persons or destruction of property.

The term accident has been filled in by case law. Rinck has enumerated a number of examples of case law involving killed livestock and physical damage to buildings caused by aviation that have been successfully brought under the scope of absolute liability. On the other hand, more intangible forms of property damage, such as devaluation of the value of property due to mere overflight, have been excluded from the regime in case law.[81] The criterion of accident can even encompass cases of surface damage inflicted by normal

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75 Koziol at 396-397.

76 Schwenk at 694. A slightly varying definition has been given by Giemulla/Schmid: *"die plötzliche Einwirkung eines äußeren Tatbestandes auf einen Menschen oder eine Sache, die eine Schädigung zur Folge hat"*, *see* Giemulla/Schmid at 19-21.

77 Koziol at 397.

78 Giemulla/Schmid at 19 *et seq*.

79 *See* §1(1) LuftVG and paragraph 2.5.2.2 of this study.

80 Comparable to the Austrian regime, which also allows for recovery of sudden damage caused by sonic booms (*"Stoßwellenbildung"*) of supersonic aircraft, but exempts long term and repetitive nuisance claims, *see* Koziol at 397.

81 *See* G. Rinck, *Duldungspflicht und Ersatzansprüche gegenüber dem Flüglärm*, 19 ZLW 98, at 99-101 (1970).

overflight, as long as the effects of such overflight are qualified as 'sudden'. The scope of absolute liability is then only narrowed down by the rules of causation. This can be illustrated by the "silverfox-farm" case of 1938.[82]

In the "silverfox-farm" case, a link of adequate causation between the damage to silverfoxes that killed their young out of fright and the noise and operation of overflying aircraft was denied by the *Reichsgericht*. The case involved regular overflight at a normal altitude of a number of aircraft, which would not harm 'normal' animals or humans, according to the court. This line of reasoning led to the ruling by the court that the damage inflicted to the extra-sensitive and foreign species of the silverfox fell outside the scope of absolute liability of §33 *LuftVG*. This was substantiated by the criteria of height of overflight and abnormal noise: compensation would only have been granted in cases where "normal" animals would have been frightened by low overflight or abnormal noise.[83] In this case, the Reichsgericht applied the objective approach of adequate causation to deny compensation for the harm done to the silverfoxes. The objective approach of adequate causation generalizes the potential classes of victims by comparing 'normal' animals to the ultrasensitive species of silverfoxes and narrows the scope of causation down to foreseeable cases of potential harm. Thus, unforeseeable and abnormal circumstances of the case are denied compensation under the rule of adequate causation.[84]

In a number of later German cases, a more subjective test of causation was applied which gave more consideration to the specific sensitivities of the victim(s) at hand. In a judgment of 27 January 1981, the *Bundes Gesetz Hof* (BGH) ruled that the link between operation of the aircraft and subsequent damage should not be governed by the doctrine of adequate causation.[85] The case involved a helicopter flying over a house at a low level, which caused a part of the 90 year old roof to collapse as a result of the movements of the motor-blades. On the grounds that the roofparts had not been attached properly when the roof was last renovated in 1939, the Court of Appeal rejected the applied link of adequate causation between the operation of the helicopter and the damage. However, the BGH overruled that decision on the grounds that the rule of adequate causation was not held to be applicable to the case. According to the court, the harm did fall under the protective scope of the violated rule. For the question should not be if the harm is foreseeable to the defendant, but far more if the specific realization of danger should lead to compensation of damage. In other words, the violated rule of § 33 *LuftVG* is not meant to set a standard of obligatory behaviour of the plaintiff (in casu, to properly repair the roof), but is merely meant to create a basis for compensation of the effects of the accident.

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82 RGZ Bd. 158 (*Silberfuchsfarm*).
83 *See* Schwenk at 694-695.
84 *See* Schwenk at 695.
85 BGHZ 1979, 259.

In a later case of 1 December 1981, the BGH endorsed its previous judgment on the scope of the rule of § 33 *LuftVG*. The case involved two jet-aircraft flying over a street in a short distance from each other, which so frightened a 19-year old automobilist that she lost control of the car and had an accident. According to the BGH, this presented a clear example of a case involving sudden and intense noise and subsequent damage which falls under the scope of § 33 *LuftVG*.[86]

These cases have met with both support and critique in German literature. An important critical observation has been that the BGH has not managed to devise a more generally applicable formula to determine which cases fall within the scope of § 33 *LuftVG* and which do not.[87]

A specific suggestion for the German legislature would be to narrow down the scope of absolute liability to cases where the aircraft fly too low, that is, in violation of the applicable rules of overflight. The advantage of such a solution would be that cases such as the "silverfox-farm" case would automatically fall outside the scope of § 33 *LuftVG*, as the implicated aircraft flew over at a normal altitude.[88] Questions on (adequate) causation would then not even arise before a determination has been made whether the aircraft flew too low or not. Specific exemptions based on severe damage caused by normal overflight that do fall under the absolute liability regime would then only lie in cases of damage caused by sonic booms.

4.4.3 The United Kingdom

The absolute liability regime of s 76(2) of the Civil Aviation Act covers 'material loss or damage caused to any person or property on land or water by, or by a person in, or an article, animal, or person falling from an aircraft while in flight, taking off or landing.' The regime also covers surface damage arising from collisions (on the surface, in flight/during take-off or landing, etc.).[89]

Damage caused by reasonable overflight has been excluded from the scope of absolute liability in s 76(1) of the Civil Aviation Act as follows:

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86 *See* Grabherr at 103-104 (1986).

87 Grabherr at 104-107; Schwenk at 694. Schwenk remarks that the scope of absolute liability will have to be determined on a case by case basis in practice, but that the scope could also be refined by means of corrective legislation.

88 Such a solution probably corresponds with the current scope of absolute liability of Article 1 of the Rome Convention of 1952, although it should be remarked that speaking more generally than merely on a level of German legislation, a scope of absolute liability is preferred in which damage caused by overflight at whatever level has been excluded.

89 Shawcross and Beaumont, V/146; Hailsham at 822.

> No action lies in respect of trespass or in respect of nuisance by reason only of the flight of an aircraft over any property at a height above the ground which, having regard to wind, weather and all the circumstances of the case is reasonable, or by reason only of the ordinary incidents of such flight, so long as the provisions of any Air Navigation Order and specified provisions of the Civil Aviation Act are duly complied with.

Thus, the normal inconveniencies and ordinary incidents of flight inherent to the activity of flying have been excluded from the regime.[90] 'Ordinary incidents of flight' refer to normal noise and vibrations arising from normal overflight.[91] In order to determine what is reasonable, a certain discretion has been left to the courts by permitting all relevant circumstances to be taken into account.

4.4.4 Switzerland

The scope of liability of the Swiss third party liability regime of the Federal Aviation Law includes damage caused by things or bodies thrown off or falling from the aircraft, even when such events happen in cases of emergency.[92] Furthermore, surface damage caused by collisions of aircraft is included and leads to joint and several liability of the implicated operators.[93]

Since the Swiss regime has copied the wording of the Rome Convention of 1933, the question may arise to what extent damage caused by overflight can be brought under the scope of the absolute liability regime. Leaving this question of scope of causation entirely to discretion of the judges is not a preferable solution, but a mere circumvention of the problem, as Riese has pointed out in this context.[94]

4.4.5 Australia

Under the Damage by Aircraft Act 1999, liability for any injury or damage can only arise

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90 Shawcross and Beaumont, V/136.

91 Hailsham at 824-825. Note that the specific heights at which aircraft are permitted to operate are regulated by means of specific statutory provisions on operation on or near aerodromes and aerodrome traffic zones; provisions relating to minimum altitudes in general can be found in special regulations restricting flying and in the Rules of the Air Regulations, *see* Hailsham at 726 *et seq*.

92 Article 64(2a) LFG.

93 Article 66 LFG.

94 Riese at 338-339.

> where caused by impact with an aircraft in flight or in flight immediately before the *impact*, or from contact with an object which has fallen from the aircraft in flight or on *impact*, including part of an aircraft. This will include damage caused, which is the result of the *impact* (for example, by fire).[95]

The Australian legislature has thus clearly narrowed the scope of the absolute liability regime down to scenarios involving the impact of aircraft or parts or objects of the aircraft. All scenarios of damage caused by normal or too low sudden or general overflight have simply been excluded, even if such scenarios cause serious forms of personal injuries or property damage.[96]

The meaning of the term 'in flight' varies per type of aircraft involved. The Australian legislature has made specific distinctions between aircraft lighter than air (such as balloons or airships), aircraft heavier than air and power-driven (e.g. propeller or jet driven), and aircraft heavier than air, but not power driven (e.g. gliders). The first category of aircraft lighter than air is deemed to be in flight from the moment of detachment from the surface until the moment of attachment to the surface. The second category of aircraft heavier than air and power-driven is deemed to be in flight from the moment when power is applied for the purpose of take-off until the landing run ends. And finally, the third category of aircraft heavier than air, but not power driven, is considered to be in flight from the moment of becoming airborne until the moment the landing run ends.[97]

The ratio for these specifications is to exclude normal manoeuvres that occur directly after the aircraft has landed and slowed to a normal speed from the scope of the regime, for instance in case of an aircraft exiting from a runway without stopping and then taxiing directly to a hard stand. The scope of the regime has thus been narrowed down to crash landings and to specific landings where the aircraft may have landed normally but has managed to cause damage in the process anyhow. Examples of the latter include over-shooting or leaving a runway at an airport, as well as damage arising from the use of a taxiway, road, field, or other area as an emergency landing strip.[98]

Damage caused by collision or interference of two or more aircraft leads to joint and several liability of the operators or owners of the implicated aircraft.[99]

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95 Clause 10(1) of the Damage by Aircraft Act 1999.

96 This corresponds to the first scenario of surface damage as described in sub-paragraph 2.2.1 of this study.

97 Clause 5 of the Damage by Aircraft Act 1999.

98 *See* the comment on Clause 5 of the Damage by Aircraft Act 1999.

99 Clause 10(4) of the Damage by Aircraft Act 1999. Such a solution could also serve to fill in the current legislative gap in the French regime in that area, *see* sub-paragraph 4.4.1 of this chapter.

4.5 LIMITATION OF LIABILITY AND INSURANCE REQUIREMENTS

This paragraph will focus on the question whether the absolute liability regimes under review are based on limited or unlimited liability and whether these regimes are backed up by compulsory insurance requirements. Most States require proof of insurance coverage of domestic operators under the registration procedures of their aircraft as well as of international operators of aircraft flying within or over their territory. Furthermore, Community law stipulates that air carriers falling under its scope should carry third party liability insurance coverage, which is of relevance for the EU Member States discussed in this paragraph.[100]

4.5.1 France

The French regime has not been limited, nor have any insurance requirements for third party liability been made compulsory under French law.

4.5.2 Germany and Austria

Under the German and Austrian regimes, the operators of aircraft can only be held liable up to certain legal limits of liability. These systems of limitation of liability are comparable to those of the Rome Convention of 1952 as amended by the Montreal Protocol of 1978.[101] Under the German regime, the correlation between weight of the aircraft and applicable limits ranges from model aircraft (starting at a weight of 25 kilogrammes) with a legal limitation of 1,5 million euro to aircraft of more than 14000 kilogrammes with a legal limitation of 60 million euro. 'Weight' of the aircraft has been defined as the maximum allowed take-off weight in that context. Furthermore, a maximum limit of 600.000 euro per killed or injured person has been enacted, as well as a system of division of limits between the categories of personal injuries and property damage.[102]

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100 Article 7 Council Regulation (EEC) No 2407/92 of 23 July 1992, OJ L 240.

101 *See* paragraph 3.5 of this study.

102 *See* § 37 LuftVG (1) for the six categories of weight and limitation and paragraph (2) for the maximum limit person. Paragraphs 3 and 4 provide for a system of division whereby two thirds of the amount calculated in accordance with paragraph (1) shall be used to pay damages for injuries to persons. If such personal injuries exceed the limits, the applicable limited amount should be divided proportionately between the claimants. The last third of the amount shall be divided proportionately between property damage and as yet not compensated personal injury claims (paragraph 4). If the total amount of damages exceeds the limitations set out in paragraph 1, the payment to each claimant shall diminish in the same ratio as that of the total amount to the maximum amount (paragraph 3).

A comparable system of limitation has been codified in the Austrian regime, with varying levels of weight and correlated limitation tiers ranging from flight models from 20 kg with a legal limitation of 872.000 euro, to 65.400.000 euro for aircraft of more than 14.000 kg. A system of division between personal injuries and property damage has been also been enacted.[103]

However, an important difference between the system of Rome and the German and Austrian regimes lies in the escape routes from limited to unlimited liability. For under both the German and Austrian regime, the escape routes from absolute and limited liability lie in the general rules of German and Austrian fault liability.[104] And such an alternative can be qualified as far more reasonable than having to fall back on proof of gross negligence or wilful misconduct of the operator, as is required under the system of Rome.[105]

The operators of military aircraft are subjected to unlimited liability for surface damage in both the German and Austrian regime.[106]

Under the German Aviation Law, a system of compulsory insurance has been enacted which requires compulsory insurance coverage or other financial guarantees by means of money deposits or other securities for at least up to the legally limited levels of liability. States and aircraft operated by the German federal government are exempted from this rule. The possibility of direct actions of third parties against insurers has not been codified under the German regime.[107]

A similar system of compulsory insurance requirements has been codified under the Austrian Aviation Law. Operators of aircraft are obliged to take out third party liability insurance for at least up to the levels of limitation as set out under the absolute liability regime.[108] Operators of certain state aircraft are exempted from this obligation.[109]

The main difference between the German and Austrian regime is that the latter allows direct actions of third parties against insurers. For insurers and insured operators can be held jointly and severally liable by third parties by means of direct actions under the Austrian regime.[110]

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103 *See* § 149 (formerly § 23) of the Austrian Aviation Code. Two thirds of the applicable limit is meant for personal injuries and one third for property damage; if damage in one category is less than the applicable limit, the remaining amount can be used for the other category (paragraph 2).

104 *See* § 159 LuftFG and § 42 LuftVG.

105 *See* subparagraph 3.5.4 of this study.

106 *See* § 53 LuftVG and § 151 LuftFG.

107 *See* W. Wussow, Unfallhaftpflichtrecht 539 (1996); Geigel at 1174; § 43(1) LuftVG jo. §§ 102-105 LuftVZO.

108 *See* § 163 (1) LuftFG.

109 § 167 (3) LuftFG exempts operators "*der Bund, ein Land, ein Gemeindeverband oder eine Ortsgemeinde mit mehr als 50 000 Einwohnern*" from the obligation to take out liability insurance.

110 *See* § 166 LuftFG.

4.5.3 United Kingdom

The statutory regime of absolute liability for damage to third parties on the surface has not been limited. Furthermore, no national compulsory liability insurance requirements exist under English law for operators or owners of aircraft. This is due to the fact that the compulsory insurance requirements that were created in the past never came into effect.[111] In practice, however, the operators of aircraft are obliged to take out third party liability insurance coverage in order to be granted an air service license by the Civil Aviation Authority.[112]

4.5.4 Switzerland

As a main rule, operators of aircraft are subjected to unlimited liability under the Swiss regime.

Operators of aircraft registered in Switzerland are obliged to take out third party liability insurance coverage up to certain amounts or to furnish other guarantees to back up potential liability.[113] State and cantonal aircraft are exempted from these compulsory requirements.[114] The duty of foreign operators to furnish guarantees is governed by international agreements and the Swiss Federal Air Office is allowed to make use of Swiss airspace dependant on the furnishing of such guarantees.[115]

The Federal Council is obliged to specify the rules on technical details such as the required amounts of coverage under such guarantees.[116]

As of April 24, 2001, the following levels of insurance coverage are required by Swiss Law:[117]

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111 In the past, English Parliament passed Part IV of the Civil Aviation Act 1949, which contained compulsory insurance requirements based on those of the Rome Convention of 1933, which was signed, but not ratified by the United Kingdom. Those requirements never came into effect and were repealed by section 128 of the Companies Act 1967. Likewise, another section that aimed to give effect to the Rome Convention of 1933 has been repealed by section 26 of the Civil Aviation Act 1968, *see* N. Legh-Jones at 852.

112 Applicants for air service licenses must satisfy the Civil Aviation Authority that his financial arrangements or insurance coverage have been met; see the Civil Aviation (Licensing) Regulations 1964 (S.I. 1964 No. 1116) made under Civil Aviation (Licensing) Act 1960, s.2, *see* J. Birds, Modern Insurance Law 395 (1997); *See also* N. Legh-Jones at 852. Furthermore, Article 7 of Council Regulation (EEC) No 2407/92 requires mandatory insurance coverage for Community air carriers.

113 Art. 70(1) jo Art. 71(1) LFG.

114 Art. 72 LFG.

115 Art. 73 LFG.

116 Art. 74 LFG.

117 *See* Art. 125 (1) of the Resolution on Aviation of 14 November 1973 ('*Verordnung über die Luftfahrt vom 14. November 1973*', also known as '*Luftfahrtverordnung* (LFV)'). For aircraft

a.	For aircraft and helicopters with a take-off weight up to 2000 kg:	3 000 000 F
b.	For aircraft and helicopters with a take-off weight from 2001 to 5700 kg:	5 000 000 F
c.	For aircraft and helicopters with a take-off weight from 5701 to 20 000 kg:	12 500 000 F
d.	For aircraft with a take-off weight of 20 001 to 200 000 kg and helicopters with a take-off weight exceeding 200 000 kg:	50 000 000 F
e.	For aircraft with a take-off weight exceeding 200 000 kg:	75 000 000 F
f.	For gliders equipped with motors:	3 000 000 F
g.	For gliders:	3 000 000 F
h.	For manned balloons:	3 000 000 F

The combination of unlimited liability and compulsory insurance or other guarantees makes the Swiss regime straightforward and workable. For the operator can be held absolutely liable for any amount of potential surface damage, even if that amount exceeds the levels of compulsory insurance. Damage caused by unlawful users or other persons that are not employed by the operator provide exceptions to that main rule. If such persons cause surface damage, the operator can only be held liable up to the applicable level of mandatory insurance coverage.[118]

4.5.5 Australia

According to its Explanatory Memorandum, the main aim of the Act is to upgrade the level of compensation for personal injuries and property damage of third parties to modern and acceptable standards by subjecting all aircraft that come within Australian jurisdiction to a uniform regime of absolute and unlimited liability. For under the previous situation, different liability regimes co-existed for foreign and domestic aircraft. This was due to the fact that foreign carriers from States signatory to the Rome Convention of 1952 as well as domestic carriers on international flights were subjected to an absolute and limited liability regime on the one hand. On the other hand, foreign carriers and domestic carriers flying within Australia were generally subjected to absolute and unlimited liability.[119] Due to this lack of uniformity, the levels of obligatory compensation to third parties in Australia could vary enormously.

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not categorized under paragraph 1, separate levels of coverage can be ordained (paragraph 2). For the carriage of dangerous goods, specific proportional third party liability insurance can be demanded (paragraph 3).

118 Riese at 378.

119 *See* the Explanatory Memorandum on the Damage by Aircraft Bill 1999, as circulated by Authority of the Minister for Transport and Regional Services, the Hon. John Anderson MP, at 2, hereinafter cited as Explanatory Memorandum.

According to the Australian legislature, that unfeasible situation was best eliminated by enacting a new regime based on unlimited liability.

Third party liability aviation insurance coverage is not required in Australia, although discussions between the Australian Department of Transport and the industry have made clear that the aviation industry would support a national mandatory scheme in this field. In practice, most commercial and non-commercial operators take out adequate coverage for third party liability.[120]

PART 2 – DEVELOPMENTS IN EUROPEAN COMMUNITY LAW

4.6 INTRODUCTION

As has been established in the introductory paragraph to this Chapter, European Community air law in the field of third party liability for damage to third parties on the surface is currently non-existent. Community law merely requires that air carriers and operators falling under the scope of Community law should be insured to cover liability in case of accidents, in particular in respect of passengers, luggage, cargo, mail, and third parties.[121] However, no minimal levels of compulsory coverage have been enacted. This means that an aircraft operator or air carrier falling under the scope of Community law can currently obtain any (minimal) level of insurance coverage for potential liability in order to comply with the licensing requirements of Council Regulation 2407/92.

A brief leap back in time can help to understand the current lack of Community legislation in this field. In a Consultation Paper of 1992 on liability in air transport, the Commission made an evaluation of the existing international and national rules on liability toward passengers and third parties. The Commission was of the opinion that a basis re-assessment of the situation was required, since the rules on third party liability differed substantially per Member State and the Rome Convention of 1952 was completely out of date. According to the Consultation Paper, a Community approach would have the advantage of including areas that were not governed by the system of Warsaw,

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120 *See* Discussion Paper, at 9. It is noteworthy that passengers are better protected than third parties in this respect, as the Australian Civil Aviation (Carriers' Liability) Act 1959 requires mandatory non-voidable insurance coverage for all operators carrying fare-paying passengers with a minimum insurance level of A$500,000 per passenger, *see* Discussion Paper, at 3; *see also* D.B. Johnston and T. Pyne, *Case notes and commentaries – Australia, Recent Developments in Australian Aviation Law*, TAQ 142, at 146-148 (1998) and the Transport Legislation Amendment Act 1995 for the insurance requirements to which Australian holders of a charter and/or Regular Public Transport (RPT) Air Operator's Certificate for international or domestic carriage are subjected.

121 Article 7 of Council Regulation (EEC) No 2407/92 of 23 July 1992, OJ L 240, 24.8.1992.

such as third party liability. The Commission concluded that the varying third party liability regimes in force did not meet the basic requirements in terms of establishing fair compensation limits and harmonized standards throughout the Community and invited interested parties to give their views on these issues.[122]

The International Chamber of Commerce (ICC) responded to this invitation and held that the legal and economic problems that could arise from accidents which cause damage to third parties were solved adequately by national legislation in combination with proper insurance requirements and that the degree of protection to third parties thus depended on the national regime at hand. The ICC remarked that such national regimes were generally based on a combination of strict and unlimited liability and that it supported such an approach. At most, the ICC conceded that a recommendation or directive to achieve uniformity in this respect might be desirable. For the Rome Convention of 1952 was held not to fill any vital or recognized need.[123]

After this brief examination of the problem, no further legislative action was taken on a Community level in this field from 1992 onwards. Passenger liability, on the other hand, was specifically dealt with by means of Council Regulation (EC) No 2027/97 of 9 October 1997. In brief, the liability regime of the Regulation provided for unlimited liability of Community air carriers for damages sustained in the event of death, wounding, or any other bodily injury by passengers in the event of accidents. For any damages up to the sum of the equivalent in ecu of 100.000 SDR, the Community air carrier was not permitted to exclude or limit his liability by proving that he and his agents had taken all necessary measures to avoid the damage or that it was impossible for him to take such measures.[124] The regime could thus be qualified as a two-tier regime of absolute liability up to 100 000 SDR and fault liability or negligence for amounts in excess of 100.000 SDR.

And then the problem of insurability of risks related to war and terrorism forced itself upon the European agenda in the direct aftermath of '9/11.' In the aftermath of '9/11', the Member States of the European Union introduced temporary insurance measures for coverage of the risks posed by war and terrorism in response to the decision of the aviation insurance industry to reduce obtainable coverage for such risks to approximately 5% of the normal coverage. These measures were approved by the Council of Ministers on

122 *See* EC Consultation Paper on Passenger Liability in Aircraft Accidents – Warsaw Convention and Internal Market Requirements of 5.10.1992, VII.C.1 – 174/92-8, at 2, 4-6.

123 *See* ICC Comments on the EC Consultation Paper: Passenger Liability in Aircraft Accidents – Warsaw Convention and Internal Market Requirements, Doc. No. 310/403 at 5 (General Observations on Third Party Liability).

124 Article 3(1) sub a jo. 3(2) Council Regulation (EC) No 2027/97.

September 22, 2001 on the conditions that they were temporary, strictly regulated and notified to the European Commission.[125]

State aid was also granted by the European Commission under certain conditions, such as the condition that compensation was paid in a non-discriminatory manner to all airlines in a given Member State and that it only concerned the costs incurred during the period of 11 – 14 September 2001, following the grounding of air traffic by the American authorities.[126] The temporary insurance measures were eventually prolonged to June 2002.

Another related legislative response to '9/11' consisted of a the proposal for a regulation of the European Parliament and of the Council on insurance requirements for air carriers and aircraft operators, which was launched on 24 September 2002. The proposal aims to bridge the current legislative gap on levels of required insurance coverage and scope of the current legislation in the future. Notably, no legislative action on a Community level was taken in the field of third party liability. The proposal, which also states the reasons for not taking legislative action in the field of third party liability, will be dealt with in more detail in the next paragraph.

4.7 THE EC PROPOSAL ON INSURANCE REQUIREMENTS

The Proposal for a Regulation of the European Parliament and of the Council on insurance requirements for air carriers and aircraft operators, aims to fill in the open-ended Community requirement on air carrier licensing which merely requires that air carriers are insured without specifying to which levels such insurance coverage should be obtained.[127] It should be borne in mind that the proposal is still in its drafting stages and has not been finalized yet.[128] Unfortunately, this means that this paragraph can only be based on

125 *See* Communication from the Commission on Insurance in the Air Transport sector following the terrorist attacks of 11 September 2001 in the United States, Brussels, 2.7.2002 COM (2002) 320 final, at 3.

126 *See* Communication from the Commission to the European Parliament and the Council, The repercussions of the terrorist attacks in the United States on the air transport industry, Brussels, 10.10.2001 COM (2001) 574 final, at 7-8. Notably, state aid was permitted on the basis of Article 87(2)(b) of the Treaty establishing the European Community. The events of September 11, 2001 were held to be exceptional occurrences within the meaning of Article 87(2)(b) Treaty.

127 See Article 7 Council Regulation (EEC) No 2407/92.

128 The proposed Regulation is subjected to the Article 251 EC procedure (ex Article 189b), and reached the stage of first reading by the European Parliament on April 1, 2003, *see* European Parliament, Amendments 8-57, PE 314.759/8-57, April 1, 2003. At the time of finalizing of this study, the outstanding issues of the final version of the Draft Regulation (Aviation Doc. 12689/03 of 23 September 2003) as prepared by the Working Party on Aviation under Greek and Italian Presidency were submitted to COREPER I on 26-09-2003 with the aim of facilitating political agreement on a Council common position at the Transport Council on 9 October 2003.

the initial proposal, as access to all further legislative amendments made by the Working Party on Aviation under Greek and Italian presidency is formally limited.

In order to achieve a fully harmonized approach and a level playing field for Community and non-Community air carriers and aircraft operators, the proposed Regulation applies to all aircraft carriers and operators flying to or from Community airports as well as over territory of Member States.[129] This is a large step further than merely filling in Article 7 of '2407/92' with obligatory levels of required insurance, as the proposed Regulation also effects the insurance requirements to which non-Community air carriers and operators that merely fly over Community territory are subjected to. In various amendments in the first reading of the European Parliament the question has been raised whether such an imposition of insurance requirements on non-Community air carriers and operators that have no intention to land in a Member State is in conformity with the Chicago Convention of 1944.

According to Article 5 of the Chicago Convention, non-scheduled flights are granted multilateral rights of overflight over the territory of Contracting States, albeit subject to certain reservations. Article 6 of the Chicago Convention holds that scheduled international air services can only be operated over or into the territory of a Contracting State with special permission or other authorization of that State and in accordance with the terms of such permission or authorization. In both cases, specific insurance requirements have not been explicitly regulated nor even mentioned. The open-ended question is thus if the conditions of Article 5 and the permission and authorization of Article 6 can be interpreted as to include such insurance obligations. In that context, both the International Air Services Transit Agreement of 1945, to which the majority of Contracting States is party, as well as normal bilateral agreements between States can be of relevance. The former holds that each Contracting State reserves the right to withhold or revoke a certificate or permit to an air transport enterprise of another State, if the air transport enterprise does not comply with the laws of the State over which it operates.[130] Bilaterals, including bilaterals between Contracting States not party to the International Air Services Transit Agreement, can also contain insurance requirements. Article 5 and 6 of the Chicago Convention as well as the regime of the International Air Services Transit Agreement of 1945 and general bilaterals seem to point to the possibility of imposing Community insurance requirements to non-Community air carriers or aircraft operators that merely fly over Community territory. This view was also substantiated by the Council Legal Service in the drafting process.

In case of bilateral agreements between two non-EU States, such Community legislation could effect the insurance provisions of the bilateral at hand, es-

129 *See* Article 2 of the proposed Regulation.
130 *See* Article 1 (5) of the International Air Services Transit Agreement of 1945.

pecially if the Community insurance requirements are more rigid than those of the State of registry of one or both parties to the bilateral. But even if non-Community air carriers or aircraft operators can be subjected to Community insurance requirements in case of such mere overflight, enforceability of the Regulation could prove troublesome.

The initially proposed required levels of insurance coverage have been based on the European Civil Aviation Conference (ECAC) Resolution on minimum insurance requirements (ECAC/25-1). On the presumption that the Maximum Take-Off Weight (MTOW) and subsequent level of required insurance coverage correspond to the potential level of danger per type of aircraft to a certain degree, the following categories of coverage for third party liability have been suggested:

Category 1: aircraft with a MTOW of less than 25.000 kg: 80 million SDRs
Category 2: aircraft with a MTOW of less than 50.000 kg: 270 million SDRs
Category 3: aircraft with a MTOW of less than 200.000 kg: 400 million SDRs
Category 4: aircraft with a MTOW of more than 200.000 kg: 600 million SDRs.[131]

The Regulation specifically mentions that these levels of insurance also are mandatory for coverage of acts of war and terrorism. It should be borne in mind that these categories and potential levels of coverage have been subject to discussion and have been amended in the drafting process of the proposed Regulation. At this point, one can merely observe that any attempt to fill in such requirements on the basis of MTOW of aircraft can be lauded as a step in the direction of more clarity in relation to the specific requirements that have to be met by air carriers and aircraft operators falling under the scope of the proposed Regulation, as long as the final categories correspond to levels of insurance coverage are reasonably obtainable for the aircraft operator or air carrier at hand within a certain weight category.[132]

Insurance coverage can be obtained from insurers authorized to effect such coverage under Community law or the laws of the country which has delivered an operating license, the country where the aircraft is registered, or the country where the insurer has its residence or principal place of business.[133] Alter-

131 *See* Article 7 (2) of the proposed Regulation.

132 During the drafting stages of the proposed Regulation, the UK delegation suggested a more refined division into nine categories of required insurance coverage. According to the UK delegation, this would take the position of light aircraft into account more accurately. Such a division would also take the Airbus A380 into account at the other end of the spectrum by means of a category above 500.000 kg with a minimum coverage of 1000 million SDR's, *see* Annex to Council of the European Union, Interinstitutional File: 2002/0234 (COD), Brussels, 25 February 2003, at 2. Almost all delegations were of the opinion that the initial proposed categories were too broad and found the prescribed amounts of coverage too high, especially for lighter aircraft, *see* Council of the European Union, Interinstitutional File: 2002/0234, Working Party on Aviation, Brussels, 3 April 2003, at 21 (footnote 64).

133 *See* Article 5(1) of the proposed Regulation.

natively, air carriers or aircraft operators from third countries shall provide either a cash deposit in a depository maintained in the country that granted the license, or a guarantee issued by a bank authorized to do so by the country of registration and whose financial responsibility has been verified by that country. Furthermore that country is not permitted to claim immunity from suit in relation to such a guarantee. The latter rule has also proven to be controversial during the drafting process of the proposed Regulation, in view of the fact that such a provision distorts a level playing field between Community and third country air carriers and aircraft operators.

Air carriers and aircraft operators are obliged to deposit an insurance certificate or any of the latter other securities with the competent aviation authorities of the Member States at the beginning of each scheduling period.[134]

The proposed Regulation does not deal with third party liability regimes, which are left to the discretion of the Member States.[135] In that sense, it is remarkable that the Proposal initially defined scenarios which are to be covered by insurance, but are normally used to define the scope of an absolute or strict liability regime. For Article 7(1) of the Regulation held that insurance to cover liability vis-à-vis third parties shall be understood to cover 'any damage caused by an aircraft in flight or on the ground or by any person or thing falling therefrom to third parties, for each aircraft and incident, only if damage is a direct consequence of incident giving rise thereto.' Such criteria are meant to define the scope of an absolute liability regime, such as been done under Article 1(1) of the Rome Convention, but not to define beforehand to what extent insurance coverage goes in terms of potential scenarios that can cause surface damage. This can be seen as a flaw which complicates matters; for if Community insurance requirements are deliberately codified separately from liability regimes this should be done in a consequent manner.

As a whole, the move to fill in the insurance requirements of Article 7 of '2407/92' by means of the proposed Regulation can be lauded as a step forward toward more clarity in relation to the precise level of obligatory insurance coverage for the air carriers and aircraft operators that fall under the scope of the proposed Regulation. Despite the fact that enforcement may prove difficult in cases of mere overflight of non-Community air carriers or aircraft operators, at least a level playing field in relation to level of mandatory insurance coverage has been created for all parties concerned, both in the air and on the ground. However, at the time of finalizing this study, a number of issues still needed to be resolved, such as the question to what extent scenarios of market failure should be brought under the scope of the proposed Regulation.

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134 *See* Article 5(2)(3) of the proposed Regulation. Notably, Member States that are merely flown over may also require evidence that such insurance has been effected.

135 *See* Article 7(1)(a) of the proposed Regulation.

4.8 A MORE HARMONIZED COMMUNITY APPROACH TO THIRD PARTY LIABILITY?

In absence of any instrument on third party liability in this field on a Community level, the question could be raised whether the enactment of such an instrument should be considered by the Commission.

In the Explanatory Memorandum to the Proposal for a Regulation of the European Parliament and of the Council on insurance requirements for air carriers and aircraft operators, the Commission concedes that there are no Community rules defining what third party liability should be based on.[136] The Commission acknowledges that air carrier's liability toward third parties is generally based on proven tort arising from negligence or any other wrongful acts (wilful misconduct), as opposed to strict liability in the Member States.[137] However, 'as far as third party liability of air carriers and aircraft operators in case of incidents is concerned, the Commission is of the opinion that liability has been already sufficiently defined in the Member States.'[138] This view seems contrary to an earlier notion put forward by the Commission in 1992 that a Community approach to aviation liability could encompass areas such as third party liability, as the varying national regimes in force did not establish harmonized standards throughout the Community.[139] But is the current rather meagre justification for not taking legislative action on a Community level on the basis of the requirements of subsidiarity of Article 5 EC sufficient?[140] In order to examine that question, a number of considerations of the Council of the European Union to Regulation 2027/97 on passenger liability can be of comparative value in order to find justifications and arguments for similar legislative action on a Community level in the field of third party liability.

The fourth consideration of Regulation 2027/97 holds that in the internal aviation market, the distinction between national and international transport

136 *See* Explanatory Memorandum to the Proposal for a Regulation of the European Parliament and of the Council on insurance requirements for air carriers and aircraft operators, Brussels, 24.9.2002 COM (2002) 521 final, at 5 (point 13), hereinafter cited as Explanatory Memorandum of 24.9.2002.

137 *See* Explanatory Memorandum of 24.9.2002 at 5, point 14. The Commission also points out that some Member States have enacted specific regimes based on strict and unlimited liability, such as France, Sweden, and the United Kingdom.

138 *See* Explanatory Memorandum of 24.9.2002 at 6, point 15.

139 *See* paragraph 4.6 of this study.

140 Subsidiarity in the sense of Article 5 EC provides that action by the Community should only be taken if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore by reason of scale or effects of the proposed action be better achieved by the Community. If Community action is deemed necessary, the Commission will opt for directives rather than regulations, as minimum as opposed to total harmonization is now more the norm, *see* P. Craig & G. de Burca, EU Law 135-136 (2003).

has been eliminated. Therefore, it is appropriate to have the same level and nature of liability in both national and international transport.

The sixth consideration holds that action at a Community level is desirable in order to achieve harmonization in the field of air carrier liability and could serve as a guideline for improved passenger protection on a global scale. Such action would be in compliance with the principle of subsidiarity.

The seventh consideration holds that it is appropriate to remove all monetary limits of liability of the Warsaw Convention or any other legal or contractual limits in accordance with present trends at an international level.

The eighth consideration holds that in order to avoid situations where victims of accidents are not compensated, Community air carriers should not be able to invoke any defence of Article 20(1) of the Warsaw Convention up to a certain limit.

If modified to the specific area of third party liability, such considerations could equally serve as arguments for harmonization of third party liability regimes within the internal aviation market on a Community level.[141] For the point not addressed by the Commission is that as only a number of Member States have enacted national regimes based on absolute liability, whereas others have no regime at all, a level and harmonized playing field is currently lacking both for aircraft operators and air carriers as well as third parties falling under the scope of Community law. One would at least expect the same level of legal protection of third parties as of passengers, if not more so, as third parties do not even profit from aviation in the way that passengers do. For aircraft operators and air carriers can currently invoke all defences available under general rules of fault liability or negligence at hand in Member States without specific third party liability regimes in force, whereas passengers always profit from absolute liability up to 100.000 SDR of Regulation 2027/97, irrespective of the Member State at hand. Since the whole point of this study is to explore the difference between the situation in absence of any regime and stricter regimes of liability which offer more protection to third parties, the Commission has not justified its grounds for not taking legislative action on a Community level sufficiently in my opinion. On the grounds of harmonization and a level playing field for all parties concerned in the internal aviation market, both a legislative instrument on a Community level in the field of second party as of third party liability thus seem practically equally defendable. The technical question if such an instrument should be enacted in the form of a Regulation or Directive is difficult to answer. Arguments in favor of the less far fetching instrument of a Directive include the fact that a number of Member States already have legislation in force in this field, which

141 For it should be borne in mind that the law of the European Community is primarily meant to establish an internal market and not to unify the law on the basis the EC Treaty; therefore pleas for harmonization of national laws should be based on the grounds of necessity for the establishment and functioning of the internal market, *see* Van Gerven *et al.*, at 475-476.

would then simply have to be amended to the requirements of the Directive instead of abolished. Member States without any legislation in force would need to create specific legislation in this field on a national level within a certain timeframe that would replace the general regime of fault liability or negligence at hand.[142]

However, as long as the legislative void in Community law remains, the problem of third party liability will have to be resolved on a national level of legislation by the Member States, which ultimately means that no level playing field exists in this area in the European Community. The only valid counter-argument against the current lack of harmonized rules, which was also raised in Chapter 3 of this study in relation to the necessity of an international regime in this field, is that Member states are now free to enact national regimes with a greater range of types of aircraft covered by them than mere civil aircraft.

4.9 Final remarks and conclusions

In this Chapter, the question has been raised how a national legislature could best deal with the problem of liability for surface damage inflicted by aircraft on a national level. Such legislative action on a national level is partly justifiable on the grounds that the current international system of Rome is deemed to be obsolete at this point in time. In order to provide the fictitious national legislator with pointers in this area, the first part of this Chapter dealt with the third party liability regimes in the aviation laws of France, Germany, Austria, the United Kingdom, Switzerland and Australia. These regimes were deemed to contain useful patterns of legislation in respect of persons liable, basis and scope of liability, etc. Despite their inherent differences, the discussed regimes all have a basis of absolute liability in common.

Although its exact definition may vary, the main person or entity that can be held absolutely liable under the majority of regimes is the operator of the aircraft.[143] In a number of regimes and dependant on certain conditions, the owners of aircraft can be held liable as well.[144]

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142 In that context, Directive 85/374 of 25 July 1985 [1985] OJ L 210/79 on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective products could serve as a comparative example of harmonization of (product) liability rules on a Community level by means of a Directive as opposed to a Regulation.

143 The main exception to that rule is provided by the absolute liability regime of the United Kingdom, which attributes liability to the owner of the aircraft; however, in practice, this generally amounts to the operator as well, *see* sub-paragraph 4.3.3 of this study.

144 *See in that context,* sub-paragraphs 4.3.1, 4.3.3, and 4.3.5 on the French, United Kingdom, and Australian regimes.

In view of the worldwide aftermath of the terrorist attacks on the United States of 11 September, 2001, it is of interest that the problems related to liability for surface damage inflicted by unlawful use of the aircraft have been dealt with in a number of regimes.[145] The solution opted for in the Swiss liability regime is recommendable, which holds that the unlawful user can be held fully liable, whereas the operator of the aircraft can only be held liable up to the limits of mandatory insurance coverage. If such a legislative solution were to be applied to scenarios involving excessive damage, such as '9/11', the implicated operator of the aircraft could only be legally held liable up to their (actual and/or compulsory) levels of insurance coverage, without subjecting them to the dangers of potential bankruptcy.[146]

Although a feasible regime of international liability in this field would certainly have a great number of advantages, one of its main disadvantages remains that its scope of application is far more narrow than the potential scope of national regimes. For the Rome Convention of 1952 only applies to scenarios of surface damage inflicted by international civil aviation in the territory of a Contracting State by an aircraft registered in the territory of another Contracting State and does not apply to damage caused by military, customs, or police aircraft.[147] The scope of application of national regimes can be made a lot broader, since national regimes can be made to apply both to international and domestic flights above national territory and are not dependant on adherence by foreign states whose aircraft are permitted to fly to or over the state with such legislation in force. Furthermore, the national legislator is free to determine which range of types of aircraft are covered by the regime. The French regime in this field thus applies to civil, military, and state aircraft;[148] and according to the Air Navigation Order of the United Kingdom, aircraft even include balloons and kites.[149] By means of such categorizations, the national legislature can also create variations in the liability regime per type of aircraft.[150] Furthermore, national regimes can be made to encompass all potential cases of collisions of aircraft, whereas the international regime of liability of the system of Rome only covers cases of collision

145 *See in that context*, paragraphs 4.3.2, 4.3.4, and 4.3.5 on the German, Austrian, Swiss, and Australian regimes.

146 The necessary excess coverage could then be taken up by States to a certain extent on the grounds that such catastrophic risks should not be borne by aviation alone, *see also* paragraph 2.10, argument 3 in that context.

147 *See* Articles 23(1) and 26 of the Rome Convention of 1952.

148 *See* sub-paragraph 4.3.1 of this study.

149 *See* the Air Navigation Order of 1995 as cited in sub-paragraph 4.3.3 of this study.

150 Under the German and Austrian regimes, for instance, the operators of military aircraft are subjected to regimes of unlimited absolute liability for surface damage, whereas the operators of other types of aircraft are subjected to limited regimes of absolute liability, *see* sub-paragraph 4.3.2 of this study.

between two or more international civil aircraft of States party to the Convention.[151]

Perhaps the most striking variations between the national regimes of liability under review lie in the scope of absolute liability per regime. All of the discussed regimes cover the most severe scenario of surface damage caused by the impact of aircraft or parts, objects, or bodies falling or thrown from the aircraft, although their wording varies. Some regimes also specify the type of damage covered by the regime.[152] Damage caused by nuisance or noise has either been completely excluded or only included to a certain extent, for instance by narrowing it down by means of criteria such as severity of the damage or 'suddenness'.[153] The general idea is to at least expel the normal inconveniencies of overflight that people on the ground have to bear from aviation from the scope of absolute liability.

Most of the regimes have been based on unlimited liability and in most cases compulsory insurance or security requirements have been enacted to provide an extra financial safeguard for such regimes. In some cases, direct actions have been permitted. Even in case of legally limited liability regimes, the potential escape route to unlimited liability is based on the applicable rules of general fault liability.[154]

As a whole, all of these national regimes based on absolute liability reflect the notion that potential victims of surface damage deserve a better legal protection than the general rules of negligence or fault liability of these systems of law can offer. The rationale for such a notion is generally based on arguments such as the potential complexities involved in proving fault or negligence inherent to aviation accidents or incidents in general. Other arguments include the fact that third parties generally do not benefit directly from aviation or are able to prevent flights from being conducted above their heads. In short, despite its improving track record, the aviation industry is still held to pose dangers to third parties that are best dealt with by means of specific regimes based on absolute liability.

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151 *See* Article 7 of the Rome Convention of 1952; for the inherent problems involved in the combination of collisions and the limited liability regime of the Rome Convention of 1952, *see* sub-paragraph 3.3.2 of this study. Whenever collisions are specifically covered by a national regime, a rule of joint and several liability will generally prevail, *see e.g.* sub-paragraph 4.3.2 on the German regime of absolute liability in case of collisions.

152 The German and Austrian third party liability regimes specifically define the types of personal injuries and property damage that must have been inflicted by the aircraft, *see* sub-paragraph 4.4.2 of this study.

153 Under the Australian regime, the scope of absolute liability has been narrowed down by the impact criterion, by which any damage caused by overflight has been excluded, *see* sub-paragraph 4.4.5 of this study. The German and Austrian regimes have been limited in scope of absolute liability to 'accidents', which require that certain elements are met, *see* sub-paragraph 4.4.2.2 of this study.

154 *See* sub-paragraph 4.5.2 of this study.

The second part of this Chapter dealt with the latest developments in Community law in this field. A distinction was made between the current proposed Regulation on insurance requirements and the lack of legislative action on a Community level in the sphere of liability, which has been left to the discretion of Member States. The proposed Regulation can be hailed as a useful step to fill in the current legislative gap on required levels of compulsory insurance coverage per category of aircraft on the basis of a correlation between Maximum Take-Off Weight and corresponding level of coverage (MTOW). However, the proposed Regulation has not been finalized yet and a number of issues will still have to be resolved, such as the question whether specific rules for market failure should be enacted in the proposed Regulation.

The question has also been raised why the Commission has not also opted for a more harmonized approach with respect to liability in this field. A number of arguments have been put forward to substantiate such a move in order to create a more level playing field for all parties concerned.

However, in the current void of any legislative instrument on third party liability on a Community level or of any plans to enact such an instrument in the near future, Member States are currently forced to approach the problem on a national level. As has been mentioned, one advantage of such an approach is that the national legislature can encompass all types of aircraft in its regime, including military aircraft. Thus, the Dutch legislature, which was taken as a starting point in this Chapter, is advised to combine the best aspects of the discussed regimes and create his own regime of third party liability in Book 8, title 17 of the Dutch Civil Code. A regime based on absolute and unlimited liability, which is limited in scope by the criteria of the first scenario of impact of the aircraft or parts of the aircraft or persons/things falling therefrom is recommended. The Australian regime of the Damage by Aircraft Bill of 1999 can serve as an example of such a regime, albeit that inclusion of the defence of contributory negligence is advisable, which was omitted by the Australian legislator. Any form of damage or injury, however severe, caused by aircraft that remain intact and merely fly over, at whatever height, should not fall under scope of the absolute liability regime as an important quid pro quo to the severity of the absolute liability regime. For the difficulty to prove fault or negligence is deemed the most feasible justification for absolute liability as well as the greatest potential problem in cases of actual crashes of aircraft or when parts of the aircraft fall from the aircraft. The broader scope of liability of for instance the German and French regimes is therefore not recommended.

Damage caused by unlawful users should form the main exception to the rule of absolute and unlimited liability. The Swiss solution of subjecting the operator of the aircraft to a combination of absolute and limited liability up to the level of compulsory insurance is recommended in that context.

5 The gradual move to negligence in the United States

5.1 INTRODUCTION

In the previous Chapter of this study, a general outline has been given of a number of specific national liability regimes and insurance requirements for damage to third parties on the surface inflicted by aircraft. Despite their differences, these national regimes are generally based on the pillars of absolute and in most cases unlimited liability, and have generally been financially safeguarded by compulsory insurance or other security requirements. Even the common law jurisdictions of the United Kingdom and Australia have been seen to rely on statutory regimes of absolute liability.

This Chapter is dedicated to the developments in the United States in this field. These developments are of interest, as they indicate a general move in a different direction than that of specifically codified regimes based on absolute liability. For in absence of international law or federal liability statutes and with only a marginal number of statutory regimes in force, the general rules of negligence have won the day in this field in the United States.[1] This implies that the victims of surface damage within the majority of jurisdictions within the United States have to prove that the owners or operators of the implicated aircraft were negligent in order to receive compensation for their personal injuries or property damage.[2]

An exploration of the past is necessary in order to understand this move away from common law or statutory headings of absolute liability to negligence: for the historical origins and rationale of absolute liability can help to clarify the apparent change of perception that aviation has undergone in the last four decades of the twentieth century from an activity worthy of absolute liability to an activity deemed adequately covered by the general principles of negligence. This exploration will range from the absolute liability rule of

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1 The United States have signed nor ratified any of the Rome instruments, mainly in view of objections raised against the principle and scope of absolute liability, the relatively low limits of liability, and the security provisions set out in the Convention, *see* E.T. Nunnely, *Report of the Chairman of the United States Delegation to the International Conference held at Rome, Italy, September 9-October 7, 1952 – to adopt a Convention on damage caused by foreign aircraft to third parties on the surface*, 20 JALC 89, at 91(1953). As will be seen in more detail, attempts to codify federal aviation liability legislation have not succeeded in the United States.

2 *See* G.I. Whitehead, Jr., *Legal liability of owners and operators of aircraft in general aviation for damage to third parties*, 15 Syracuse Law Review 1, at 2 (1963).

the landmark case of *Rylands* v. *Fletcher* for abnormally dangerous conditions and activities to the current status quo of general negligence. In order to clarify this exploration, the three main headings of liability will be discussed in three parts (A to C). First, the basis and scope of absolute liability under common law will be discussed (Part A, 5.2 – 5.5). A description of the common law bases of absolute liability that have been applied to surface damage will be given, using the landmark case of *Rylands* v. *Fletcher* as a starting point (5.2).[3] In that context, the two main Restatements of Torts in this field will be evaluated (5.3). The relationship between the rule of *Rylands* v. *Fletcher*, the Restatements, and the activity of flying will subsequently be addressed (5.4). Finally, the other bases of common law absolute liability of trespass and nuisance will be described (5.5).

Next, the statutory regimes of absolute liability will be discussed. The relevant provisions of the Uniform State Law for Aeronautics as well as other proposed legislation in this field will be taken into account. Furthermore, the constitutionality of such regimes will be addressed (Part B, 5.6). The gradual move to negligence will subsequently be described, with its range from presumptions of negligence to pure negligence (Part C, 5.7).

These paragraphs on applicable basis and scope of liability are followed by paragraphs on persons liable under these varying bases of liability (5.8) and federal insurance requirements in this field (5.9) (Part D). The case of September 11, 2001 will be dealt with separately, in view of its uniqueness in the history of aviation and its effects on existing tort law and insurance (Part E, 5.10). The Chapter will end with a number of final observations on the developments in the United States (Part F, 5.11).

A ABSOLUTE LIABILITY UNDER COMMON LAW

5.2 LIABILITY FOR ABNORMALLY DANGEROUS ACTIVITIES

The origins of the doctrine of absolute liability for abnormally dangerous conditions and activities lie in the English landmark case of *Rylands* v. *Fletcher* of 1868.[4] The case involved a mill-owner that was ultimately held liable for the damages inflicted by a dam that he had ordered to power his mill. For the dam created a reservoir that lay over ancient coalmines, which led into an operating colliery. Damage was subsequently caused by water that ran through the old shafts, which flooded the colliery.

The two most influential opinions on the case were made by Mr. Justice Blackburn in the Court of Exechequer and Lord Cairns in the House of Lords. Blackburn held that

3 *Rylands* v. *Fletcher* (1866) LR 1 Ex 265 (ExCh), (1868) LR 3 HL 330.
4 *Rylands* v. *Fletcher* (1866) LR 1 Ex 265 (ExCh), (1868) LR 3 HL 330.

> the true rule of law is, that the person who for his own purposes brings on his lands and collects and keeps there anything likely to do mischief if it escapes must keep it in at his peril, and, if he does not do so, is prima facie answerable for all the damage which is the natural consequence of its escape… etc.[5]

Cairns agreed, but restricted the scope of the rule of absolute liability to 'non-natural users', under which the mill-owner was categorized. Cairns did not further define the term non-natural user, although he probably referred to the difference between traditional and novel use.[6]

The case of *Rylands* v. *Fletcher* can be qualified as an important court-made rule of absolute liability, which should be distinguished from the common law bases of liability of trespass and nuisance. However, the borderlines between these three bases of liability are often fine and can vary per common law jurisdiction.[7] The rule of *Rylands* v. *Fletcher* was adopted in a number of English cases, which had in common that the thing or activity must be unduly dangerous and not normal to maintain in the chosen place and its surroundings. In 1947, the scope of the rule was narrowed down to cases involving an escape of a dangerous substance in the United Kingdom.[8]

In the United States, the rule of *Rylands* v. *Fletcher* met with approval followed by disapproval in case law and doctrine of the late nineteenth and early twentieth century.[9] The opposition held that the rule led to an unjustifiable extension of liability in the sphere of accidents, which could easily be met by a combination of negligence and the doctrine of res ipsa loquitur. This point of view was substantiated by the notion that the nascent industries and dangerous enterprises of the United States needed protection against too-easily filed claims from potential victims located in the vicinity of these industries.[10]

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5 *Fletcher* v. *Rylands* (1866) LR 1 Ex 265, 279 f.

6 *See* C. Morris, *Hazardous Enterprises and Risk Bearing Capacity*, 61 Yale Law Journal 1172, at 1172-1173 (1952).

7 As a rough distinction, liability for trespass only arises when the invasion of land is intentional, whereas if a person conducts activities on his land which unintentionally lead to damage on nearby property, trespass is only fulfulled if the damage was negligently inflicted. However, on the basis of *Rylands* v. *Fletcher*, liability would arise regardless of fault for the activities that fall under the scope of the rule. Nuisance, on the other hand, leads to liability without fault for smoke, vapours, smells, etc., that effect adjacent territory, *see* Van Gerven *et al*., at 19. *See also* paragraph 5.5 of this study.

8 *See* Prosser and Keeton on Torts 548 (1984); Zweigert & Kötz at 668-669. The scope of the rule was narrowed down in *Read* v. *Lyons & Co*. [1947] AC 156, in which injuries caused by an explosion in a munitions factory were excluded from the rule. Aeroplanes were not considered as dangerous things under the rule in the United Kingdom, *see* Walton *et al*., at 813, citing *Fosbroke-Hobbes* v. *Airwork Ltd* [1937] 1 All E.R 108 at 110.

9 *See, e.g., Losee* v. *Buchanan*, 51 N.Y. 476 (1873), in which the court held that the rule of *Rylands* v. *Fletcher* decision was in direct conflict with American (negligence) law, and that a case comparable to *Rylands* v. *Fletcher* would thus require proof of some fault or negligence of the mill-owner; the case is derived from Phillips *et al*. at 438.

10 Prosser and Keeton at 548-549.

The rule then regained ground on the notion that hazardous enterprises should make up for damages inflicted to innocent third parties. The scope of the rule was broad and encompassed all types of cases where the thing or activity was out of place and abnormally dangerous, varying from water collected in quantity in dangerous places to dangerous party walls.[11]

As Morris points out, the notion that novel enterprises were obliged to compensate potential damages under the rule of *Rylands* v. *Fletcher* was attractive: for the rule combined the fact that profits were made and risks were involved in such enterprises. Such a justification for the rule is a preliminary step to the perception that industrial risks should be borne by the risk-taker and profit-maker, rather than by innocent victims.[12]

In the next paragraph, the manner in which the rule of *Rylands* v. *Fletcher* was incorporated into the Restatement of Torts will be taken into account.

5.3 Restatement of torts

In the Restatement of Torts, the problem of liability for ultrahazardous or abnormally dangerous activities was taken into account by the American Law Institute in 1938 and 1976.[13] The Restatement of Torts (1938) incorporated a regime of absolute liability for "ultrahazardous" activities in Sections 519 and 520, which read:[14]:

> Section 519. Miscarriage of Ultrahazardous Activities Carefully Carried On.
>
> Except as stated in 521-4, one who carries on an ultrahazardous activity is liable to another whose person, land or chattels the actor should recognize as likely to be harmed by the unpreventable miscarriage of the activity for harm resulting thereto from that which makes the activity ultrahazardous, although the utmost care is exercised to prevent the harm.
>
> Section 520. Definition of Ultrahazardous Activity.
>
> An activity is ultrahazardous if it necessarily involves a risk of serious harm to the person, land or chattels of others which cannot be eliminated by the exercise of the utmost care, and is not a manner of common usage.

11 Prosser and Keeton at 550-551.

12 Morris at 1174.

13 The American Law Institute was founded in 1923. Upon recommendation of the founding Committee, the American Law Institute started addressing uncertainties in various fields of common law between 1923 and 1944, including Torts. The aim was to advise judges and lawyers on the law in these fields, *see* 'About the American Law Institute', at www.a-li.org.

14 The texts of Sections 519 and 520 have been derived from G.W. Boston, *Strict Liability For Abnormally Dangerous Activity: the Negligence Barrier*, 36 San Diego L. Review 597, at 605 (1999).

The aim of the first Restatement of Torts was to hold enterprisers absolutely liable for the abnormal risks posed to innocent third parties by their uncommon activities.[15] It is of comparative interest that liability is connected to 'activities' as opposed to 'things', which was deemed a more suitable qualification by most European legislatures.[16]

Although the first Restatement was clearly based on the rule of *Rylands* v. *Fletcher*, its scope is broader as it includes activities that are not a manner of common usage (broader than the category of non-natural users) and does not narrow down the potential danger of ultrahazardous activities to surrounding land.[17] On the other hand, the regime does add the criteria of extreme danger and an impossibility of eliminating such danger by the exercise of the utmost care. And that was not entirely in conformity with American case law of the time, which also took the place of the activity into account.[18]

After a number of decades, the Second Restatement of Torts was adopted and promulgated by the American Law Institute in 1976. Sections 519 and 520 now read:[19]

> Section 519. General Principle
>
> 1. One who carries on an abnormally dangerous activity is subject to liability for harm to the person, land or chattels of another resulting from the activity, although he has exercised the utmost care to prevent the harm.
> 2. This strict liability is limited to the kind of harm, the possibility of which makes the activity abnormally dangerous.
>
> Section 520. Abnormally Dangerous Activities
>
> In determining whether an activity is abnormally dangerous, the following factors are to be considered:
>
> a. existence of a high degree of risk of some harm to the person, land or chattels of others;
> b. likelihood that the harm that results from it will be great;
> c. inability to eliminate the risk by the exercise of reasonable care;
> d. extent to which the activity is not a matter of common usage;
> e. inappropriateness of the activity to the place where it is carried on; and
> f. extent to which its value to the community is outweighed by its dangerous attributes.

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15 Prosser and Keeton at 555.

16 Dutch Civil Law can serve as an example in this context. For it attributes liability to 'things' as opposed to 'activities'. Of further interest in this context is that the Dutch legislator has not opted for the qualification of 'ultrahazardous' or 'abnormally dangerous', in view of the fact that it would be difficult to distinguish between 'ultrahazardous' and 'safe' things, *see* Asser-Hartkamp, Verbintenissenrecht 4-III, nr. 166 (1998).

17 Boston at 605.

18 Prosser and Keeton at 551.

19 Restatement of the Law Second Torts 2d Volume 3 §§ 504-707A, As Adopted and Promulgated by the American Law Institute at Washington, D.C. May 19, 1976, 34-36 (1977).

Although the comments to these Sections suggest that they are based on a form of absolute liability, this is by no means a clear-cut or straightforward regime.[20] The lack of clarity is due to the fact that it is not entirely clear to what extent factors (a) to (f) are to be considered. The comments suggest that all factors are of importance, and that any one of them is not sufficient by itself as a sole justification for absolute liability. The key question that has to be raised is whether the risk created is so unusual, either because of its magnitude or because of the circumstances surrounding it, as to justify the imposition of absolute liability for the harm that results from it, even though it is carried on with all reasonable care.[21] Although the comments seem to insist that all factors must be taken into account in order to determine whether absolute liability is justified, relevant case law in this field tends to lay a certain emphasis on factors (a) to (c).[22]

Recapitulating, the First Restatement of Torts has been drafted more clearly than its successor in view of the uncertainties concerning the exact application and interplay of the six criteria under the regime of the Second Restatement. Furthermore, the First Restatement has a greater scope than the Second Restatement, since the criteria of locational inappropriateness, uncommon usage, as well as the value of the activity to the community have been ignored under the First Restatement.[23]

The question now arises how the rules of *Rylands* v. *Fletcher* and the Restatements have been applied to the problem of liability for surface damage inflicted by the activity of flying.

5.4 THE RULES OF *RYLANDS V. FLETCHER* AND THE RESTATEMENTS IN RELATION TO SURFACE DAMAGE INFLICTED BY THE ACTIVITY OF FLYING

In the previous two paragraphs, the fundamental principles and justifications for the basis of absolute liability under general common law have been given as derived from the landmark case of Rylands v. *Fletcher* and as perceived by the drafters of the Restatement of Torts. Criteria to determine whether the basis of absolute liability should be applicable included the abnormal danger or ultrahazardousness of the activity in relation to its surroundings, the fact that such dangers cannot be eliminated by the exercise of utmost care, and the extent to which the activity is not a manner of common usage. The question now arises to what extent the activity of flying can be categorized as an activity

20 *See* Comment to Restatement of the Law Second, at 34-35.
21 *See* Comment to Restatement of the Law Second, at 37-38.
22 Boston at 622. However, the comments seem to insist that all factors must be taken into account at the end of the day in order to qualify an activity as abnormally dangerous, *see* Comment to Restatement of the Law Second, at 39.
23 Boston at 625-626. Bohlen drafted the First- and Prosser the Second Restatement.

that can automatically be subjected to absolute liability under common law in absence of specific statutory regimes of liability in the field of aviation. In order to answer this question, this paragraph has been divided in four sub-paragraphs. First, the question to what extent the absolute liability rule of *Rylands* v. *Fletcher* is applicable to the activity of flying will be taken into account (5.4.1). Next, the position of the Restatements on the hazards involved in the activity of flying will be described (5.4.2). And finally, other justifications for absolute liability in this field under general common law will be enumerated (5.4.3), followed by a recapitulation of all arguments that can be raised in favour of absolute liability for surface damage inflicted by the activity of flying (5.4.4).

5.4.1 The application of the rule of *Rylands* v. *Fletcher* to the activity of flying

The justification for application of the absolute liability rule of *Rylands* v. *Fletcher* to surface damage inflicted by the activity of flying has been based on three arguments:

- the fact that third parties on the surface are helpless to avoid such injuries or damage;
- the notion that aircraft can be qualified as dangerous instrumentalities of which the safety depends upon factors beyond human control;
- the notion that it is almost impossible for third parties to prove the cause of an aviation accident.[24]

On the other hand, such a direct application of the rule of *Rylands* v. *Fletcher* to the activity of flying has also been questioned on the grounds that the rule cannot be applied to movable chattels.[25] Other objections include the question if typical *Rylands* v. *Fletcher* elements such as 'accumulation' and 'escape' can be applied satisfactorily to the conduct of aircraft. In the words of the following often cited passage:

> If, in arriving at the conclusion of the court in *Rylands* v. *Fletcher*, there was a consideration of any fault element, the fault must have been one occurring prior to the actual accident, i.e., the negligent act must have been that of the accumulation of the potentially dangerous thing on the land and not its escape therefrom.[26]

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24 *See* H.S. Goldin, *The Doctrine of Res Ipsa Loquitur in Aviation Law*, 18 Southern California Law Review 124, at 125 ('44-'45).

25 Goldin at 125-126.

26 Goldin at 126; R.E. Kingsley and S.E. Gates, *Liability to Persons and Property on the Ground*, 4 Journal of Air Law 515, at 521 (1933).

Kingsley and Gates explain that an aircraft does not "escape" onto the land of others by itself: evidently human control is necessary, in the same manner as a stationary car cannot harm third parties without human control. Since the mere ownership or operation of an aircraft cannot automatically be qualified as wrongful conduct, some act or omission will then have to be established which will qualify such ownership or operation as an accumulation of a thing "likely to do mischief if it escapes."[27]

Although a literal application of the criteria of *Rylands* v. *Fletcher* to the activity of flying is evidently troublesome, the three aforementioned arguments derived from the case that point to application of absolute liability in this field are of interest. Those arguments have resurfaced in the position taken by the drafters of the Restatement of Torts in relation to aviation. As will be seen in more detail in the next sub-paragraph, the most crucial and ambiguous argument of the three is the perception of aviation as an ultrahazardous or extra-dangerous activity.[28]

5.4.2 The Restatements of Torts and the activity of flying

The Restatements' positions on the specific problems of surface damage inflicted by aviation were mainly based on the perceived danger of the activity of flying, although other factors, such as the level of usage, have also played a role.

The position taken in the First Restatement of Torts (1938) reveals that the drafters still perceived aviation as an 'ultrahazardous activity', which warranted the application of absolute liability.[29] That position was reflected in comment b on Section 520, which stated that

> aviation in its present stage of development is ultrahazardous because even the best constructed and maintained aeroplane is so incapable of complete control that flying creates a risk that the plane even though carefully constructed, maintained and operated, may crash to the injury of persons, structures and chattels on the land over which the flight is made.[30]

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27 Kingsley and Gates at 521.

28 Kingsley and Gates, who clearly opposed the application of absolute liability in this field, contended that aviation was 'safe' as early as 1933, which would justify negligence, *see* Kingsley and Gates at 523.

29 The developing aviation industry severely opposed this qualification, which was in conformity with the manner of treatment of a number of early cases in this field in New York, *see* Prosser and Keeton at 556-557.

30 *See* Comment b on § 520 of the First Restatement, *as cited by* W.J. Appel, *Strict liability, in absence of statute, for injury or damage occurring on the ground caused by ascent, descent, or flight of aircraft*, 73 ALR 4th 416, at 419 (1989). *See also* A.T. Hollyday, *Aviation Law: Owner-lessor liability – The need for uniformity*, 36 Maine Law Review 93, at 96-97 (1984).

Another criterion that was held to justify absolute liability concerned the notion that aviation at that time had not yet become either a common or an essential means of transportation in comparison with for instance the far more common use of automobiles.[31]

Despite the fact that from the 1950's onward, American case law in this field was gradually started to apply negligence on the grounds that aviation was no longer considered an ultrahazardous activity, the Restatement (Second) of Torts (1976) specifically retained its position on the fairness of absolute liability in Section 520A. Section 520 A, a species of Sections 519 – 520, reads:[32]

> Section 520A. Ground Damage From Aircraft
>
> If physical harm to land or to persons or chattels on the ground is caused by the ascent, descent or flight of aircraft, or by the dropping or falling of an object from the aircraft,
>
> a. the operator of the aircraft is subject to liability for the harm, even though he has exercised the utmost care to prevent it, and
> b. the owner of the aircraft is subject to similar liability if he has authorized or permitted the operation.

This position was based on the notion that aviation had not *yet* reached the stage of development "where the risks of accidental physical harm to persons or to land or chattels on the ground is properly to be borne by those who suffer the harm, rather than by the industry itself."[33] If taken literally, this line of reasoning implies that once aviation has reached that stage of development, third parties, rather than the industry, may have to bear those risks, which seems remarkable to say the least.

Other considerations include "the gravity of the harm resulting when a few tons of flaming gasoline descend upon a dwelling", which is *still* a factor to be taken into account, as well as the fact that third parties have no place to hide from falling aircraft and are generally helpless to select any locality for their residence or business in which they are not subjected to such risks from above. These factors make the risks posed by aviation unique in comparison with the risks posed by other forms of transportation.[34] The choice of the term '*still*' is remarkable if it is meant to reflect the notion that the gravity of such harm might one day not be deemed an important factor to take into account. Hopefully it is meant to reflect the notion that somewhere in the future, such risks are history due to the fact that aircraft are so safe as not to crash anymore, although that hope seems rather unlikely.

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31 *See* Comment g to § 520 *as cited by* Hollyday at 97.
32 *See* Restatement of the Law Second Torts at 43.
33 *See* comment c. to Section 520A, Restatement of the Law Seconds, Torts 2d at 43-44.
34 *See* comment c. to Section 520A, Restatement of the Law Seconds, Torts 2d at 44.

Another argument put forward in favour of absolute liability is based on the numerical notion that those who carry on the activity of flying are still relatively few (similar to the argument raised under the First Restatement).[35] Upon closer scrutiny, that argument is also remarkable, for it seems to imply that once a great(er) number of people or entities are engaged in the activity of flying, a regime of absolute liability would no longer be necessary. Arguably, such a regime would then be all the more necessary, for the chances that aviation accidents might occur will evidently also increase with the growth of the number of aircraft in the air.

The scope of absolute liability of Section 520 A encompasses the 'ascent, descent or flight of aircraft' as well as the 'dropping or falling from an object from the aircraft', upon the condition that such scenarios cause physical harm to land or to persons or chattels. This seems to exclude general scenarios of nuisance or noise caused by normal overflight as long as such nuisance or noise does not cause physical harm, but can merely be qualified as a disturbance or annoyance.

As to persons liable, the owners of aircraft have not been defined precisely under Section 520 A. "Owners" are merely held to be those entities that have a beneficial interest in the aircraft and such control over it at the time of the accident or incident, that they should be held responsible for the ensuing damages.[36]

5.4.3 Other justifications for absolute liability under common law

In the previous two sub-paragraphs, the main grounds for subjecting the activity of flying to absolute liability for surface damage as derived from the rule of *Rylands* v. *Fletcher* and the Restatements have been enumerated. The qualification of aviation as an ultrahazardous or abnormally dangerous activity is the most significant of these grounds. Two other important justifications have been added to the aforementioned ones by Vold, who argued that the criterion of ultrahazardousness was too meagre as the sole justification for absolute liability in this field. The first extra justification added by Vold concerned the one-sidedness of the benefits for those involved in the activity of flying on the one hand and the risk to third parties on the other hand. The

35 *See* comment d. to Section 520A, Restatement of the Law Seconds, Torts 2d at 44.

36 *See* comment f. to Section 520A, Restatement of the Law Seconds, Torts 2d at 44-45. A reference is made to § 1404 of the Federal Aviation Act, 49 U.S.C. § 1404, which excludes liability for a person having a security interest in, or security title to, any civil aircraft under a contract or conditional sale, equipment trust, chattel mortgage or other similar instrument unless the aircraft was in actual possession or control of such a person at the time of the accident or incident.

second justification was based on the ability of the aviation industry to distribute potential losses as part of its cost of operation (insurability).[37]

Vold stressed the difference between one-sidedness and mutuality of an activity by comparing the position of aircraft operators vis-à-vis third parties with the position of users of highways amongst one another. In the latter case, the mutuality lies in the fact that all users of highways both profit from such use as well as expose themselves to its risks, whereas only the aircraft operators profit from the activity of flying in the former case. In other words, where negligence may be a defendable basis of liability in case of mutuality, absolute liability should prevail in case of one-sidedness of an activity.[38]

The argument of insurability holds that the party better equipped to distribute its losses through insurance coverage can be taken into account as a factor to help determine who ought to bear the risk.[39] A number of reservations can be made against such a direct link between the preferable basis of liability and the question of insurability if the argument is perceived in a strictly legal sense. For insurance and insurability of any activity are secondary matters that do not directly concern the question of preferable basis of liability per activity. One may be held liable in negligence for throwing a stone through a window or held absolutely liable for damages inflicted by one's dog, while both scenarios are covered by the same personal insurance policy for third party liability. But that does not directly imply that the former regime of liability should be transformed into one based on absolute liability, merely because the stone-thrower is perceived to be the most logical party to take out insurance. However, practically speaking, the argument has a certain validity. For the aviation industry is evidently better equipped to take out insurance and analyse the potential risks involved in the activity of flying than third parties in general.

5.4.4 Recapitulation

Recapitulating, the following arguments in favour of absolute liability in this field as distilled from the previously described sources can be enumerated:

1. the fact that third parties on the surface are helpless to avoid personal injuries or property damage inflicted by aircraft;
2. the notion that aircraft can be qualified as dangerous instrumentalities (or that aviation can be qualified as an ultrahazardous or abnormally dangerous activity) of which the safety depends upon factors beyond human control;

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37 *See* L. Vold, *Strict liability for aircraft crashes and forced landings on ground victims outside of established landing areas*, Hastings Law Journal 1, at 1 (1953). These extra criteria have also been based directly on the rule of *Rylands v. Fletcher*, *see* Wolff at 205-206.

38 Vold at 2-3.

39 Vold at 5-7.

3 the notion that it is almost impossible for third parties to prove the cause of an aviation accident;
4 the notion that aviation has not yet reached the stage of development where the risks of accidental physical harm to persons or to land or chattels on the ground is properly to be borne by those who suffer the harm, rather than by the industry itself;
5 the notion that relatively few persons or entities are involved in the activity of flying;
6 the one-sidedness of the activity of flying with respect to profits for those engaged in the activity on the one hand and the risks imposed by the activity to third (non-benefitted) parties on the other hand;
7 the ability of the aviation industry to distribute potential losses as part of its operational costs (insurability).

A number of reservations can be made to the assumptions on which a number of these arguments rest. The underlying assumption to the second argument, for instance, is based on the notion that once aviation is no longer deemed ultrahazardous, a regime of absolute liability for surface damage would no longer be justified. But the consequence of this remarkable line of reasoning is that it ultimately will be more difficult to claim successfully for surface damage when flying is perceived as 'safe' than in times when it was deemed to be ultrahazardous. For in 'safe' times, negligence will have to be proven by plaintiffs, whereas plaintiffs could rely on absolute liability in the past. Such a line of reasoning could easily be reversed by holding that if flying is so 'safe', the least the rule of law could guarantee is that liability is easily established by application of absolute liability to those very few cases when things do go wrong. For the mistake of linking a basis of liability to the notion that an activity in general is perceived as safe, lies in the fact that negligence can be just as difficult to prove on a case by case basis in times when aviation accidents decrease in a statistical sense.

A similar fallacy in reasoning is revealed upon closer scrutiny of the fourth argument, which asserts that the risks involved in flying should be carried by third parties rather than the industry itself, once the aviation industry is fully developed. If ever an argument can be reversed, it must be this one. In that sense, the historical reason for application of negligence to industrial accidents in the nineteenth century as a developing-industry-friendly gesture of no liability without fault also point in the direction of stricter liability regimes in the long run. For one could then argue that once such nascent industries are no longer in their infancy and have become safer, they are even better equipped to bear the strongly diminished risks they impose on innocent third parties.[40] Another deficiency lies in the fifth argument, which links the

40 The industrial revolution and development of railways and the subsequent rise of industrial accidents have probably contributed to the evolution of negligence, *see* Prosser and Keeton at 160-161; Zweigert & Kötz at 608.

rationale for absolute liability to the limited number of people or entities involved in the activity. As has been argued previously, a basis of absolute liability would be just as defendable if not more, once a great number of people are involved in the activity, as negligence may remain difficult to prove on a case by case basis irrespective of the number of people involved in the activity.

In the light of the aforementioned seven arguments, of which a number have been seen to point even more strongly to absolute liability in a timeless sense when perceived more closely, the gradual overall move to negligence in this field in the United States is all the more surprising. For most of the aforementioned arguments provide sound policy reasons for permanent application of absolute liability in this field.

5.5 TRESPASS AND NUISANCE

Aside from the application of absolute liability for ultrahazardous activities to the activity of flying under general common law, the common law bases of trespass and nuisance can also be applied to certain cases of surface damage inflicted by aircraft. Some intricate questions can be raised on which heading of liability should apply in borderline cases of damage inflicted by (too) low overflight, which can even constitute a taking under certain conditions.[41]

In the following sub-paragraphs, the application of trespass will first be discussed in relation to the scenario of actual impact of aircraft (5.5.1). Next, the application of trespass and nuisance will be discussed in relation to surface damage caused by (too) low overflight (5.5.2).

5.5.1 Trespass and actual impact of aircraft or objects falling from aircraft

A number of early aviation cases involving intrusion of aircraft or objects falling from aircraft on property were ruled on the basis of trespass on the grounds that aviation was perceived as an ultrahazardous activity.[42] The most ancient of these cases is the New York case of *Guille* v. *Swan* (1822), in which the operator of a balloon was held liable on the basis of trespass for damage to crops in a garden caused by a combination of the downfall of his balloon and a crowd of bystanders that trampled the crops in order to come to his

41 *See also* sub-paragraph 2.5.2.1 in that context.

42 Appel at 419. This notion is substantiated by the Restatement (First) of Torts, section 165, sub c., which upheld liability for such scenarios of surface damage, *see* Lee S. Kreindler, Aviation Accident Law 6-6 (1993).

aid. The court based its decision in trespass on the hazards of operating balloons, which can become beyond control of their operators.[43]

Another New York case, *Rochester Gas & Electric Corp.* v. *Dunlop* (1933), involved a single-engine private aeroplane that struck and damaged a steel transmission tower during a forced landing at night.[44] The plaintiff sued on the basis of negligence, substantiated by the doctrine of res ipsa loquitur, as well as on the basis of trespass. Interestingly enough, the argument raised by defendant that the science of aviation was not developed enough as yet to establish negligence by the mere occurrence of an accident backfired. For the judge held that if there was such chance that a plane could become uncontrollable despite the utmost care in management or operation, flying could justifiably be perceived as so dangerous an activity that its risks should be borne by those engaged in it and not by unbenefitted victims on the surface. On the basis of this line of reasoning, negligence was dismissed and the question of liability was based on trespass.[45]

In *Margosian* v. *U.S. Airlines* (1955), a house was damaged by an aircraft crash. The plaintiff based his claim on negligence, but this was not deemed necessary by the federal district court, which ruled that trespass would suffice.[46]

Examples of governmental liability ruled on the basis of trespass include *Parcell* v. *United States* (1951) and *Gaidys* v. *United States* (1952). In *Parcell* v. *United States*, two fighter airplanes crashed and caused damage to a barn and other adjacent buildings. The accident was defined as a trespass, for which the United States could be held absolutely liable under the Federal Tort Claims Act.[47] In *Gaidys* v. *United States*, the United States was also held liable under the Federal Tort Claims Act for the crash of a jet aircraft in a residential area during take-off. The accident caused personal injuries to a husband and wife by burning parts and flaming fuel of the aircraft as well as property damage.

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43 *See Guille* v. *Swan*, New York Supreme Court, January, 1822, 1 (CCH) Avi. 1. *See, on Guille* v. *Swan, also* Kreindler at 6-6; Goldin at 127; P.A. Peterson, *Liability for ground damage from crashes or forced landings of aircraft*, 43 California Law Review 309, at 312 (1955); Speiser & Krause at 148.

44 *Rochester Gas & Electric Corp.* v. *Dunlop*, 148 Misc. 849, 266 N.Y.S. 469 (Supp. Ct. 1933).

45 *See* F.H. Bohlen, *Aviation under the common law*, 6 ALR 155, at 155 (1935); Billyou, Air Law 84-85 (1964); Peterson at 312, who remarks that New York imposed strict liability for trespass without fault; *see also* J.A. Eubank, *Land Damage Liability in Aircraft Cases*, 57 Dickinson Law Review 188, at 188-189 (1952-'53). Eubank comments that the line of reasoning in this case was based on trespass, but came close to 'pure' liability-without-fault.

46 *Margosian* v. *U.S. Airlines*, 127 F. Supp. 464, (E.D.N.Y. 1955), *as cited by* Peterson at 312.

47 *Parcell* v. *United States* (1951, DC W Va) 104 F Supp 110. At that time, the Federal Tort Claims Act incorporated the tort law of the State in which the accident occurred (in this case, West-Virginian law). The Federal Tort phraseology of 'wrongful act' was interpreted as to include acts for which the government could be held absolutely liable, *see* Appel at 422. As will be seen in more detail, the United States can only be held liable on the basis of negligence since 1971.

The court ruled that aviation was an ultrahazardous activity and that the crash constituted a trespass.[48]

However, courts gradually began to overrule trespass as a feasible basis of liability for surface damage inflicted by aircraft accidents. This tendency can be illustrated by the case of *Wood* v. *United Airlines* (1961), in which the impact and subsequent spillage of jet-fuel of a United Airlines aircraft caused damage to a building. The claims for personal injuries and property damage were based on trespass. However, the court ruled that since it no longer considered aviation to be an ultrahazardous activity, an *intentional* act had to be established by plaintiffs in order to successfully claim on the basis of trespass. The court subsequently held that there had not been a trespass, as there had not been an intent to land.[49]

As will be seen in more detail, that change of perception of the dangers of flying under common law also affected the number of codified regimes of absolute liability in this field, which can help explain the overall move to negligence in the United States. But the boarderline cases of trespass and nuisance are also of interest for scenarios of surface damage that are not inflicted by actual crashes, but by (too) low overflight. In that context, questions on the relationship between rights of property owners and the use of airspace by those engaged in the activity of flying can emerge. Such issues will be dealt with in more detail in the next sub-paragraph.

5.5.2 Trespass and nuisance; damage caused by overflight

The cases described in the previous sub-paragraph all involved scenarios of actual impact of the aircraft or parts of the aircraft.[50] However, cases of surface damage have also arisen through mere sudden or repetitive (too low) overflight. In *Hoebee* v. *Howe* (1953), for instance, a child was struck by a runaway horse that bolted out of fright caused by a low flying aeroplane.[51]

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48 *United States* v. *Gaidys*, 194, 194 F.2d 762 (10th Cir. 1952). The case was decided solely on basis of the Federal Tort Claims Act in absence of Colorado decisions or applicable statute, *see* Peterson at 313; *see also* Annotation 74 ALR 2d, at 869; Annotation 81 ALR 2d, at 1062-1063.

49 *See Wood* v. *United Air Lines, Inc*. 1961, 32 Misc.2d 955, 223 N.Y.S.2d 692, affirmed mem. 16 A.D2d 659, 226 N.Y.S.2d 1022, appeal dismissed 11 N.Y.2d 1053, 230 N.Y.S.2d 207, 184 N.E.2d 180, *as cited by* Prosser and Keeton at 557; *see also* Appel at 425; Kreindler at 6-8; F.E. Malony Jr., *Torts – Airplanes no longer considered ultrahazardous*, 13 Syracuse Law Journal 619, at 619-621 (1962).

50 Previously defined as 'scenario 1' in sub-paragraph 2.2.1 of this study: surface damage inflicted by 'direct contact' or 'impact' of the aircraft or parts, objects, chemicals, or persons from the aircraft.

51 *See* Kreindler at 6-16 – 6-17 and Speiser & Krause at 151-152 for various examples of case law in this area.

The question arises when such scenarios create a cause of action under common law and if so, on which basis of liability: trespass, nuisance, or perhaps even on the grounds of a taking of property.[52] Such an approach can help to determine the boarderlines between various scenarios of surface damage and subsequent actions as well as the justifiable scope of statutory regimes of absolute liability in this field. For, as has been described previously, one of the main justifications for application of absolute liability in this field is that aircraft can pose a serious threat to third parties on the ground in view of their ability to crash and that negligence of the aircraft operator can be difficult to prove in such cases. However, the degree of potential surface damage will generally be less severe when aircraft remain airborne. Simply put, the higher the altitude of the aircraft, the less severe the potential damage to people on the surface. The question arises how such scenarios are dealt with under common law bases of liability, especially in relationship to property owners.

As a starting point on the relationship between trespass and nuisance and normal (high) overflight in general, the logical observation can be made that there can be no liability toward property owners when no actual damage has been inflicted. For it has been held that "the upper air is a natural heritage, common to all people, and its reasonable use ought not to be impaired by the ancient maxim *cujus est re infernis usque ad coelum*."[53] But this observation leads to questions on the possible extent of ownership of airspace of property owners. In other words, which causes of action are available to property owners against aircraft that somehow invade their property?[54]

Taking the *ad coelum* doctrine as a starting point, the following five theories on the extent of ownership of airspace have been put forward:[55]

1. The landowner owns all airspace above his property without any limitations (the pure *ad coelum* doctrine);

52 *See* sub-paragraphs 2.2.2 and 2.2.3 of this study.

53 Goldin at 124, *citing Johnson* v. *Curtiss Northwest Airplane Co.*, (1928) U.S.Av.Rep. 42, 43 Minn. D.C., Ramsey Co., 1923; *see also* sub-paragraph 2.5.2.1 of this study.

54 In *Gaidys* v. *United States* (1952), as discussed in the previous sub-paragraph, the appellate court deliberated on such questions. For in that case, a U.S. Army plane crash into a house was qualified as a wrongful act and trespass, as well as a breach of privileged passage through plaintiffs' airspace by the court. This was substantiated by the fact that the plane was flying too low, at a 100 feet in non-navigable airspace, at the time of the crash. The appellate court admitted that the case would have been more complex for the court if the aircraft had been flying at a safe altitude (above the limit of a 1000 feet of navigable airspace) just before the crash. For then the decision would have to have been based on either liability-without-fault directly, negligence, or the notion that aviation was ultra-hazardous. Non-liability could have also been an outcome, *e.g.* on the basis of Act of God, *see* Eubank at 189-190.

55 *See* R.B. Anderson, *Some Aspects of Airspace Trespass*, 27 JALC 341, at 342 (1960).

2. The landowner owns the airspace above his property without any limitations subject to an 'easement' or 'privilege' of flight;[56]
3. The landowner owns the airspace up to such a height as fixed by statute;
4. The landowner owns the airspace within the scope of effective possession;[57]
5. The landowner owns the airspace that he actually occupies and can only object to such uses of the airspace over his property as do actual damage.[58]

The third theory generally prevails in most jurisdictions by allowing air navigation over private land on the basis of statutory laws that regulate the allowed flight of aircraft in terms of height, flightpath, etc. Within that regulatory framework of permitted air navigation, actions based on nuisance may be invoked by property owners, even if their rights of ownership have not been breached but the annoyance is nevertheless severe.[59]

As a first observation on the distinctions between trespass and nuisance, an invasion of realty is actionable upon trespass per se, whereas an action based on nuisance requires interference with the use and enjoyment of property or with personal rights. In other words, the effects of such an invasion, as opposed to the invasion itself, are actionable on the basis of nuisance. Thus, as has been seen in the previous sub-paragraph, surface damage inflicted by aircraft crashes was actionable on the basis of trespass as such accidents involved a direct invasion of property.[60] Recurrent trespasses of governmental aircraft that fly over without crashing can also give rise to a cause of action referred to as 'inverse condemnation' against a governmental agency in order to recover the value of constitutionally taken property without formal exercise of the power of eminent domain.[61]

For claims based on nuisance other criteria, such as interference of use and enjoyment of land by the effects of overflying aircraft have to be met. Depending on the circumstances of the case, such criteria can also include unreasonableness, unlawfulness, continuity and recurrence, noise, lighting, air pollution, vibration, altitude, and apprehension of danger.[62] However, courts have also

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56 This theory was adopted by the Restatement of Tort (Second), Sections 159 and 194 and the Uniform Aeronautics Act, Uniform Laws Annotated (1923), *see* Anderson at 342.

57 This theory represents an attempt to establish a third dimension to property, which would make trespass an invasion of possessory rights, *see* Anderson at 342.

58 This theory would only provide a cause of action in cases of actual impact; however, it has been applied to a larger scope of scenarios, *see* Anderson at 342.

59 *See* J.L. Litwin, *Annotation: Airport operations or flight of aircraft as nuisance*, 79 ALR3d 253, at 259-260.

60 Although the element of intent was later added as a requirement for trespass once aviation was no longer considered ultrahazardous, *see Wood* v. *United Airlines* (1961), *as discussed in sub-paragraph* 5.5.1 of this study.

61 Litwin at 262; *see also* Zitter at 868-869, and sub-paragraph 2.5.2.1 of this study.

62 Anderson at 342; J.L. Litwin at 253 *et seq.*, in which a clear enumeration of cases based on these categories of nuisance has been made.

accepted trespass and nuisance as a single cause of action in a number of cases.[63]

Depending on the circumstances of the case, property owners located near airports can sue airport operators and perhaps even the implicated aircraft on the basis of nuisance. Furthermore, they can either claim for damages or equitable relief by injunction if they suffer irreparable injury.[64] However, as a general rule, the airport operators, and not the aircraft operators that will generally operate in accordance with the applicable Federal Aviation Regulations and local noise regulations, are exposed to potential claims based on noise, nuisance, or pollution. It would go therefore go beyond the scope of this study to delve into case law on noise and nuisance extensively.[65] In that context, it should also be borne in mind that the type of damage suffered will generally consist of property devaluation or the personal inconveniences caused by noise or vibration, as opposed to death, serious personal injuries or actual destruction of property. And, as has been seen in the description of English law in this field, claims based on trespass and nuisance that merely lead to the normal inconveniencies of overflight have been excluded from the English statutory regime of absolute liability for that reason.[66]

B STATUTORY REGIMES OF ABSOLUTE LIABILITY FOR SURFACE DAMAGE

5.6 UNIFORM STATE LAW FOR AERONAUTICS AND OTHER PROPOSED LEGISLATION. INTRODUCTION

The problem of liability for surface damage in the field of air law has been dealt with by means of statutory regimes based on absolute liability in a number of states in the past. The most important foundation for such statutory regimes was the Uniform Aeronautics Act, which was adopted and promulgated by the National Conference of Commissioners on Uniform State Laws in 1922.[67] However, the number of jurisdictions that adopted statutory regimes based on absolute liability on the basis of the Uniform Aeronautics Act

63 Anderson at 342.

64 Litwin at 261.

65 Even in cases where the claims based on nuisance or noise are directed against airport operators, liability will generally be difficult to establish in view of the fact that in most cases, property will have been acquired when the airport was already in function (information received from G.N. Tompkins, Jr.). Notably, other systems of law use comparable yardsticks to deny compensation in such cases, *see, e.g.*, sub-paragraph 4.4.1 of this study on the French yardstick of wrongful location of victims near airports in that context.

66 *See* sub-paragraph 4.4.3 of this study.

67 *See* G.J. Kuenhl, *Uniform State Aviation Liability Legislation*, Wisconsin Law Review 356, at 357 (1948).

gradually declined due to the overall tendency to not consider aviation as an ultrahazardous activity anymore. This led to a gradual move to general negligence and away from such enacted regimes based on absolute liability in the United States.

The statutory regimes based on absolute liability in this field will be taken into account in sub-paragraphs 5.6.1 to 5.6.3 of this section (B). First, the relevant provisions on liability for surface damage of the Uniform State Law for Aeronautics and their implementation in statutory state law will be dealt with (5.6.1). Attacks on the constitutionality of such regimes in relevant case law will subsequently be described (5.6.2). And finally, a number of failed attempts at legislation will serve as an introduction to the general move to negligence in this field (5.6.3).

5.6.1 Uniform aviation legislation (I): The Uniform State Law for Aeronautics

A certain uniformity of aviation legislation was first achieved in 1922 by means of the Uniform State Law for Aeronautics. Sections 4 and 5 of the Uniform Aeronautics Act dealt with the problem of liability for surface damage in the following manner:

> Section 4.
>
> Flight in aircraft over the lands and waters of this state is lawful, unless at such a low altitude as to interfere with the then existing use to which the land or water or the space over the land or water is put by the owner, or unless so conducted as to be imminently dangerous to persons or property lawfully on the land or water beneath. The landing of an aircraft on the lands or waters of another, without his consent, is unlawful, except in the case of a forced landing. For damages caused by a forced landing, however, the owner or lessee of the aircraft or the aeronaut shall be liable, as provided in § 5.
>
> Section 5 (Damage on land).
>
> The owner of every aircraft operated over the lands and waters of this state is absolutely liable for injuries to persons or property on the land or water beneath, caused by the ascent, descent, or flight of the aircraft, or the dropping or falling of any object therefrom, whether such owner is negligent or not, unless the injury is caused in whole or in part by the negligence of the person injured, or of the owner or bailee of the property injured. If the aircraft is leased at the time of the injury to person or property, both owner and lessee shall be liable. An aeronaut who is not the owner or lessee shall be liable only for the consequences of his own negligence.[68]

68 The texts of Sections 4 and 5 have been derived from Annotation 81 ALR2d, at 1059.

Comparable to one of the most important foundations for absolute liability under the Restatements and (older) general common law in this field, Sections 4 and 5 were based on the notion that aviation was an ultrahazardous activity.[69]

5.6.1.1 Scope of Sections 4 and 5

Sections 4 and 5 offer a rather detailed codified regime of absolute liability. Under Section 4, the scope of unlawful flight ranges from flying at such a low altitude as to interfere with use of the land in the sense of actually being dangerous to persons and property lawfully on the land or water beneath. Section 4 also qualifies the landing of aircraft on another's land as unlawful, unless done with consent of the owner or in case of forced landings. Even if forced landings are not qualified as unlawful, the owner, lessee, or the aeronaut can be held absolutely liable for subsequent damages arising out of forced landings.

Section 5 elaborates on the scope of absolute liability, which includes surface damage caused by the ascent, descent, or *flight* of the aircraft or the dropping or falling of any objects therefrom. The only defence available is that of contributory negligence. The range of the term *'flight'* of the aircraft is narrowed down by the scope of unlawfulness as specified in Section 4. For if this were not the case, even the most remote forms of nuisance (inconvenience, property devaluation) caused by normal overflight would fall under the scope of the absolute liability regime of Section 5.

The scope of statutory provisions based on Sections 4 and 5 has been dealt with in case law. In *Birckhead* v. *Sammon* (1937), the court held that Sections 4 and 5 did not apply to the lawful landing and take-off on and from an airport, which was governed by general principles of negligence. The case involved the death of a boy that was killed by a descending plane while he was bicycling on a road across a flying field. The court held that the statute would only be applicable if the descent of the aircraft could be construed as a trespass upon the rights of a landowner.[70]

In *Dahlstrom* v. *United States* (1955), the Minnesota statutes based on Sections 4 and 5 of the Uniform Aeronautics Act were held to be applicable to the scenario of a flight of a United States aircraft at a 100 feet. This low overflight caused horses to run away frightened and harm the plaintiff who was

69 Kreindler at 6-3, *referring to Boyd* v. *White*, 128 Cal. App. 2d 641, 276 P.2d 92 (1954); *Prentiss* v. *National Airlines*, 112 F. Supp. 306 (D.N.J. 1953).

70 *Birckhead* v. *Sammon*, 171 Md. 178, 189 Atl. 265, [1937] US Av. Reports. 11 (1936); *see also* Eubank at 190-191; Goldin at 131; Kreindler at 6-5; Appel at 427; 81 ALR2d at 1062.

working on his farm. The court construed this scenario as an affirmative, intentional act, which amounted to an unlawful trespass.[71]

5.6.1.2 Statutory implementation of Sections 4 and 5

The number of jurisdictions that implemented statutory provisions based on Sections 4 and/or 5 of the Uniform Aeronautics Act gradually declined since the Act was declared 'obsolete' and withdrawn by the Commission on Uniform State Laws in 1943.[72]

By approximately 1957, thirty states had no applicable statute; seven states imposed statutory liability on the basis of negligence; five states relied on rebuttable presumptions of negligence against the owner or lessee of the aircraft; two states only imposed absolute liability on the owners or lessees of aircraft for forced landings; and a mere seven states still relied on statutory regimes based on Sections 4 and 5 of the Uniform Aeronautics Act.[73]

By the end of 2000, the number of states with such statutory regimes in force had dropped to six; a number of other states still relied on a rebuttable presumption of negligence; and several states had statutory provisions in force which determined that cases of surface damage should be decided in accordance with the rules of law applicable to land. But the majority of states had no statutory provisions at all and relied solely on the general principles of negligence. However, it should be borne in mind that if the applicable rules of tort law within a jurisdiction rely on the common law rule of absolute liability for abnormally dangerous activities, this can imply that liability for surface damage is also qualified on that basis. That can be qualified as the

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71 *Dahlstrom* v. *United States* (1955, DC Minn) 129 F Supp 772, revd on other grounds (CA8) 228 F2d 819, *as cited in* 74 ALR2d at 870; 81 ALR2d at 1063; Speiser & Krause at 152. An interesting aspect of this case was the fact that the District Court held that the flight was within the exercise of a discretionary function or duty on the part of a federal agency on the basis of an exception for claims on that basis within the Federal Tort Claims Act; however, on the assumption that the conduct was in violation of the statute or negligent (or both), the scenario was held to be 'wrongful' within the meaning of the Federal Tort Claims Act nonetheless, *see* 74 ALR2d at 870-871.

72 Restatement of the Law Third, The American Law Institute, Council Draft No. 2, September 26, 2000, at 129.

73 Peterson at 317 and 321. States without statutory provisions: Alabama, Alaska, Colorado, Connecticut, District of Columbia, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Miane, Massachusetts, Michigan, Mississippi, Missouri, Nebraska, New Hampshire, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Texas, Utah, Virginia, Washington, West Virginia. States with statutory negligence: Arizona, Arkansas, California, Idaho, Pennsylvania, South Dakota Vermont. States with rebuttable presumptions of negligence: Georgia, Maryland, Nevada, Rhode Island, Wisconsin. States imposing absolute liability for forced landings (Section 4): Montana, Wyoming. States that have implemented Sections 4 and 5: Delaware, Hawaii, Minnesota, New Jersey, North Dakota, South Carolina, Tennessee; *see also* Billyou, Air Law 88 (1964); Eubank at 191-193.

only exception to the general rejection of absolute liability in this field.[74] Negligence has thus clearly won the day in this field within the majority of jurisdictions within the United States.

5.6.2 Constitutionality of statutory regimes

The question whether statutory regimes based on Sections 4 and 5 of the Uniform Aeronautics Act can be attacked as unconstitutional has also arisen in a number of cases.

In *Prentiss et al*. v. *National Airlines* (1953), the implied unconstitutionality of the New Jersey statute was based on the argument that it deprived the two air carriers in question of their property without due process of law and was also in violation of the Interstate Commerce clause of the United States Constitution as an invalid restraint upon interstate commerce.[75] The due process argument was refuted by the court on the grounds that the doctrine of absolute liability was historically recognized as due process of law and that it was proper to impose a rule of absolute liability for surface damage since the aviation industry must be considered as ultrahazardous.[76]

The ultrahazardous nature of aviation was subsequently held to have a reasonable relation to health, welfare, and safety of the people, and such issues are allowed to be promoted by the police power of a state by means of specific regulations. The main policy ground for statutory absolute liability, which was based on the difficulties of proving negligence in the present situation, was also accepted by the court. Furthermore, the court acknowledged the underlying purpose of the statutory regime of placing the cost of the dangers of the enterprise upon the industry itself rather than upon completely innocent and unbenefitted third parties.[77]

The argument that such statutory regimes of absolute liability were in violation of the Interstate Commerce clause was also refuted by the court on the grounds that:

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74 Implementations of Sections 4 and 5 can still be found in DEL. CODE ANN. Tit. 2 § 305 (1999); HAW. REV. STAT. ANN. § 263-5 (Michie 1999); MINN. STAT. ANN. § 360.012 (West 2000); N.J. REV. STAT. § 6:2-7 (1996); S.C. CODE ANN. § 55-3-60 (Law Co-op 2000), and VT. STAT. ANN. Tit. 5 § 479 (1999), *see* Restatement of the Law Third, The American Law Institute, Council Draft No. 2, September 26, 2000, at 129-130.

75 *Prentiss et Al.* v. *National Airlines, Inc*. (1953, DC NJ), 4 Avi. 17,123 – 17,124; *see also* Whitehead Jr., at 17. The case evolved out of three aircraft crashes of aircraft owned by American Airlines, the National Airlines and the Miami Airlines, in which injuries to and death of persons as well as damage to property were inflicted as a result of these crashes, aside from passenger fatalities. The defendants referred to the Fourteenth Amendment of the United States Constitution, which holds that 'nor shall any state deprive any person of life, liberty, or property without due process of law.'

76 *Prentiss et Al.* v. *National Airlines, Inc.* (1953), at 17,123.

77 *Prentiss et Al.* v. *National Airlines, Inc.* (1953), at 17,125; Annotation, 81 ALR2d at 1059-1060.

1 They do not affect the actual movement of airplanes in interstate commerce.
2 They do not affect the average airplane, even financially, as would a tax.
3 They only affect an airplane owner financially on the occurrence of an accident. The defendant owners will certainly agree that such an accident is not the ordinary result of air travel.
4 The benefit of the statutory provisions does not go to any one who in any wise participates in such air travel, such as passengers, but only to those who are, under ordinary circumstances, entire strangers to air travel, and who are totally without fault themselves.[78]

Ergo, both attacks on the constitutionality of the statutory regime in question were found to be without merit by the court.

In *Adler's Quality Bakery et als.* v. *Gasetaria* (1960), a similar attack was launched against the applicable New Jersey absolute liability statute. The case involved actions of property owners against the owner of an aircraft for damages caused by the collision of the aircraft with a TV tower and the subsequent falling debris.[79] Similar to the grounds raised in the *Prentiss*-case, it was held that the statute was an unconstitutional exercise of police power and that it deprived aircraft owners of their property without due process of law on the grounds that aviation is no longer ultrahazardous. The court countered this argument by pointing out that the rule of *Rylands* v. *Fletcher* on absolute liability for extra-hazardous activities did not refer to statutory, but common law law liability.[80] In other words, the court did not base its finding of the constitutionality of the statute on the qualification of aviation as an ultrahazardous activity, but on policy grounds such as the potential problems of proof of fault and the expenses inherent in obtaining such proof as well as the shift of risk to the enterprise rather than innocent victims. Such grounds were found to be within the legislative power to act in behalf of general welfare by means of specific legislation.[81]

The second attack focused on the persons liable under the statute. For the statute only imposed absolute liability on the owner or lessee, but not on the operator of the aircraft. The attack argued that such a classification was unconstitutional and contrary to the equal protection clause of the Fourteenth Amendment. However, the court countered that such a classification was reasonable as it was based on the fact that the risk of loss was thus placed

78 *Prentiss et Al*. v. *National Airlines, Inc.* (1953), at 17,129; Annotation, 81 ALR2d, at 1060.
79 *Adler's Quality Bakery, Inc. et Als*. v. *Gasetaria* (1960), 6 Avi., at 17,953 (32 NJ 55, 159 A2d 97).
80 Note the different approach in the *Prentiss*-case, in which the statute was deemed to be based on the ultrahazardous nature of the activity.
81 *Adler's Quality Bakery, Inc. et Als*. v. *Gasetaria* (1960), 6 Avi., at 17,956; *see also* Annotation 81 ALR2d at 1060, in which the ineffectiveness of the doctrine of *res ipsa loquitur* is also mentioned as an argument for the justification of the statute in question.

upon the better risk bearer, which was deemed to be the owner of the aircraft in the majority of cases.[82]

The third attack was based on the notion that the statute raised an unconstitutional burden on interstate commerce. This was refuted by the court on similar grounds as in the *Prentiss*-case.[83]

In the case of *Torchia* v. *Fisher* (1983), the validity of the absolute liability statute of New Jersey was yet again upheld and this time by the New Jersey Supreme Court. In that case, the owner of a stolen aircraft held that application of the statute violated due process. But the court argued that even in case of theft, the statute legitimately shifted the loss to the better risk bearer, the owner, as opposed to unbenefitted third parties, who cannot protect themselves against the risks imposed by aviation.[84]

These three cases illustrate the fact that statutory regimes of absolute liability have been qualified as valid and permitted under the United States Constitution in a number of decisions and need not necessarily be based on the mere qualification of aviation as an ultrahazardous activity, but can also be based on other policy grounds, such as the potential difficulty of proving negligence and the shift of potential damages to the better risk bearer. In other words, the current general move toward negligence can still legitimately be reversed by means of statutory regimes based on absolute liability if this is deemed necessary by the State legislature.

5.6.3 Uniform aviation legislation (II): failed legislative attempts

The following legislative attempts of the past to adopt uniform rules in the field of aviation liability have all failed and can help to illustrate the apparent lack of willingness to create more uniformity in this field in the United States. A re-examination of such attempts is also deemed useful for the day the legislature decides to give the green light to more uniformity in this field.

1) The Uniform Aviation Liability Act (1937)

The Uniform Aviation Liability Act was drafted in 1937 and approved by the National Conference in 1938. However, the Executive Committee withheld promulgation of the Act before state legislatures in view of potential differences between the Uniform Aviation Liability Act and the federal Civil Aeronautics

82 *Adler's Quality Bakery, Inc. et Als.* v. *Gasetaria* (1960), 6 Avi., at 17,956-17,957; *see also* Annotation 81 ALR2d at 1060. The term 'owner' does not refer to lessors as mere financial owners of aircraft in this context.

83 Annotation 81 ALR2d, at 1060.

84 Kreindler at 6-4, citing *Torchia* v. *Fisher*, 95 N.J. 43, 468 A.2d 1061, 18 Avi., at 17,695 (1983). Although the same line of reasoning could be adapted in that context, the analogy between a stolen and hijacked aircraft may not be applied as vigorously after the September 11, 2001 attacks on the United States.

Act of 1938. Aside from the problems posed by these potential differences, the Uniform Aviation Liability Act was opposed by the Air Transport Association and the National Association of State Aviation Officials. In the end, it was not adopted in view of the fact that the Civil Aeronautics Authority preferred to do its own research on the possibilities of a Federal Aviation Liability Act. That research culminated in the so-called Sweeney Report (see sub 2).[85]

In Sections 201-207 of Article II of the Uniform Aviation Liability Act, a regime of absolute, albeit limited liability was codified, including a Section on mandatory insurance or security. Excerpts from Article II can help illustrate the envisaged regime:[86]

> Article II – Liability for bodily injury to individuals on the land and damage to property thereon
>
> Section 201. (a)
> This article shall apply to liability for bodily injuries within this State and for death resulting therefrom to individuals on the land, and for damage within this State to property on the land, caused by the ascent or descent or attempt to ascend, or flight of aircraft, or by the falling of an object therefrom;
>
> Section 202.
> In cases within the scope of this article, the operator of an aircraft shall be liable, in an action brought within this State as in this article specified, regardless of negligence, for bodily injury to an individual and for death resulting therefrom and damage to property, to the extent in this article specified.
>
> Section 203.
> The operator of an aircraft shall not be liable under the preceding section, if the injury or damage was caused by the wilful misconduct of the individual injured or the person who would otherwise be entitled to recover for damage to property.
>
> Section 205.
> It shall be unlawful for any person to operate or to cause or permit to be operated an aircraft either on or over land in this State unless the operator of such aircraft carries valid insurance or has furnished security or deposited cash as in this act prescribed, against the liabilities imposed by the preceding sections of this article;
>
> Section 207.(a)
> Any person or his personal representative may elect, notwithstanding the preceding provisions of this article, to bring an action to recover from the operator of an aircraft for negligence, but in any such action, such person or his personal repres-

85 Kuenhl at 358-360. The Act was drafted jointly by the American Law Institute, the American Bar Association, and committees of the National Conference of Commissioners on Uniform State Laws. *See also* Hollyday, at 108, who remarks that the National Conference of Commissioners on Uniform State Laws has never made another attempt at a uniform aviation liability act, despite the possibility of doing so on the basis of its self-imposed criteria.

86 The text of the excerpts is derived from the Uniform Aviation Liability Act as printed in 9 Journal of Air Law 726, at 726-744 (1938).

> entative must prove affirmatively the cause of the accident and that it was caused by the negligence of the operator.

These excerpts reveal that the envisaged regime was one of absolute liability to which the operator, as opposed to the owner or lessee as under Section 5 of the Uniform Aeronautics Act, was subjected. Although the regime was limited for death and bodily injury and property damage separately (Sections 204(a) and (b)), the effects of that limitation were mitigated by also allowing claims to based on (unlimited) negligence.[87] However, Section 207(a) seems to require full proof of negligence, and not merely a presumption, in view of the requirement of proving affirmatively the cause of the accident. Notably, a remarkable deviation from the more normal defence of contributory negligence was enacted in Section 203, by requiring wilful misconduct of third parties. A final remarkable aspect of the Act concerns the fact that liability for surface damage arising from collisions of aircraft was governed by comparative negligence and not by joint and several absolute liability (under Article V, Section 504). For negligence of one or more of the implicated aircraft operators can evidently be just as difficult to prove in cases of collisions of aircraft, if not more so.

2) The Sweeney Report (1941)

A study on the possibility of federal aviation liability legislation was made by Sweeney under auspices of the Civil Aeronautics Board in 1941.[88] His position on the problem of liability for surface damage can be derived from the following quotation:

> Persons on the ground (not a landing area of an established airport) should be compensated for injuries directly attributable to the operation of aircraft, irrespective of the aircraft operator's negligence. It is believed that the imposition of this liability by legislation involves no departure from law as it is now developing, and that it would have the desired effect of eliminating the confusion in legal theories prevailing in the decisions of the courts that have considered this liability. Important as the continued development of civil aviation is believed to be, no convincing reason has been presented why it should be subsidized at the expense of the luckless victim on the ground who, without participating in aviation in any way, is injured by an aircraft accident not attributable to the fault of the operator.[89]

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87 Which is a more fair solution than was opted for under the Rome Convention of 1952, which required proof of wilful misconduct in order to circumvent limitation of liability, *see* subparagraph 3.5.4. of this study.

88 Sweeney was a member of the Civil Aeronautics Authority's legal staff, who made a comprehensive study of aviation liability and insurance practices, entitled "Report to the Civil Aeronautics Board of a Study of the Proposed Aviation Liability Legislation", which was published in 1941 by the Board, *see* E.C. Sweeney, *Is Special Aviation Legislation Essential? – Part 1*, 19 JALC 166, at 166 (1952).

89 *Quotation from* Eubank at 195.

Unfortunately the Sweeney Report is not available anymore, but his own recommendations of 1952 on his suggested regime of federal aviation liability for surface damage are. According to these recommendations, the regime should be based on absolute liability. The scope of absolute liability should encompass damage caused by forced landings, crashes or objects or persons falling from aircraft in flight, but not necessarily damage arising from the alleged nuisance of ordinary flight. In order to make this distinction, Sweeney introduced the 'contact' criterion between victims of surface damage and the aircraft or parts of the aircraft or objects or persons falling from the aircraft. According to Sweeney, the 'contact' criterion would automatically exclude claims based on nuisance and noise arising from ordinary flight from the scope of absolute liability.[90] Sweeney also limited the scope of potential claimants under the regime by excluding claims from passengers of other aircraft, other aircraft in general, and other persons who voluntarily visit landing areas of airports. This exclusion was based on the rationale that such persons or entities assume the risks posed by aviation voluntarily. For such claimants, negligence was deemed to suffice.[91]

According to Sweeney, his proposed regime would have eliminated the confusion inherent in the potential application of various headings of liability under common law to various scenarios of surface damage. For aviation crashes and forced landings can be construed as a privileged trespass, but also as unintentional and non-negligent entries or accidental intrusions for which no direct liability exists under common law, unless the activity of flying is considered as an 'ultrahazardous activity' or if negligence is established.[92]

Sweeney made some useful suggestions for a liability regime in this field, such as the application of the 'contact' criterion to narrow down the scope of absolute liability. His recommendations also make clear that a regime based on absolute liability can only be guaranteed by specific legislation under common law in view of the uncertainties and changing attitudes to the question whether aviation is considered ultrahazardous or not. And as has been described previously, the overall tendency under common law within the United States has been to not consider aviation as ultrahazardous anymore since the nineteenfifties.

The main objection that can be put foward to Sweeney's regime from the perspective of third parties was that it was also based on a system of limitation

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90 As well as claims based on potential damage caused by too low general or sudden overflight.

91 E.C. Sweeney, *Is special aviation liability legislation essential? – Part II*, 19 JALC 317, at 324-325 (1952). The 'contact' criterium has also been used in the Australian Damage by Aircraft Bill to define the scope of its liability regime, albeit phrased as 'impact', *see* sub-paragraph 4.4.5 of this study.

92 Sweeney at 324.

of liability with a maximum death recovery and an overall limit on the amount of recovery per accident based on the weight of the aircraft.[93]

3) The O'Hara bills (H.R. 4912/532, 1945)
A number of bills that were far more aviation- than victim- oriented and were (not surprisingly) actively supported by the Air Transport Association of America were launched in Congress by O'Hara in 1945. The proposed liability regime of the bills was in effect so pro- aviation, that third parties would even be better off under the general rules of negligence. For the aircraft operator could only be held liable for surface damage unless he proved that he had taken all measures to avoid such damage or that such measures were impossible to take. Furthermore, the liability regime was limited and the scope of potential claimants was narrowed down by excluding persons or property within the area of an airport as claimants.[94] In effect, such a combination comes down to a limited liability regime based on a ground of liability that closely resembles the rule of normal negligence due to the fact that the defence of 'necessary measures' has been left intact. Thus, third parties would be better off under the general rules of negligence, which at least guarantee liability without any monetary limitations.

Neither of these three attempts at uniform aviation liability legislation have ever been enacted. And as the number of courts in the United States that no longer considered aviation to be ultrahazardous expanded, the gradual move to negligence in this field gained ground. This move to negligence will be dealt with in the next part of this Chapter.

C NEGLIGENCE AND SURFACE DAMAGE

5.7 THE GRADUAL MOVE TO NEGLIGENCE

As has been described in parts A and B of this Chapter, the problem of liability for surface damage in the field of aviation has been dealt with under various headings of absolute liability under common law as well as under statutory regimes of absolute liability in the United States. The most important justification for absolute liability in general has turned out to be the perception of aviation as an ultrahazardous activity. But a change of view became apparent from approximately halfway the 1950's, when more and more courts and state legislatures started to reject the notion that aviation was (still) ultrahazardous

93 Kuenhl at 377-378.
94 Kuenhl at 379-380; Eubank at 193-194.

and thus began to apply negligence as opposed to absolute liability to the problem of surface damage inflicted by aircraft.[95]

Important arguments that substantiated this move to negligence included the notion that aircraft technology and maintenance were by then far more advanced than in the early days of aviation and that the operation of aircraft was governed by a plethora of government regulations. In other words, the risk of surface damage could be sufficiently reduced through due care in the areas of maintenance and improvements of aircraft.[96] A more general argument in favour of negligence held that regimes based on absolute liability would unjustifiably discriminate against aircraft operators and could turn out to be an obstructing factor to expansion of the aviation industry. According to this argument, operators of aircraft should thus always be able to rely on a basis of negligence and its defences. Bluntly speaking, these arguments can amount to letting the loss lie where it falls by making compensation of surface damage dependant upon proof of negligence.[97]

That a great number of arguments in favour of negligence lack substance has been established previously; the aim of this part of the Chapter is primarily to describe the effects of application of negligence in this field in the majority of jurisdictions within the United States. First, the effects of a presumption of negligence as well as the criteria for application of the doctrine of res ipsa loquitur will be discussed. As will be seen in more detail, some jurisdictions have enacted specific statutory regimes in this field based on a presumption of negligence. For practical purposes, these will be discussed jointly with cases in which the doctrine of res ipsa loquitur was permitted to be invoked under general negligence in view of the comparability of both alternatives (5.7.1). Next, a number of cases based on the requirement of 'pure' negligence, without any presumption or application of the doctrine of res ipsa loquitur, will be evaluated (5.7.2). Finally, the potential scope of negligence will be dealt with (5.7.3).

5.7.1 Presumptions of negligence. The doctrine of *res ipsa loquitur.*

A number of jurisdictions have incorporated statutory regimes of liability for surface damage based on a rebuttable presumption of negligence.[98] The statut-

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95 That line of reasoning holds that since the Second World War, aviation can no longer be considered as ultrahazardous due to the technological advancements and excellent safety records of the industry, *see Notes: Liability for aircraft damage to ground occupiers – A study of current trends in Tort Law*, 31 Indiana Law Journal 63, at 64 (1955).

96 Appel at 419, 421. The numerous Federal Aviation Regulations have been used by courts to help determine the reasonable standard of care, *see* C. Robertson, Aviation, A Complete Legal Guide 59 (1987).

97 Goldin at 126-127; *Notes* at 67.

98 *See* sub-paragraph 5.6.1.2 of this chapter.

ory regime of Maryland played a role in the case of *D'Anna* v. *United States* (1950), in which persons and property on the ground suffered injuries and damages when a gasoline tank from a United States naval aircraft fell into a fruit market. The court held the United States liable, since the evidence that was put forward to rebut the presumption of negligence was held to be too vague and unsatisfactory.[99]

Under a number of jurisdictions in which the general rules of negligence prevail, the doctrine of *res ipsa loquitur* can be invoked in order to help prove negligence. The adherents of the application of negligence in this field generally claim that the combination of the doctrine of *res ipsa loquitur* and negligence provide a sufficiently satisfactory framework for claiming compensation for surface damage. However, the doctrine of *res ipsa loquitur* is by no means clear-cut and has been defined varyingly under case law as a presumption of negligence, a 'permissible inference' of negligence, a 'prima facie case of negligence', and a shift of the burden of proof to the defendant. Although related to the wrongful death of a passenger killed in the wreck of a transport airplane, the case of *Smith et Al*. v. *Pennsylvania Central Airlines Corporation* (1948), can help recapitulate how the doctrine is applied.[100] In that case the court held that:

> the bases of the doctrine of *res ipsa loquitur* are two fold: first, if the mechanism involved in the accident is within the sole and entire control of the defendant, the latter is in a better position than the plaintiff to adduce an explanation as to how and why the accident happened; second, if the accident is of an unusual kind, and would not ordinarily occur without failure on the part of some human agency, it is reasonable to assume in the absence of a satisfactory explanation that it was due to some negligence on the part of the defendant. These principles are as applicable to airplane crashes as they are to railroad wrecks. That airplane crashes may occur as a result of the action of the elements, or without any carelessness or deficiencies on the part of any human being, is no doubt true… *It must be borne in mind that the doctrine of res ipsa loquitur does not result in a conclusive presumption of negligence nor does it even compel such an inference.* It merely permits it and calls upon the defendant for an explanation. The concept of res ipsa loquitur does not impose on the defendant a liability that would not otherwise exist. If it be the fact that the defendant was not guilty of negligence, he will be free of liability. The doctrine does not even lift the burden of proof from the plaintiff and place it on the defendant. It merely calls on the defendant to offer an account of the cause

99 *D'Anna* v. *United States* (1950), CA4 Md 181 F2d 335, 3 CCH Avi 17171; Speiser and Krause at 148. The tank became detached while the aircraft was involved in a 30-degree dive during a public exhibition over Baltimore with 69 other aircraft. No explanation could be offered on the question why the tank, that was attached to the bomb rack by hooks, became detached. Apparently, a pin that was held by a sheared lock ring popped out of the bomb-rack for unknown reasons. *See also* Eubank at 190; Annotation, 74 ALR2d at 868-869.

100 *Smith et Al*. v. *Pennsylvania Central Airlines Corporation* (1948), CCH 2 Avi, 14,618. *See also* Mr. Chief Groner on the varying ways in which the doctrine has been defined at 14,619.

> of the accident. In the absence of a satisfactory explanation exculpating him, the jury may, but is not compelled to, make a finding that the disaster was caused by the defendant's negligence.[101]

This opinion reveals that the doctrine does not necessarily provide plaintiffs with a presumption or even an inference of negligence, but merely allows the defendant to give an explanation of the reason why things went wrong, which is subsequently evaluated by the jury. One of the key assets of application of the doctrine is that its inference of negligence can be legally adequate to satisfy the plaintiff's burden of proof, which enables him to survive a motion to dismiss at the close of his case. The jury can subsequently decide either way, as it is permitted to draw an inference of negligence, but need not necessarily do so. This can also be an important factor for the settlement value of cases.[102]

The doctrine of res ipsa loquitur was held applicable in a number of cases involving surface damage. In *Northwestern National Insurance Company et Al.* v. *United States of America* (1949), a P-51 Mustang Pursuit Plane crashed into a building in Chicago, which subsequently caught fire. The court held that plaintiffs had made out a prima facie case of negligence by establishing that the instrumentality was under the management and control of the alleged tortfeasor and that the accident was such as in the ordinary course of things would not have happened if proper care had been used. Therefore, the accident itself afforded reasonable evidence – in the absence of an explanation to the contrary – that it arose from want of proper care.[103]

United States v. *Kesinger et al*. (1951) involved an Army Air Force aircraft that took off, touched the ground, became air-borne again, but finally crashed and destroyed several farm buildings. The court held the doctrine applicable as the 'thing' which caused the injury was under exclusive control of the defendant at the time of the injury and that the occurrence was one which in the ordinary course of things does not happen if the defendant uses proper care. The court even declared that the trend of authority was to hold the doctrine of res ipsa loquitur applicable to airplane accidents, referring to the case of *Sollak* v. *State of New York* (1927).[104]

On the notion that it automatically applies in every case of surface damage inflicted by aircraft, the doctrine of res ipsa loquitur would arguably provide a reasonably fair compromise between the poles of absolute liability on the

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101 *Smith et Al.* v. *Pennsylvania Central Airlines Corporation* (1948), at 14,620.

102 *See* Dobbs & Hayden at 175-177 *on Eaton* v. *Eaton*, 119 N.J. 628, 575 A.2d 858 (1990).

103 Northwestern National Insurance Company et Al. v. *United States of America* (1949), CCH 2 Avi. at 14,965 sub 3 and 4; Peterson at 314.

104 *United States* v. *Kesinger et Al.* (1951), CCH 3 Avi., at 17,611; *Notes* at 64; Speiser & Krause at 126; *Sollak* v. *State of New York*, New York Court of Claims, October 14, 1927, 1 CCH Avi. 99, involved the collision between a state aircraft and an automobile on a public highway, in which a presumption of negligence was successfully raised by plaintiff by invoking the doctrine of res ipsa loquitur; *see also* Goldin at 129.

one hand and pure negligence on the other hand. For it would then allow the defendant to give his side of the story in order to counter the automatic presumption or prima facie evidence of negligence, while also leaving important defences available under negligence intact. For the doctrine of res ipsa loquitur does not affect the defences available under common law negligence, which include Act of God, bailment, agency relationships, and proximate cause.[105] However, the doctrine does not apply automatically, nor can it always be invoked successfully.[106] In the case of *Williams et al* v. *United States* (1952), for instance, not all of the criteria of the doctrine were met. For the court then ruled that it not only must be shown that the aircraft was under exclusive control of the government, but also that the accident would not have occurred in the ordinary course of events if due care had been exercised. Ergo, negligence can be difficult to establish even with the aid of the doctrine, as was also noted in the dissenting opinion in the case of *Crosby* v. *Cox Aircraft Co*. (1987).[107]

Although perhaps far too exaggerated in tone, the prediction made by Goldin on the developments in this field in the nineteenforties thus still hold some validity at the beginning of the 21st century. For Goldin held that

> with respect to the doctrine of res ipsa loquitur, the law of the air is replete with confusion…. Indeed, the trend is unmistakingly in the direction of applying to aeronautical accidents, both on the ground and in the air, the rules of negligence and proximate cause generally applicable to torts on land. Adherence to this modern view automatically transfers into the realm of aviation law all the vagaries and uncertainties which surround the application of res ipsa loquitur doctrine to land accidents. Moreover, the prospects for the future seem none too encouraging. That harmony and uniformity soon will reign where chaos and confusion now are firmly entrenched, appears to be mere wishful thinking rather than an expectation.[108]

105 Wolff at 214-216.

106 In discussions of the American Law Institute in 1964 and 1965 on this topic, it was acknowledged that aircraft accidents are generally a result of negligence, but that the doctrine of res ipsa loquitur is only available sometimes; furthermore, it was held that the burden of investigating the causes of such accidents can often be extremely onerous for plaintiffs, *see* Restatement of the Law Third, The American Law Institute, Council Draft No.2 (September 26, 2000), at 131.

107 *See, on the latter case* sub-paragraph 2.5.1 of this study. *See also Williams et Al*. v. *United States* (1955), 4 CCH Avi, 17,537. In the Williams case, injuries and other damage on the surface was caused by falling fuel from an Air Force jet bomber that had exploded in mid-air. The plaintiffs relied solely on the doctrine of res ipsa loquitur in order to establish negligence, but failed to meet the required criteria. The case provides a sad example of a negligence-based case in which the doctrine was of no help either. *See* Prosser and Keeton on Torts at 558 for examples of other cases in which the courts have refused to apply the doctrine and in which recovery was subsequently denied.

108 Goldin at 152-153.

In view of the fact that defendants' attorneys may indeed convince the jury that the the aviation accident or incident at hand was caused by events other than than the lack of due care of the aircraft operator, the doctrine is not often relied on by plaintiffs in current aviation litigation in the United States.[109]

This brings us to the predicted 'chaos and confusion' involved in the application of negligence unaided by rebuttable presumptions of negligence or the doctrine of res ipsa loquitur.

5.7.2 Negligence and surface damage

The long and winding road through past legislative developments and case law in this field leads to the destination of negligence as it is currently upheld in the majority of jurisdictions in the United States and in the majority of decisions. The basis of negligence has either been specifically incorporated in statutory provisions on surface damage in a number of jurisdictions, or is applicable in absence of any liability regulation in this field.

Although perhaps more suited as an example of a case on the question who can be held liable, the landmark case of *Boyd* v. *White* (1954) can be given in the context of application of negligence in this field as well.[110] For in *Boyd* v. *White*, in which plaintiff claimed for recovery of damages caused by fright and mental suffering and for property damage due to the crash of an aircraft into her house, the California District Court of Appeal held that aircraft were no longer inherently dangerous instruments. The court explicitly examined the trend away from the absolute liability doctrine of the Restatement of Torts and the absolute liability regime of the Uniform Aeronautics Act, which was followed by Californian legislation. As of 1947, the California legislature deliberately refused to adopt the provisions of the Uniform Aeronautics Act. For the legislature was of the opinion that the question of liability of owners, lessees, or operators of aircraft was to be determined by the normal rules of negligence, as incorporated in a specific statute.[111] It is of particular interest that the court did acknowledge the 'strong public policy' argument raised by the appellant. For the appellant argued that the risk of damage to third parties owning property over which airplanes are flown should be borne by the owners of planes, who can insure themselves against such risks, and not by innocent property owners. However, the court added that such arguments should be addressed to the legislature and not to courts, who are tied to negligence once aviation is no longer perceived to be ultrahazardous *per se*.

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109 Information received from G.N. Tompkins, Jr.

110 *Boyd* v. *White et Al.*, California District Court of Appeals, November 12, 1954, CCH 4 Avi. 17,485.

111 *Boyd* v. *White et Al.*, at 17,488 – 17,491; Peterson at 309-311; Hollyday at 97-98.

In another Californian case, *Southern California Edison Co*. v. *Coleman* (1957), an aircraft collided with the wires, poles, and equipment of a power company near an airport. The power company asserted that the defendants should be held absolutely liable for the damages to its property on the basis of trespass. The defendants countered that the trespass (if any) was unavoidable and the result of an Act of God in the form of a downdraft which caused the aircraft to collide with the wires. The court followed that line of reasoning and held that there could be no liability for trespass unless the trespass was intentional, the result of recklessness or negligence, or the result of engaging in extrahazardous activity. And as an aircraft that was properly handled by a competent pilot was not considered extrahazardous anymore, the court ruled that liability could only arise out of a defect in the aircraft or out of its negligent operation.[112]

Negligence or wrongful misconduct has also been adopted as the sole basis of recovery from the government under the Federal Tort Claims Act since the Supreme Court decision of *Laird* v. *Nelms* (1972).[113] Since that decision, the government cannot be held liable on the basis of any absolute liability statute or common law rules of absolute liability anymore. This was not always the case, as can be established by aviation cases involving military aircraft prior to 1972.[114]

5.7.3 Scope of negligence

The basis of negligence requires proof of the broad criteria of breach of a legal duty to use a reasonable degree of care and proximate cause. Therefore, it is not surprising that a great number of potential scenarios of surface damage

112 *Southern California Edison Co*. v. *Lloyd S. Coleman, Jr., et Al*, 150 Cal App 2d Supp 829, 310 P2d 504, CCH 5 Avi. 17,415; Appel, at 424. In that case, a reference was made to *San Diego Gas & Electric Co*. v. *United States* (1949), 173 Fed. Rep. 2d 92 (Ninth Circuit), 2 Avi. 14,842 in which a Coast Guard plane hit the wires of an electric company, and in which negligence was alleged, *see* Whitehead at 11; Speiser and Krause at 146.

113 *Laird* v. *Nelms*, 406 U.S. 797 (1972), *see* Kreindler at 6-5.

114 *See, e.g., United States* v. *Praylou et Al*., United States Court of Appeals, Fourth Circuit, November 9, 1953; Certiorari denied, United States Supreme Court, April 5, 1954, 4 Avi. 17,191. In that case, the United States was held liable on the basis of the South Carolina absolute liability statute of the time. It was held that the fact that the Federal Tort Claims Act submits the government to the liability of an individual only where there is a negligent or wrongful act or omission of an employee of the government does not make the statute inapplicable: for the Federal Tort Claims Act requires that the United States shall be liable in the same manner and to the same extent as a private individual under similar circumstances. In general, the Federal Tort Claims Act can be qualified as a strictly construed waiver of the sovereign immunity of the United States. State law can come into play to draw a comparison between potential liability for similar conduct of a private individual under State law and the alleged conduct for which the Federal Government is held liable (information received by G.N. Tompkins, Jr.).

can fall under the scope of negligence. Case law ranges from scenarios of direct contact or impact of the aircraft or parts of the aircraft to scenarios of damage caused by overflight. All sorts of sub-scenarios have also been dealt with in case law, which includes cases of surface damage related to the taxiing of aircraft, airplane propellors striking persons on the ground, sonic booms, damage caused by too low overflight, cropdusting, and so on. A great range of varying examples can be given per main scenario, of which a number have been chosen to help illustrate the broad potential scope of negligence.

For the scenario of damage caused by impact or direct contact with the aircraft, the bizarre case of *Platt* v. *Erie County Agricultural Soc.* (1914) can be mentioned, in which an an aircraft damaged the ear of a surface victim with its wingtip and injured several other persons, and for which the pilot was held negligent by the court.[115]

For the scenarios of normal or too low overflight, the case of *Boskovich* v. *U.S.*(1950), can serve as an example. In that case it was held that a poultryman who suffered loss due to fright of his chickens when a formation of military aircraft flew over his farm had no cause of action in negligence as the formation flew in conformity with existing air traffic regulations.[116] The case of *Brunt* v. *Chicago Mill & Lumber Co.* (1962), in which cattle stampeded and were lost out of fright of an aircraft in take-off was also based on negligence.[117]

Kreindler has enumerated a number of mainly military cases based on damage caused by sonic booms, which produce conical shock waves that emanate from the aircraft and can cause surface damage. Although all of these cases are based on negligence, they do not always lead to liability of the implicated aircraft, since such flights can be protected by the discretionary function exception to the Federal Tort Claims Act, which can exempt the government from potential liability.[118]

The scope of negligence in relation to unlawful use of aircraft by terrorists has evidently become of great relevance in the aftermath of the events of '9/11' in the United States and will be dealt with in greater detail in Part E of this Chapter.

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115 164 App Div 99, 149 NYS 520, 1 CCH Avi. 34, *as cited by* Speiser and Krause at 150; *see also* sub-paragraph 2.2.1 of this study.

116 *Boskovich* v. *United States of America*, United States District Court, District of Utah, Central Division, April 7 (1950), 3 CCH Avi. 17,252; Kreindler at 6-16 – 6-17.

117 243 Miss 607, 139 So 2d *as cited by* Appel at 424-425; Speiser & Krause, at 152.

118 *See, e.g. Maynard* v. *United States*, 430 F.2d 1264 (9th Cir. 1970), in which personal injuries of a horserider were caused by the sonic boom from a U.S. Air Force aircraft, which frightened the horse. The route taken by the aircraft was within the discretionary function, as cited by Kreindler at 6-27.

D PERSONS LIABLE AND INSURANCE REQUIREMENTS

5.8 PERSONS LIABLE

The question who can be held liable for surface damage inflicted by aircraft depends on the applicable regime at hand and on the specific facts of the case. A first distinction can be made between cases governed by statutory regimes of absolute liability and cases governed by general headings of liability under common law, of which negligence generally prevails. For the latter cases, a second distinction can be made between liability of the operators and owners of aircraft.

The persons liable under the absolute liability statutes can be derived from Section 5 of the Uniform State Law for Aeronautics (1922). The main rule of Section 5 holds that the owners of aircraft can be held absolutely liable for surface damage. However, if the aircraft is leased at the time of the injury to person or property, both owner and lessee shall be liable. Section 5 also specifies that an aeronaut who is not the owner or lessee can only be held liable for the consequences of his own negligence.[119] The term 'owner' refers to actual owners, not financial owners, such as lessors or mortgagees.[120]

As has been described previously in this study, the most logical person or entity to be held liable for surface damage has been held to be the operator as opposed to the owner of the aircraft if the two are not one and the same person or entity. For the operator is generally the person or entity that has actual control of the aircraft and/or the one that profits economically from the activity of flying. Owners of aircraft, on the other hand, can face the danger of being perceived as the deepest pocket by claimants, even if their role in the actual operation of the aircraft is limited or non-existent. Legal distinctions between the position of operators and owners have been made under common law for that purpose. For under common law, the owner or lessee of an aircraft cannot be held liable automatically for surface damage, unless some relationship of agency with the operator or pilot can be established.[121] If such a relationship can be established, the doctrine of respondeat superior might make

119 *See* Section 5 of the Uniform Aeronautics Act (1922).

120 Whitehead at 17. Whitehead refers to federal law, which exempts lessors or mortgagees from liability unless in actual control of the aircraft.

121 A relationship of agency can be defined as a relationship between two persons, by agreement or otherwise, where one (the agent) may act on behalf of the other (the principal) and bind the principal by words and actions. The relationship can be one of principal and agent, employer or proprietor and independent contractor, or master and servant, *see* Blacks's Law Dictionary 62 (1990). In the master/servant relationship, the owner of an aircraft may be held liable for torts committed by the pilot of the aircraft, *see* Hollyday at 95-96.

the owner or lessee responsible for the tort committed by the operator or pilot.[122]

As the doctrine of respondeat superior requires the pilot to be acting within the scope of his employment, liability of the owner of the aircraft is excluded if this was not proven to be the case. A sad example of such a scenario is provided by the case of *King* v. *United States* (1949), in which an intoxicated student airforce pilot flew a military aircraft into plaintiff's home without the authorization, knowledge, or consent of the United States. The court held that the pilot was on a frolic of his own and was not acting within the scope of his employment. Therefore, the United States could not be held liable under the Federal Tort Claims Act.[123]

Similarly, a bailor cannot be held liable automatically for surface damage inflicted by a bailee unless a relationship of agency or the doctrine of respondeat superior can be established.[124] The previously described case of *Boyd* v. *White* (1954) can also serve as an example in this context. The case involved a flight instructor who operated a flying school and had rented an aircraft from another firm of aircraft owners, as all of his own aircraft were in use. After a joint flight that was carried out by the flight instructor and the student pilot, the student pilot was allowed to fly solo. During the solo flight, the student pilot attempted a forced landing due to engine trouble and loss of altitude, but crashed into a house. The key question was if the owner of an aircraft who leases such an aircraft to a competent flying instructor can be held liable for subsequent surface damage caused by a student pilot. According to the court, this was not the case, since no agency relationship could be established between owner and instructor in absence of evidence that the instructor acted under direction or control of the owner.[125] The underlying relationship between all parties concerned was qualified as one of bailment, not agency. That qualification necessitated proof that the owner or lessee that

122 Peterson at 313, referring to a number of cases in which the operators, and not the owners, of aircraft were subjected to liability based on trespass. The doctrine of respondeat superior ('let the master answer') holds a master liable in certain cases for wrongful acts committed by a servant or a principal for those of his agent. Notably, the doctrine only applies when the employee is acting within the scope of authority of the master, *see* Black's Law Dictionary 1311-1312 (1990).

123 *King* v. *United States*, United States Court of Appeals, Fifth Circuit, December 14, 1949, 2 Avi. 15,103; Peterson at 315; Speiser and Krause at 154.

124 Bailment in general can be defined as a delivery of goods or personal property (in casu aircraft) by one person (bailor) to another (bailee), in trust for the execution of a special object upon or in relation to such goods, beneficial either to the bailor or bailee or both, and upon a contract to perform the trust and carry out such object, and thereupon either to redeliver the goods to the bailor or otherwise dispose of the same in conformity with the purpose of the trust, *see* Black's Law Dictionary 141-142 (1990).

125 *Boyd* v. *White*, California District Court of Appeals, November 12, 1954, 4 Avi. 17,485 – 17,488.

furnished the aircraft knew that the (student) pilot was reckless or incompetent.[126]

Other grounds on which owners of aircraft may be held liable for damages include the furnishing of a dangerously defective chattel to the operator and joint venture. In the first case, the burden of proof of defectiveness lies with the plaintiff, perhaps aided by the doctrine of res ipsa loquitur. Joint venture, which can be defined as a partnership in a joint undertaking for mutual profit, would also have to be proven to exist between the owner and operator of the aircraft in order to claim successfully from the owner.[127]

Statutory regimes based on based on Sections 4 and 5 of the Uniform Aeronautics Act are based on absolute liability of the owners of aircraft, irrespective of the principles of respondeat superior and the question whether the pilot/employee was acting in the scope of his employment at the time of the accident.[128] However, such absolute liability regimes only allow the owner of the aircraft to invoke the defence of contributory negligence. And such a lack of available defences may also lead to liability too easily in cases of extreme surface damage caused by others than the owner. The defence available under general negligence that the owner or his agents are not the persons or entities responsible for the surface damage is of interest in this context. This was established in the landmark case of *Palsgraf* v. *Long Island R.R. Co* (1928), in which the court held that the defendant could only be held liable for the foreseeable consequences of his own actions. Potential defendants are thus permitted to invoke 'proximate cause' as a defence against liability under negligence.[129] The relevance of applicable liability regimes and the defences available to potential defendants in cases of surface damage inflicted by others than the official operators/pilots of civilian aircraft has become evident in the aftermath of the extreme damage inflicted by terrorists on September 11, 2001 in the United States and will be dealt with in more detail in paragraph 5.10.

5.9 Limitation of liability and insurance requirements

Irrespective of the applicable basis of liability, liability of the operators or owners of aircraft for damage to third parties has not been legally limited in general in the United States. The legislative aftermath of '9/11' is the only exception to that rule.[130]

126 Appel at 422-423; Peterson at 319; Whitehead at 15-16.
127 Peterson at 319-320.
128 Annotation, 74 ALR2d at 871.
129 *Palsgraf* v. *Long Island R.R. Co*. 248 N.Y. 339, 162 N.E. 99 (1928), *as cited by* Wolff at 215-216.
130 *See* Part E of this Chapter.

The insurance requirements for aircraft accident liability have been enacted on a federal level in Title 14 of the Code of Federal Regulations, Part 205.[131] The requirements apply to all United States direct air carriers and foreign direct air carriers, and make air transportation by these entities dependant on certain minimal levels of compulsory aircraft accident coverage. Such coverage may be obtained either by insurance policies (listed on certificates of insurance) or by self-insurance plans.[132]

Within the codified limits of minimal coverage, the scope of such insurance policies or self-insurance plans must encompass all sums that the carrier shall become legally obligated to pay as damages for bodily injury to or death of a person, or for damage to property of others, resulting from the operation or maintenance of the aircraft.[133]

Three classes of air carriers can be distinguished with varying requirements of coverage for third party liability:

A. Requirements for U.S. and foreign direct air carriers

Third-party aircraft accident liability coverage for bodily injury or death to persons other than passengers (but including nonemployee cargo attendants) and for damage to property, with a minimal limit of $300.000 for any one person in any one occurrence, and a total of $20.000.000 per involved aircraft for each occurrence. Aircraft of not more than 60 seats or 18.000 pounds maximum payload capacity only require coverage of $2.000.000 per involved aircraft for each occurrence.[134]

Requirements for U.S air taxi operators

Third-party aircraft accident liability coverage for bodily injury or death to persons other than passengers (but including nonemployee cargo attendants), with a minimal limit of $75.000 for any one person and a limit of at least $100.000 for damage to property and a total of $300.000 per involved aircraft for each occurrence.[135]

Requirements for Canadian charter air taxi operators

Third party aircraft accident liability coverage for bodily injury or death to persons other than passengers (but including nonemployee cargo attendants) and for damage to property, with a minimal limit of $75.000 per person and a total of $2.000.000 per involved aircraft per occurrence. If the operated aircraft has more than 30 seats or 7500 pounds of maximum cargo payload capacity and a maximum

131 14 CFR 205.1-8. In Standard Policy Forms, these requirements can be found under Aviation policy clause AVN 57A, *see* Lloyd's Aviation Underwriters' Association Standard Policy Forms, Proposal Forms and Clauses, Etc. (1996).

132 14 CFR 205.1-3.

133 14 CFR 205.5(a)

134 14 CFR 205.5(b1); if such carriers also carry passengers, extra coverage of $300,000 per passenger and a total per involved aircraft for each occurrence of $300.000 x 75% of the number of passenger seats installed in the aircraft is required, *see* 14 CFR 205.5 (b2).

135 14 CFR 205.5(c1); if U.S. air taxi operators also carry passengers, extra coverage of $75.000 per passenger and a total per involved aircraft for each occurrence of $75.000 x 75% of the number of passenger seats installed in the aircraft is required, *see* 14 CFR 205.5 (c2).

authorized takeoff weight on wheels not greater than 35.000 pounds, a coverage of $20.000.000 per involved aircraft per occurrence is required.[136]

Notwithstanding these separate requirements for third party and passenger liability per category of aircraft, a combined single limit of liability encompassing both second and third party liability for at least the same total amount of coverage of both categories is also permitted.[137] The most important prohibited exclusion of coverage concerns the violation of any safety-related requirement as imposed either by statutory law or by rule of a government agency.[138] In general, these required levels of 'adequate' coverage can be qualified as surprisingly low, if one takes into account that international air carriers are currently generally insured on the basis of a single limit of liability of approximately $ 1.5 billion per accident.

E THE IMPACT OF THE TERRORIST ATTACKS OF SEPTEMBER 11, 2001

5.10 THE TERRORIST ATTACKS OF SEPTEMBER 11, 2001

And then came September 11, 2001, the infamous date in which two civilian aircraft of American Airlines and two civilian aircraft of United Airlines were used as manned bombs on the World Trade Center in New York, the Pentagon, and Shanksville, Pennsylvania. The unprecedented terrorist attacks, which resulted in an extremely high death toll of people aboard the aircraft, third parties on the ground, and massive destruction of property, have had such an impact on the traditional rules of tort and law and aviation insurance practice, that numerous legal studies could be written on the subject alone.[139]

136 14 CFR 205.5 (d1); if Canadian charter air taxi operators also carry passengers, extra coverage of $75.000 per passenger and a total per involved aircraft for each occurrence of $75.000 x 75% of the number of passenger seats installed in the aircraft is required, *see* 14 CFR 205.5 (d2).

137 14 CFR 205.5 (e).

138 14 CFR 205.6 (b1).

139 A death toll of approximately 3000 people as well as varying degrees of personal injuries to thousands of others on the ground was caused by the impact of three of the four hijacked aircraft. The three aircraft were American Airlines Flight 11 and United Airlines Flight 175, which flew into the North and South Tower of the Twin Towers respectively, and American Airlines Flight 77, which struck a Pentagon building, *see* G.N. Tompkins, Jr., *Claims arising from 11 September 2001 – The current situation*, talk given at the Annual Meeting of the European Air Law Association, Stockholm, Sweden, on 22 November 2002, at 7; *see also* Lee S. Kreindler, *The Terrorist Attacks of 11 September 2001. Legal Liability Issues Confronting Claimants – The Congressional Response – Salvation or Frustration?* XXVII AASL 377, at 378 (2002).

The events of '9/11' have given rise to a whole new set of legal and practical problems, of which only a number have been temporarily resolved. On a governmental level, the worldwide takeover of war and terrorism related liability insurance coverage can serve as an example of at least a temporary solution. But such a solution cannot mask the fact liability coverage for risks related to war and terrorism has still often been severely limited in aviation insurance policies and that another aviation-related terrorist event comparable in scale to '9/11' may lead to a situation in which such risks may no longer be adequately covered at all.[140]

In the following sub-paragraphs, the manner and extent in which the aftermath of '9/11' has been dealt by the United States government by means of specific legislation will be evaluated in relation to the traditional route of litigation. First, the scope and regime of the governmental legislative initiative of the so-called 'Air Transportation Safety and System Stabilization Act' and its Victim Compensation Fund will be evaluated (5.10.1). Next, the alternative of the traditional route of litigation, as affected by the Act, will be addressed on the basis of the ruling of the United States District Judge Hellerstein of 9 September 2003 (5.10.2). And finally, a comparative assessment of both alternatives and their feasibility will be made (5.10.3).

5.10.1 The Act and Victim Compensation Fund

In the United States, '9/11' has led to the unique and extremely speedily enacted Congressional initiative of the 'Air Transportation Safety and System Stabilization Act', which was meant to preserve the continued viability of the United States air transportation system on the one hand and to provide compensation to the individual victims of '9/11' or their relatives on the other hand.[141]

As Tompkins has remarked, the rationale of Congress for this solution was based on the important notion that the terrorist attacks of '9/11' were perceived as an attack on the United States as a whole, and not merely on the implicated air carriers or the individual victims.[142] The relevance of this notion lies in the legislative acknowledgment that both the implicated air carriers as well as the individual victims were thus perceived as victims of the terrorist attacks directed against the United States. This could in turn serve as an implicit

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140 *See* Ken Coombes, *Marsh Update on Aviation War Insurance for European Commission Ad-Hoc Group (Insurance)*, Brussels, 12 September, 2003. As of September 2003, governments that still provide or assist with war and terrorism coverage include Australia, Brazil, Canada, China, Ghana, Israel, Japan, Jordan, Malaysia, Mexico, New Zealand, Quatar, Singapore, South Korea, Thailand, and Turkey.

141 107th Congress, 1st Session, H.R. 2926. On September 22, 2001, a mere eleven days after '9/11', the Act was signed into law by the President of the United States.

142 Tompkins, at 3.

argument to soften the blame of the implicated air carriers for the terrorist attacks.

The viability of the United States air transportation system was guaranteed by a number of measures which included federal loan and compensation mechanisms and reimbursments for the increased cost of insurance to air carriers as a result of the events of '9/11'.[143]

The mechanism for compensation of individual victims and their relatives was enacted in Title IV of the Act by means of the so-called "September 11th Victim Compensation Fund of 2001". Not only does the Fund provide an important alternative to the route of traditional civil law suits, but it has also in fact amended existing liability law and procederal rules for claims arising from '9/11'. This can be derived from Section 408 of the Act, in which the level of potential liability of the implicated air carriers has been limited up to the amount of obtained liability coverage.[144] Although understandable from the perspective of protecting American and United Airlines against potential bankruptcy, such a legislative move can be probably qualified as an unconstitutional taking of property rights of the victims as it was made after the events of '9/11' took place.[145] But what does the Fund offer as alternative to such a transformed regime of liability based on limited as opposed to unlimited negligence?

According to Section 403 of the Act, the Fund aims to provide compensation to any individual or relatives of a deceased individual who was physically injured or killed as a result of the terrorist-related aircraft crashes of September 11, 2001. Notably, any claim based on property damage has thus been excluded from the scope of the Fund.[146]

Compensation on the basis of the Fund has not been made dependent on proof of negligence or any other theory of liability.[147] However, once a claim has been filed under the Fund, the right to file a civil action in any federal or state court for damages sustained as a result of the attacks is formally waived.[148]

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143 *See* Titles I and II of the Act.

144 Notably, the current Title IV was preceded by a Final Interim Rule implementing Title IV, which was open to comment until January 22, 2002, *see* Morrison, Mahoney & Miller, *Aviation Update, Victim Compensation Fund*, 14118.1. This sub-paragraph is based on the final wording of Title IV.

145 Kreindler (2002), at 383.

146 As property losses are generally covered by property insurance on the basis of policies which cover all property losses regardless of fault, Congress saw no need to cover such losses in the Act (information received by G.N. Tompkins, Jr.); *see also* O.A. Haazen, *Een jaar lang 11 september, De balans van de juridische bijdragen aan de oplossing van de problemen naar aanleiding van de aanval op New York*, 77 NJB 1598, at 1601 (2002). Haazen comments that the Fund contains 18 billion dollars.

147 Section 405 (3)(b)(2) Act.

148 Section 405 (3) (B) (i). Note that civil actions to recover colleteral source obligations are still permitted and that the right to sue the terrorists is not waived.

Claims can be filed with the so-called Special Master, who has been specifically appointed by the Attorney General to administer the Fund.[149] On a specific form, claimants will have to substantiate the physical harm suffered, or confirm the decendent's death if the claim is filed on behalf of a decendent, as a result of the terrorist-related aircraft crashes of September 11. Furthermore, any possible economic and non-economic losses suffered through the attacks as well as information regarding collateral sources must be provided.[150] The claim form can be downloaded from the September 11th Victim Compensation Fund of 2001 website, which also contains background information on items such as the applicability of state wrongful death laws for economic loss and the manner of distribution of non-economic loss.[151] Information on collateral sources is necessary as the Special Master is obliged to reduce the amount of compensation due under the Fund by the amount of collateral source compensation that the claimant has received as a result of the attacks.[152]

Claims will have to be filed within two years after the date on which regulations are promulgated by the Attorney General in consultation with the Special Master to carry out the requirements needed to activate the Fund.[153]

Eligibility of an individual third party to claim from the Fund has been specifically determined by the criteria of being present either at the World Trade Center, the Pentagon, or the site of the aircraft crash at Shanksville, Pennsylvania at the time or in the immediate aftermath of the attacks and having suffered physical harm or death as a result of the aircraft crash at hand.[154] In comparison with traditional yardsticks of tort law to determine

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149 Sections 404 and 405 Act.

150 Section 405 (2) (B)(i)(ii)(iii) Act. Economic loss has specifically been defined as 'any pecuniairy loss resulting from harm (including the loss of earnings or other benefits related to employment, medical expense loss, replacement services loss, loss due to death, burial costs, and loss of business or employment opportunities to the extent recovery for such loss is allowed under applicable State law.' Noneconomic losses refer to 'losses for physical and emotional pain, suffering, inconvenience, physical impairment, mental anguish, disfigurement, loss of enjoyment of life, loss of society and companionship, loss of consortium (other than loss of domestic service), hedonic damages, injury to reputation, and all other non-pecuniary losses of any kind or nature,' *see* Section 402 (5)(7) Act. Recovery for economic losses and non-economic losses has to be permitted under the applicable State law and punitive damages have been excluded under the regime of the Fund, *see* Tompkins at 15.

151 *See* www.usdoj.gov/victimcompensation/compensation.html. Determination of economic and noneconomic losses has been simplified for claimants by means of specific presumptive loss calculation tables created by the Special Master. The tables are based on criteria such as age, income, number of dependants and can be traced on www.usdoj.gov/victimcompensation/loss_calc.html, *see* J.L. Geraghty, *To Sue or Not to Sue: A look at the legal landscape for victims of 'September 11'*, XXVII AASL 363, at 366-369 (2002).

152 Section 405 (6) Act. Collateral sources refer to 'all collateral sources, including life insurance, pension funds, death benefit programs, and payments by Federal, State, or local governments related to the terrorist-related aircraft crashes of September 11, 2001,' *see* Section 402 (4) Act.

153 Sections 405 (a) (3), 407 Act.

154 Section 405 (c) (1)(2) (A) (i)(ii) Act.

to whom tortfeasors owe a duty of care, the range of eligible claimants has thus been narrowed down by excluding potential claims from individuals that have suffered any form of mental injury or emotional distress unaccompanied by physical harm and may have had a valid claim under negligence.

In view of the fact that individual circumstances such as economic loss are considered by the Special Master, the Fund has been criticized both on the basis of disparities between the highest and lowest awards as on the notion that the high-end awards are too low.[155] As such evaluations on the feasibility of the Fund in comparison to the route of a court claim based on negligence will have to be made by each potential claimant on a case by case basis, the level of success of the Fund can only be determined in hindsight after the time limit of two years after promulgation in which all claims have to be made. This means that the deadline for filing claims has been set at 21 December 2003.[156]

But what does the alternative of tort law as transformed by the legislature into a limited regime of negligence hold in store for potential claimants?

5.10.2 The transformed liability regime based on limited negligence

As has been touched upon in the previous sub-paragraph, a remarkable aspect of the Act is that it has transformed the applicable regime of liability *after* '9/11', by limiting liability for claims arising both from death or personal injuries as well as property damage against all potential defendants up to the amount of insurance coverage. Furthermore, the Act merely provides for a federal cause of action as the exclusive remedy for damages arising out of the hijacking and subsequent crashes of '9/11' before the United States District Court for the Southern District of New York.[157] The Act also provides that the substantive law that governs the case shall be derived from the law and choice of law principles of the State in which the crash occurred.[158]

Taking the general requirements of negligence into account, plaintiffs will have to prove that:

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155 *See* 'Statement of the Special Master Regarding the Progress of the September 11th Victim Compensation Fund', at 1. In the Statement, the Special Master has declared that in general it would be rare for victims to receive less than $250.000 or more than $3.000.000 to $ 4.000.000 tax-free after collateral source offsets.

156 By September 2003, approximately 1250 death claims and 1035 injury claims have been filed with the Fund, *see* K. Semple, *Judge Allows 9/11 Suits to Proceed*, New York Times, 9 September 2003. However, the Special Master has predicted that most potentential applicants will postpone their decision to the end in view of the fact that they have to come to terms with their loss and may want to compare the treatment of other applicants with their own potential treatment out of tactical reasons, *see* Statement of the Special Master at 2.

157 Section 408 (b) (1) (3) Act.

158 Section 408 (b) (2) Act.

1 they suffered damages;
2 the defendants owed a duty of care to the plaintiffs;
3 the defendants breached their duty to the plaintiffs. That requires an analysis of the question whether the defendants' conduct was reasonable by a jury;
4 the breach was the proximate cause of the plaintiffs' damages. In other words, were the terrorist attacks foreseeable to the defendants or could they be qualified as an intervening event breaking the chain of causation?

In what is bound to become complex and mass tort litigation that will take years to resolve, the first important ruling was given on September 9, 2003 by the United States District Judge Hellerstein. His opinion and order denying defendants' motion to dismiss will be partly evaluated in relation to the implicated airlines. The next steps in the litigation process will not be discussed, since no exact predictions can be made on the course of events. At the time of writing, it seems plausible that after the opportunity that is provided by the discovery procedure for parties to request information from one another, the defendants will demand a court ruling on these issues prior to trial in a so-called motion for summary judgment.[159]

In his opinion, Hellerstein particularly focused on the second requirement of duty of care owed by the defendants under negligence and on the important element of foreseeability under negligence. Aside from the implicated airlines, the defendants included the Port Authority of New York and New Jersey, the owners of the World Trade Center in New York, and the Boeing Company.

In their motions to dismiss, the defendants argued that they did not owe duty of care to the victims on the ground and that their injuries were beyond the scope of any foreseeable duty that may have been owed to them, and even if it was owed, the terrorist attacks broke the chain of proximate causation.[160] The subtle underlying acknowledgement of defendants implies that even if they owe a general duty of care to ground victims, this was not the case in the unprecedented terrorist attacks of '9/11'.

The plaintiffs argued that the aviation defendants negligently failed to carry out their duty to secure the aircraft against terrorists and their weapons smuggled aboard. Furthermore, they held that security measures are specifically meant to guard against the risks of hijacking, and that defendants knew or should have known that those risks included risks to third parties on the ground. The last argument that was raised by plaintiffs is of particular interest,

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159 If the judge then rules for the defendants, the case will not go to trial; if he rules for some defendants, only these will be dismissed from the trial, *see* P. Binder, *9-11 Civil Liability Web Site*, at www.gsu.edu. Binder is also quoted in D.B. Henriques and S. Saulny, *Judge permits Sept. 11 lawsuits*, International Herald Tribune Online, 10 September 2003, at www.iht.com.

160 A. K. Hellerstein, *Opinion and Order Denying Defendants' motions to dismiss*, United States Distict Court Southern District of New York, in Re September 11 Litigation, at 4-5.

as it held that 'terrorism was a substantial concern, and that suicidal acts by terrorists seeking to cause death, injury and havoc to as many innocent people as possible *had become a frequently used strategy*.'[161] Perhaps so, but one might add that that strategy was never before carried out by the use of aircraft as manned bombs, and never on such a grand scale.

In order to substantiate his ruling, Hellerstein took the following step by step approach:

a. Airplane crashes in residential areas are not unknown and in such cases, airlines typically recognize responsibility to victims on the ground.[162]

Notably, Hellerstein admits that in such cases, the quantity or quality of tragedy of the '9/11' crashes is not matched. And therein lies an important nuance. For it could also be argued that airlines indeed hold a general responsibility to victims on the ground by operating safely and minimizing the risk of potential aviation accidents as much as is fairly possible. And if things go wrong, airlines will perhaps generally recognize responsiblity to ground victims, as the scale of damages and scope of victims in aviation accidents or incidents that were not deliberately set in motion by unlawful acts will generally be surveyable and insurable.

b. The refutal of the argument that the potential for a limitless liability to an indeterminate class of plaintiffs distinguishes the '9/11' cases of intentional intervening acts from aviation accidents unrelated to terrorism.

The argument raised by the defence that the scope of duty would be unreasonably extended in case of '9/11' in comparison with aviation accidents unrelated to terrorism was refuted by Hellerstein on the basis of the scope of duty criteria of *Madison Ave. Gourmet Foods, Inc*. v. *Finlandia Center, Inc* (2001).[163] In that case, the Court of Appeals limited the scope of duty to those who had suffered personal injury or property damage, and thus excluded those who had merely suffered financial losses. According to Hellerstein, such yardsticks for narrowing down the scope of duty to a foreseeable range of potential plaintiffs could also be applied to the '9/11' cases. In other words, the claims to recover for personal injuries, death, or property damage arising from '9/11' were held to be within the thus defined scope of duty and were not perceived as an impermissable proliferation of claims. This argument is substantiated by the fact that the liability of defendants has been capped by federal statute, which

161 Hellerstein at 8.

162 Hellerstein at 8-9, referring to a string of aviation accidents unrelated to terrorism, such as *Rehm* v. *United States*, 196 F. Supp. 428 (E.D.N.Y. 1961) and *In re Air Crash Disaster at Cove Neck*, 885 F. Supp. 434 (E.D.N.Y. 1995).

163 750 N.E.2d 1097, 1101 (N.Y.2001)(Kaye, Ch.J.).

eliminates the inherent danger of unlimited or insurer-like liability in this case.[164]

Although Hellerstein points out that the type of damage falling under the scope of duty has been neatly demarcated by means of the categories of personal injury or property damage, one could argue that the scope of eligible claimants would then still be enormous in view of the scale of the inflicted damages to persons and property on the ground.

c. The refutal of the argument of 'disproportionate risk and reparation allocation.'

Hellerstein argues that the airlines and airport security companies had a duty to protect against the risks at stake in terms of costs and efficacy, not only to passengers, but also to the public at large.[165]

This point raises the difficult question if such a duty can be stretched as far as to take precautions against the potential risks involved of not merely a hijack, but a manned bomb attack by means of civilian aircraft, without such an event ever happening before. Although such an event might now be foreseeable in hindsight, that was arguably not the case prior to '9/11.'

The question if the reasonable level of protection of passengers and third parties had to include all potential measures in terms of cost and efficacy to prevent the new risk of the use of aircraft as manned bombs thus remains open to debate in my view. The difficulty lies in the all or nothing approach to breach of duty, which holds that if the security companies can be held responsible for those breaches, that responsibility extends to whatever level of damage the hijackers inflict.[166]

If a visitor of my house suddenly leaps from the second floor balcony, without any prior warning or indication, and thereby causes personal injuries to downfloor neighbours in the garden, would I be held to be in breach of a duty of care owed to my neighbours? Even if one takes into account that the costs of raising the balcony balustrade so as to make such an act impossible would have been reasonable, this still seems a far fetching level of required duty of care. For I had no reason to suspect that any visitor would commit such an act. In my view, the normal height of the balustrade would qualify as a sufficient guarantee for the duty of care owed to the neighbours, as that would sufficiently prevent people falling from the balcony.

164 Hellerstein at 11-13.
165 Hellerstein at 13-14.
166 Tompkins at 10.

d. The notion that recognition of a duty of the defendants would not substantially expand or create 'new channels of liability'.

By means of this argument, Hellerstein draws a comparison between negligence for surface damage on the basis of a number of aviation cases and negligence in regulating the boarding of airplanes and comes to the conclusion that both scenarios are governed by the same underlying principle that air carriers owe a duty to both passengers and people on the ground.[167]

Although that line of reasoning may be generally true, the same point of critique as has been raised under point c. can be made. For the 'normal' security measures prior to '9/11' may also very well be qualified as up to the standards of protection of the time, as the extreme risks of the '9/11' attack could not have been predicted prior to '9/11'.

e. Foreseeability.

The argument raised by the defence that the events of '9/11' were not within the scope of reasonably foreseeable risks was weighed by Hellerstein on the basis of criteria such as the relationship to such plaintiffs, the question whether they were within a zone of foreseeable harm, and whether the harm was within the class of reasonably foreseeable hazards that the duty exists to prevent.[168] In short, Hellerstein held that the precise manner in which the harm was inflicted need not be perfectly predicted. Thus, a certain unexpected way in which harm is brought about could also lead to liability. It is unfortunate that Hellerstein has not delved more deeply into this very important issue. As has also been argued under a number of previous points, the crucial element of foreseeability of the events of '9/11' in terms of duty owed to the victims remains controversial.

On the basis of these considerations, Hellerstein came to the following conclusion:

> Construing the factual allegations in the light most favorable to plaintiffs, I conclude that the crash of the airplanes was within the class of foreseeable hazards resulting from negligently performed security screening. While it may be true that terrorists

167 Hellerstein at 14-15

168 Hellerstein at 15-16. Reference is made to the landmark case of *Palsgraf* v. *Long Island R.R. Co.*, 162 N.E. 99, 100-01 (N.Y. 1928); unfortunately the manner in which the *Palsgraf*-test has been applied is not specifically mentioned in the ruling. In the landmark *Palsgraf*-case, the plaintiff was held to be unforeseeable by Judge Cardozo. Notably, the dissenting opinion went further by holding that due care is a duty imposed upon each of us to protect society from unnecessary danger, not to protect A, B, or C alone. Thus, duty is extended to the world at large, which would include persons outside of what would generally be thought of as the danger zone.

> had not before deliberately flown airplanes into buildings, the airlines reasonably could foresee that crashes causing death and destruction on the ground was a hazard that would arise should hijackers take control of a plane. The intrusion by terrorists into the cockpit, coupled with the volatility of a hijacking situation, creates a foreseeable risk that hijacked airplanes might crash, jeopardizing innocent lives on the ground as well as in the airplane. While the crashes into the particular locations of the World Trade Center, Pentagon, and Shanksville field may not have been foreseen, the duty to screen passengers and items brought on board existed to prevent harms not only to passengers and crew, but also to the ground victims resulting from the crashes of hijacked planes, including the four planes hijacked on September 11.[169]

And here lies the heart of the problem: for one could also argue that the hazard of death and destruction on the ground was not a risk that could have been foreseen to that extent, even with the foreseeable risk of intrusion by terrorists into the cockpit normal to any hijack, for the simple reason that no hijack prior to '9/11' had the aim to deliberately direct the hijacked aircraft into a number of preordained targets. And that aim automatically will most likely give rise to a vastly more substantial level of damages than other cases of potential surface damage, even if they arise due to hijacking, as the aim of hijacks to this date has not been to use aircraft as manned bombs directed at targets with the aim of as much damage as possible. For if an aircraft would merely crash due to a struggle in the cockpit between the pilots and the hijacker(s), the careful prediction can be made that subsequent surface damage will most likely be far less severe than if an aircraft is deliberately steered into a target with the aim of destruction.

However, it should be borne in mind that Hellerstein's ruling is merely a denial of the motions to dismiss the complaints of the defendants, which paves the way to the next stage of discovery of the lawsuits at hand. And in view of the fact that potential liability of the implicated aircraft has been capped anyhow and that not all potential victims are eligible under the Fund, it seems reasonable as such that the cases at least are permitted to go to trial.

A great number of substantive issues have specifically not been dealt with, such as the reasonableness of the defendants' conduct or the proximate cause of the suffered damage, or even the question whether the terrorist attacks can ultimately be constituted as an intervening act that would break the chain of causation.[170] All these issues will have to be resolved in later stages of litigation.

In the next sub-paragraph, a comparative assessment will be made of the alternatives of the Fund and litigation.

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169 Hellerstein at 17.

170 This is also specifically stated in the ruling by Hellerstein at 12.

5.10.3 A comparative assessment of the Act and the litigation route

The main problem of the aftermath of '9/11' is of course the unprecedented enormity of the damage, both in terms of death and personal injury toll as in terms of property damage. The prompt creation and enactment of the Act can be seen as at least a stopgap and at most as a crafty and in any case absolutely necessary move in order to preserve the viability of air transportation and to compensate a number of defined victims by means of the Fund.

Despite possible questions on constitutionality, the Act has also substantially affected the traditional tort route of litigation by capping the liability of the implicated air carriers to the levels of acquired liability insurance, which protects them against potential bankruptcy arising from litigation. In short, the only conclusion as to the option of ground victims that are eligible for the Fund of either applying for the guaranteed route of at least partial compensation by the Fund or the far longer and more uncertain route of litigation, is that they are faced with the devil's alternative.

If they opt for the litigation route, the plaintiffs will have to bear in mind that liability of the implicated air carriers has been capped. Taking into account that the liability policy coverage of the implicated United and American carriers amounts to approximately $1.5 Billion per aircraft/accident, this means that for the impact on the Twin Towers alone, the total coverage of $ 3 Billion of the two aircraft will have to be distributed proportionately between all eligible second and third party claimants. In view of the enormous number of thousands of potential claimants, these figures lead to the inevitable conclusion that next to nothing can be gained from tort law for claimants in the '9/11' cases.[171] Furthermore, negligence of the implicated air carriers or other defendants may not necessarily be proven, if for instance, the conduct of defendants is qualified as reasonable by the jury or the terrorist attacks are qualified as an intervening event breaking the chain of causation.

Aside from such considerations, plaintiffs that are also eligible under the Fund will have to compete with categories of claimants that are not and are thus forced to resort to tort law, such as people who suffered emotional distress unaccompanied by physical harm.

And finally, the problem of deadlines both for appeal to the Fund as well as for filing wrongful-death lawsuits raises immediate problems for the victims and their families. For the Fund deadline is December 22, 2003 and the formal deadline for litigation was September 10, 2003. However, New York State has extended that deadline until March 2004, which raises the question whether

171 Tompkins remarked that each claimant could wind up collecting 1 or 2 cents on the dollar of proven damages, if anything, at the end of the day, *see* Tompkins at 12.

families living outside of the state are also allowed to profit from that extension.[172]

F FINAL REMARKS AND CONCLUSIONS ON THE DEVELOPMENTS IN THE UNITED STATES

5.11 FINAL REMARKS AND CONCLUSIONS

In the United States, a common law rule of absolute liability for surface damage inflicted by the activity of flying has been based on seven main arguments as derived from *Rylands* v. *Fletcher* as well as both Restatement of Torts. Recapitulating, these arguments held that

- third parties are helpless to avoid surface damage;
- flying can be qualified as an ultrahazardous activity;
- it is impossible to prove the cause(s) of aviation accidents;
- aviation has not yet reached the stage of development where its risks should be borne by those who suffer the harm rather than by the aviation industry;
- the notion that relatively few persons or entities are involved in the activity of flying;
- the one-sidedness of the acitivity of flying in terms of profits for the industry and risks to third parties;
- the notion that the aviation industry is better equipped to insure itself against potential risks than third parties.

The common law basis of trespass has also been applied to the problem of surface damage in the past on the grounds that aviation was perceived as an ultrahazardous activity. However, in due course of time, most courts stopped qualifying aviation as ultrahazardous and generally added the requirement of proof of an intentional act to the basis of trespass, which in effect meant that negligence had to be proven. The basis of nuisance has been seen to be more suitable for claims based on loss of enjoyment of property, etc, than for cases involving direct invasion of aircraft, e.g. due to forced landings or crashes. Furthermore, nuisance claims are generally directed against airport operators as opposed to aircraft operators.

Sections 4 and 5 of the Uniform Aeronautics Act created a more solid statutory basis of absolute liability, which was implemented by a gradually declining number of jurisdictions. The number of such regimes still in force in the United States has declined to six. That decline can be attributed to the same notion that aviation is not considered ultrahazardous anymore by the State legislatures. It should be borne in mind that such regimes have not been

172 *See* Henriques and Saulny, at 1.

found to be unconstitutional in a number of cases. Since all other attempts at more uniformity in legislation have failed, negligence has been victorious in this field in the United States. Supporters of this move to negligence often refer to the applicablity of the doctrine of res ipsa loquitur; however, as has been established earlier, that doctrine is not always available, nor can its varying criteria always be easily met. This means that victims of surface damage are often faced with the full brunt of negligence, which ultimately may lead to the situation that their damages are not compensated, as in the discussed case of *Crosby* v. *Cox Aircraft Co*.[173]

Other potentially unfair consequences of negligence are revealed upon closer scrutiny of persons that can be held liable under that main heading of liability. For the applicability of the doctrine of respondeat superior may lead to the situation where the owner of the aircraft escapes liability if the pilot caused damage while he was officially not acting within the scope of his employment. And this brings us to the heart of the problem: the notion that the general application of negligence can lead to unjustifiable results and has been based too meagrely on the mere change of perception of the dangers of flying. As Prosser and Keeton have acknowledged, the question of surface damage has as yet not been finally determined. However, their suggestion to only retain absolute liability in cases of 'abnormal' aviation, which would include scenarios of stunt flying, crop dusting, experimental aircraft, and sonic booms, and to leave the risks of normal aviation to negligence, can hardly be qualified as satisfactory in view of the problems that third parties can also face in the quest for proof of negligence in such 'normal' cases, of which the effects can be no less disastrous.[174] And this brings the dissenting opinion of the *Crosby*-case against application of negligence back into the picture, which related to the defendant's exclusive causation of harm as opposed to a "wholly innocent, nonactive, nonbenefitted homeowner into whose home an airplane suddenly crashes."[175]

The usual string of policy arguments in favour of absolute liability also keeps ringing true, which include the non-admissability of NTSB reports as to probable cause in civil litigation and the theory of enterprise liability and its link to enterprise insurability. As a whole, from a socio-economic perspective, and even in absence of the criteria of ultrahazardousness of the activity of flying, absolute liability generally seems a more fair basis of liability than negligence in this field in principle.[176]

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173 *See* sub-paragraph 2.5.1 of this study.

174 *See* Prosser and Keeton, at 558, who admit that rapid technological changes would also make such a classification difficult to explain.

175 *See* the citation in Restatement of the Law Third, Council Draft No.2 (September 26, 2000), at 131.

176 *Notes* at 67-70, 74-75. However, it should be acknowledged that all factual evidence gathered by the NTSB in the course of its investigations is permissable in civil litigation (information received from G.N. Tompkins, Jr.).

As an admission to the overall governance of negligence, it can be conceded that in actual practice, application of negligence generally has not given rise to substantial problems in the United States, as air carriers and aircraft operators and their insurers will generally be willing to settle claims out of court and are not likely to dispute negligence.[177] But even in such cases, a plea in principle can be made for absolute liability, as that could strengthen the bargaining position of those seeking compensation.[178] And such a plea can particularly be directed at cases of surface damage inflicted by smaller private aircraft involved in general aviation. For they may prove less willing to settle on the basis of negligence, as they have less to lose publicly by not settling than major airlines that are far more exposed to media attention in the aftermath of major aviation accidents.

As the main exception to any current rule and any level of 'normally' inflicted damage to third parties by aviation accidents or incidents, the catastrophic events of September 11, 2001 stand alone in their enormity. These massive events have given rise to a great number of legal and practical problems and are bound to do so for years to come.

The far reaching Congressional solution of the Air Transportation Safety and System Stabilization Act has been seen to provide a solution both for the continuing viability of civil aviation in the United States as for the victims that are eligible for compensation under the Fund. A remarkable aspect of the Act is that it has capped liability of the implicated air carriers after the event took place. As has been established in this study, such a limitation can be justified in principle on the grounds that catastrophic events should not be borne by aviation alone, especially if perceived as not specifically directed against the implicated air carriers or the victims, but against the Unites States as a whole.

As those seeking redress in litigation will have to prove negligence, the evolving case law in this field is predicted to give rise to a whole new kaleidoscope of interpretations of the applicable criteria of negligence in relation to unlawful acts. But, as has also sadly been demonstrated, the main problem remains that the enormity of the damages will only be partly compensated by the Fund and most likely next to nil through litigation in view of the capped liability of the implicated air carriers, although the latter move is understandable in order to preserve their existence.

In relation to the general plea for absolute liability in this field, it is evident that a combination of absolute and unlimited liability would prove fatal for the implicated air carriers in case of unlawful acts of the enormity of '9/11'. However, as has been established in this study, specific provisions for unlawful use could be enacted within absolute liability regimes. Solutions could lie in the capping of liability of the operator up to the levels of mandatory insurance

177 Information received by G.N. Tompkins, Jr.
178 *See* the similar argument raised in paragraph 1.2 of this study.

in cases of unlawful use, or by leaving the operator the defence that he has taken all necessary measures to prevent such use.[179] But such solutions admittedly still allow plaintiffs to rely on negligence. A more radical solution for damage brought about by extreme cases of terrorism involving aircraft would be to completely exclude them from the scope of any liability regime. Such immunity of the aircraft operators from liability caused by severe unlawful acts could be justified on the grounds that both the aircraft operators or air carriers and their passengers as well as the people on the ground are perceived as victims of those attacks, which are held to be directed against the State at large. But if such a legislative approach is taken, feasible alternatives to tort law will evidently have to set up in the form of solid compensation Funds for the victims and adequate measures to guarantee continued viability of the aviation industry.

179 *See, e.g.*, the Swiss and Australian absolute liability regimes respectively in sub-paragraphs 4.3.4 and 4.3.5 of this study.

6 Final pointers and arguments for specific regimes of liability and insurance requirements for surface damage inflicted by aircraft

6.1 INTRODUCTION

In this study, an evaluation has been made of the theoretical underpinnings and actual liability regimes and third party insurance requirements in force or lack of them on an international, supranational and national levels for damage inflicted to third parties on the surface of the earth by aircraft. In this chapter, pointers will be given to our 'fictitious' legislator on the most preferable manner to deal with the problem of surface damage on a legislative level. All the main issues that are of relevance in the quest for specific regimes of liability will be re-evaluated on a step by step basis per paragraph, similar to the approach of this study as a whole. First, the scenarios of conduct of aircraft that are capable of inflicting surface damage will be enumerated (6.2). Next, the merits and demerits of not codifying any regime, but leaving the problem of surface damage to the applicable national rules of fault liability or negligence will be discussed (6.3). The main alternative of- and justifications for a specific regime based on absolute or strict liability will subsequently be evaluated (6.4). Next, variations in potential scope of a regime based on absolute or strict liability and the arguments for such variations will be taken into account (6.5). The persons or entities that should be addressed by such a specific regime will subsequently be reviewed (6.6). The question whether such a specific regime should be based on limited or unlimited liability will then be dealt with (6.7). An evaluation of third party liability insurance or other security requirements and the problem of insurability will then be made (6.8). The feasibility of specific liability regimes in this field on an international, supranational, or national level will subsequently be addressed (6.9). In view of the impact of the terrorist attacks on the United States of September 11, 2001, a number of problems that can arise in relation to liability and insurance in cases of unlawful use will be evaluated separately (6.10). The evaluation of preferred and actual third party liability regimes and insurance requirements in this field will end at the point of departure of this study: the Bijlmer air disaster. The recommendations derived from this study will be applied to the Bijlmer air disaster in order to demonstrate their effects (6.11).

6.2 SCENARIO'S OF CONDUCT OF AIRCRAFT AND SURFACE DAMAGE

As a starting point to any consideration on the necessity of a specific regime of liability in this field, an assessment of how damage can be inflicted by aircraft is necessary in order to determine the potential scope of such a regime. Thus, the first issue raised in this study concerned the question which range of conduct of aircraft is capable of inflicting which types of surface damage.[1] Although the potential scenarios of surface damage are innumerable if taken strictly on a case by case basis, a choice was made to narrow all such scenarios down to three main scenarios in this study. Such a classification was deemed to be a useful tool to help any legislature determine the scope of a potential liability regime in this field.

The scope of the first and potentially most severe scenario of surface damage was determined by the yardsticks of 'direct contact' or 'impact' of the aircraft or parts, components, objects, persons, or cargo carried by the aircraft. The first scenario thus primarily covers cases of genuine accidents of one or more aircraft, in which the damage on the ground is caused by the impact of the aircraft or its parts, objects, persons on board, or cargo. Cases of damage inflicted by the activity of cropdusting could also be categorized under the first scenario, since direct contact with the sprayed chemicals can also lead to damage on the ground.[2]

The second and third scenarios involved surface damage inflicted by aircraft in situations of overflight without any physical contact between the aircraft and persons or property on the ground. A rather broad distinction has been made between a second scenario of aircraft flying in non-conformity with air traffic regulations and a third scenario of aircraft flying in conformity with air traffic regulations. The second scenario refers to aircraft flying too low. Too low overflight, whether repetitive or sudden, can lead to various forms of personal injuries or property damage. The element of suddenness, for instance, can lead to reactions of fright and subsequently to damage. Examples of bolting horses and of a person driving her car against a tree out of fright have been given in the sphere of personal injuries. In the area of property damage, an example of a roof that partly collapsed due to the rotations of the blades of a low-flying helicopter has been described. The criteria of 'too' low overflight or flight 'in non-conformity with air traffic regulations' have deliberately been used to distinguish this scenario from damage caused by 'normal' overflight in conformity with air traffic regulations. For the former scenario can generally be qualified as unlawful, unless the alleged tortfeasor can justify his conduct by invoking a defence under the liability regime at hand, whereas the latter scenario is generally lawful. Another presumption underlying the distinction between the two scenarios is that damage caused

1 *See* paragraph 1.2 of this study.
2 *See* sub-paragraph 2.2.1 of this study.

by normal overflight will generally be less severe than damage caused by too low general and especially too low sudden overflight. For normal overflight will normally only give rise to more intangible forms of damage arising from nuisance or noise, loss of enjoyment of property or property devaluation, whereas too low overflight can potentially lead to more serious forms of personal injury or tangible property damage. However, borderline cases between lawful and unlawful overflight can easily be envisaged in which the subsequent damage is strongly comparable in terms of severity, for instance in cases of damage caused by sonic boom of aircraft.[3]

In sum, no definitive distinctions can be made between the second scenario and third scenario. Criteria such as 'suddenness', 'too low overflight' and 'in non conformity with air traffic regulations' are only meant to serve as potential yardsticks for determining the potential scope of a specific liability regime in this field. As a whole, the most important distinction between the first scenario on the one hand and the second and third scenarios on the other hand lies in the 'impact' criterion. As will be seen in more detail in paragraph 6.5, the 'impact' criterion can both serve as an important justification for more a specific regime based on absolute or strict liability and as a workable tool to narrow down the scope of a specific regime.

6.3 LIABILITY BASED ON FAULT OR NEGLIGENCE

The second main question that was raised in this study concerned the question which regimes can be codified to cover third party liability of operators or owners of aircraft and what the scope of such regimes is.[4]

As a starting point on the first part of the question whether specific liability regimes are deemed necessary for surface damage inflicted by aircraft, a brief description was given of the general headings of fault liability and negligence under civil and common law jurisdictions. Despite their inherent differences, these general headings of fault liability have in common that they are based on the requirements of unlawfulness, fault, damage, and a causal connection between the unlawful act and the damage under civil law systems and a breach of the duty of care, causation, and damage under common law systems. Furthermore, these general headings of general fault liability and negligence both allow potential defendants to disprove their fault or negligence by invoking a number of defences, such as force majeure or Act of God, act of a third party, and contributory negligence.[5]

One could argue that no special rules are needed for the specific problem of surface damage inflicted by aircraft to third parties, as the latter can base

3 See sub-paragraphs 2.2.2 – 2.2.4 of this study.
4 *See* paragraph 1.2 of this study.
5 *See* paragraphs 2.3 and 2.4 of this study.

their claims against implicated aircraft owners or operators on the applicable rules of fault liability under civil law systems or negligence or other applicable headings of liability under common law systems. For one of the great advantages of the rather amorphous headings of fault liability and negligence is that they are potentially applicable to any scenario of potential harm inflicted by any alleged tortfeasor.

Dependant on the circumstances of the case, the burden of meeting all of the necessary criteria of fault liability or negligence can even be softened by presumptions of fault under the former or the doctrine of res ipsa loquitur under the latter.

Dependant on the common law jurisdiction at hand and the court seized of the case, the doctrine of res ipsa loquitur either gives rise a presumption of negligence, a reversal of the burden of proof, or simply a possibility for the defendant to give his view on the alleged cause(s) of the accident. However, the doctrine does not automatically apply to all cases of damage inflicted by aircraft, but can depend on a number of criteria which have to be met. In a number of aviation cases, courts have rejected application of the doctrine on the grounds that the aircraft was not established to be under exclusive control of the defendant or that it was not an unusual occurrence for an airplane to crash without the intervention of a human agency. Another reason for rejection of the doctrine was based on the notion that court experience was not qualified as sufficiently uniform to justify a presumption that aviation accidents do not happen in the absence of negligence.[6] And even in cases where a reversal of the burden of proof or invocation of the doctrine of res ipsa loquitur have been permitted, disproof of alleged fault or negligence is still allowed. This could succeed by claiming that the accident was inevitable or unavoidable. The doctrine is not often relied upon in aviation litigation in the United States nowadays, since plaintiffs' attorneys fear that the defendants may indeed convince the jury that the accident was caused by events other than a lack of due care of the operator.[7]

Furthermore, the general regimes of negligence or fault liability provide alleged tortfeasors with a number of important defences such as Act of God or force majeure in order to escape liability.

In short, the application of general rules of fault liability or negligence can lead to situations in which victims of surface damage may have difficulties in positively proving that the operator, owner, and/or pilots were at fault or negligent. Specifically in cases of surface damage caused by the first scenario of actual aviation accidents, proof of the exact causes and of fault or negligence of the implicated pilot(s) or operator(s) can be difficult to obtain in view of the inherent complexities of most aviation disasters. Potential causes can include birdstrikes, pilot errors, meteorological conditions, faulty engineering,

6 *See* paragraphs 2.4.3 and 2.5.1 of this study.
7 *See* sub-paragraph 5.7.1 of this study.

construction and/or maintenance errors or intricate combinations of such causes. Plaintiffs may then be forced to rely on aircraft accident investigation reports of national accident investigation agencies in their quest for proof, which can give rise to other problems. For such reports are officially not intended for the purpose of establishing civil liability, often take a while to be released, and need not necessarily be accepted as evidence by courts.[8]

If persuaded by such arguments against the application of general negligence or fault liability in this field, the fictitious legislator could decide to address the problem of liability for surface damage by means of a tailor-made regime of liability. This brings the alternative of regimes based on absolute or strict liability and their justifications in the picture.

6.4 Regimes based on absolute or strict liability

Although the concepts of absolute and strict liability are often defined synonymously as liability without fault, their subtly differing distinctions have been evaluated on the basis of the definitions put forward by Bin Cheng. Strict liability has thus been held to be based on the criteria of *an author of an act – causing – damage*, while all similar defences of fault liability or negligence except those aimed to disproving fault have been maintained. Absolute liability, on the other hand, arises when the criteria *person in a prescribed relationship to a specific circumstance – such circumstance arising and causing damage* are met. As opposed to strict liability, the requirement that the damage has to be caused by the person to be held liable has thus been abandoned, nor are the normal defences available. However, regimes based on absolute liability do not dispense with all potential defences. Defences such as contributory negligence, armed conflicts, and grave natural disasters can be made available to the person(s) addressed by the absolute liability regime.[9]

Furthermore, the requirement of causation is less pronounced under absolute liability, although causal requirements will generally be linked to the circumstances that have to be met in order for liability to arise. However, it should be borne in mind that the aforementioned definitions need not be applied rigidly and that the best guidelines for the type of liability are provided by the actual regime at hand.

6.4.1 Justifications for absolute or strict liability

As a starting point, the legislature – whether on an international, supranational, or national level – can thus take legislative action by creating a specific regime

8 *See* paragraph 2.7 of this study.
9 *See* paragraph 2.6 of this study.

based on absolute or strict liability for surface damage inflicted by aircraft on the following grounds, which have been enumerated in this study:

1 the burden of loss should fall on the person who by his own free will and for his own benefit voluntarily chooses to fly in stead of on wholly innocent, non-active and non-benefitted third parties on the surface who consequently suffer damage, which they are unable to avoid. In sum, the rationale for this justification lies in the eminent position of aircraft toward third parties on the surface;
2 The fact that the causes of the accident and fault or negligence of the operators of the implicated aircraft can be difficult to prove, even with the aid of doctrines such as res ipsa loquitur, which can not be invoked successfully in every accident or incident;
3 The perception of the inherent dangerous qualities of certain things or activities of of them becoming dangerous when used improperly. Or more specifically, the qualification of aircraft as dangerous instrumentalities. The related argument that aviation has not yet reached the stage of development where the risks of accidental physical harm to persons or to land or chattels is properly to be borne by those who suffer the harm, rather than by the industry itself can also be put forward in that context;
4 The notion that relatively few persons or entities are involved in the activity of flying;
5 The balancing of the use of the activity to society in general and the potential harm it can create to certain members of society;
6 The economically founded argument of the relatively common and easy availability of insurance coverage for the entities that choose to take the risk of the activity rather than letting the risk fall on innocent parties or their insurance coverage for such risks. In other words, the ability of the aviation industry to distribute potential losses as part of its operational costs (insurability).
7 Absolute or strict liability is the corollary to the freedom of flying over private property. This argument is substantiated by the fact that property owners generally cannot prevent overflight legally.
8 The more spurious argument that current developments in international air law and European Community law in the field of passenger liability have also moved in the direction of regimes based on (capped) absolute liability.

On the basis of one or more of these justifications, the international regime of the system of Rome as well as a number of national regimes that have been evaluated in this study have all been based on absolute liability, albeit with variations in scope, persons liable, limitations etc.[10]

10 *See* Chapters 3 and 4 of this study.

As has been established in the course of this study, most of these justifications for absolute or strict liability ring true universally and on a timeless level, that is, independent of the question where or when the aviation accident or incident that causes damage to persons and/or property on the surface takes place. This is especially true for the first, second, fifth, and seventh justification. Generally speaking, this can also be said for the sixth argument: for what party is more justifiably and better equipped to insure itself against the risks of surface damage than the person engaged in the activity as opposed to all the potential victims that may suffer from the risks posed by the activity? However, an important exception to this general observation can be put forward in relation to insurability of the specific risks posed by war and terrorism in the aftermath of '9/11', which will be addressed separately.[11]

As to the question why not to simply let aircraft be covered by the specific regimes of liability for things as have been codified in certain civil law jurisdictions, such as France and the Netherlands, the objection can be raised that such regimes are based on strict as opposed to absolute liability and allow the important defence of force majeure to be invoked by the possessors of such things. Under regimes of absolute liability that defence has been abandoned, which makes sense in the field of air law, as meteorological conditions can play a significant role in aviation accidents.

As has been described in this study, the majority of jurisdictions in the United States have moved the away from absolute liability to negligence. In the past, third party liability in this field was governed by unwritten absolute liability under common law and a number of specific statutory regimes based on absolute liability in a great number of jurisdictions in the United States.[12]

In due course of time, absolute liability was generally abandoned in favor of negligence on the notion that aviation is not considered to be an ultra- or extrahazardous activity anymore by most legislatures and courts. But the inherent flaw of this line of reasoning has also been exposed: for the notion of not perceiving aviation as ultrahazardous anymore does not make it any easier to prove negligence for those unfortunate enough to suffer damage in times when aviation is considered 'safe.' In my view, concepts such as 'danger', 'ultrahazardousness' or 'extrahazardousness' should at most serve as yardsticks to generally illustrate the fact that aircraft can cause serious damage on the surface by crashing, but not as criteria to substantiate that aviation should be perceived as a safe activity at some point in time if analysed statistically. Statistics should therefore not play a role at all in the determination of the appropriate basis of liability, as the causes of any single aviation accident can be difficult to prove, irrespective of the number of aviation accidents that occur in a certain period of time.

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11 *See* paragraphs 6.8, and 6.10 of this study.
12 *See* paragraphs 5.2 – 5.4, 5.6 of this study.

As has been touched upon in the previous paragraph, another advantage of the application of absolute liability in this field is that plaintiffs need no longer necessarily rely on accident reports of national safety boards, as the exact causes of the aviation accident or incident at hand no longer play a substantial role in the determination of liability.

6.5 Scope of absolute liability

In order to address the question what range of conduct should be covered by specific regimes based on absolute liability, a combination must be made between the sketched scenarios of aircraft inflicting surface damage and the arguments that have been enumerated in favor of absolute liability. Furthermore, the comparative overview of international and national regimes in force in this field can provide guidelines in that area.

As has been described, the first scenario of surface damage inflicted by direct contact or impact of one or more aircraft or parts, components, objects, or persons (falling) from the aircraft is capable of inflicting the most severe forms of potential personal injuries and property damage. Practically all of the arguments raised in the previous paragraph justify that this scenario should be brought under the scope of absolute liability. The only controversial argument against absolute liability that aviation is no longer considered an ultrahazardous activity has been exposed as unjust on the grounds that aviation disasters should not be considered statistically, but on a case by case basis. And on that basis, absolute liability guarantees that potential victims are not bothered by problems of proof of the exact causes of the accident in order to substantiate their claims against the implicated operator(s) or owner(s) of the aircraft. It is therefore not surprising that the scope of all specific international and national absolute liability regimes under review in this study encompasses the first scenario.

The next two scenarios, although categorized separately as surface damage caused by too low overflight in non-conformity with air traffic regulations and surface damage caused by 'normal' overflight in conformity with air traffic regulations, at least have in common that the implicated aircraft stay in the air and do not crash.

Is it justifiable that under certain conditions a mere causal link between an aircraft in flight and subsequent surface damage should automatically give rise to liability of the operator(s) or owner(s) of the implicated aircraft? That question has proven difficult.

Useful discussions on this issue have been derived from the drafting procedures of the Rome Convention of 1952. At that time, the drafting Sub-Committee was in favor of limiting the scope of absolute liability to the first scenario of damage arising from direct contact with the aircraft or things or objects, etc. falling therefrom. However, a number of delegates opposed such

a limited scope of liability on the grounds that that would exclude damage caused by scenarios such as airstream of propellors, fire, explosions, or extraordinary noise. At this stage, it should be remarked that scenarios involving fire or explosions of the aircraft can be categorized under the first scenario. For such scenarios can be construed as the result of impact of the aircraft or parts of the aircraft.

The core problem thus comes down to the question whether and if so, under which precise circumstances, damage caused by mere overflight should lead to absolute liability. The Rome Convention of 1952 provides an interesting test case for that problem. The scope of absolute liability of the Rome Convention at least makes clear that damage resulting from the mere fact of passage of the aircraft through the airspace in conformity with air traffic regulations has been excluded. Ergo, the third scenario of 'normal' overflight can not give rise to absolute liability, even if the subsequent surface damage can be qualified as serious.

The question of scope of absolute liability is thus narrowed down to scenarios of potential damage inflicted by aircraft in non-conformity with air traffic regulations. Although earlier drafts of the Rome Convention of 1952 completely excluded recoverability of damage caused by noise, the current wording of Article 1(1) of the Rome Convention remains ambiguous.[13]

The problem was neither resolved during the International Conference on Air Law in 1978, in which the Montreal Protocol was drafted. Another related unresolved issue that came up during that Conference concerned the potential recoverability of damage caused by sonic booms of supersonic aircraft. However, it did become apparent during that Conference that a number of important aviation nations, such as the United States and Great Britain, were opposed to a regime of absolute liability which encompassed surface damage inflicted by noise.[14]

A number of national air law regimes based on absolute liability that have been reviewed in this study allow recoverability of surface damage inflicted by noise under certain conditions. Examples include the French, German and Austrian regimes. The French regime only permits claims based on extremely serious cases of noise-related surface damage, e.g. sonic booms. The German and Austrian regime have based the scope of their absolute liability regimes in this field on the criterion of an 'accident', which has been defined as a sudden external and unforeseeable event causing personal injuries or property damage, including sonic booms.[15]

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13 *See* sub-paragraph 3.3.2 of this study. Unfortunately, the current wording of Article 3 of the ICAO Draft Convention has as of yet not resolved this issue either, *see* sub-paragraph 3.11.1 of this study.

14 *See* sub-paragraph 3.9.2 of this study.

15 *See* sub-paragraphs 4.4.1 and 4.4.2 of this study.

On the other hand, the Australian regime has completely excluded scenarios of surface damage caused by noise by making absolute liability dependant on the impact with an aircraft or from contact with objects or parts that have fallen from the aircraft.[16] In my opinion, a lot can be said for this solution. For it should be borne in mind that absolute liability is the most severe form of liability possible with practically no defences left to the operators or owners of aircraft except contributory negligence. And an important justification for absolute liability in this field lies in the notion that fault or negligence can be difficult to prove. This is certainly true in many cases involving genuine accidents in which one or more aircraft actually crash. But the argument is less convincing in cases of noise-related damage, however severe. For in such cases, the pilots will always be able to testify, the CVR and FDR data of the flight will be easily obtainable, and the aircraft will always be intact. In other words, proof that an aircraft operator or owner unlawfully inflicted noise-related damage is far more easy to furnish than in cases of genuine aviation accidents. In my view, the scope of any regime of absolute liability in this field should thus be narrowed down to the first scenario of damage caused by impact of (parts of) the aircraft or things falling from the aircraft. Such a narrow scope of absolute liability could also serve as a first justifiable 'quid pro quo' for the severe basis of absolute liability.

Another issue related to the scope of absolute liability concerns the question to what extent damage caused by the aircraft whilst not yet airborne should be encompassed in the regime. Criteria such as 'operational movements' employed by the German regime can be of aid. Under the German regime, operational movements are held to commence whilst the aircraft is stationary and being loaded or unloaded and when passengers are embarking or disembarking and end when the aircraft is finally parked or towed away. The English regime specifically encompasses the scenarios of flight, take-off and landing. The Australian regime makes use of an even more detailed categorization of the phrase 'in flight', dependant on the type of aircraft involved. However, normal taxiing maneuvers have been specifically excluded from the scope of the Australian regime.

6.6 Persons liable. Types of aircraft

The third question posed in the introduction to this study concerned the issue which persons or entities should be addressed and which types of aircraft

16 *See* paragraph 4.4.5 of this study.

should be covered by the specific regimes of liability for surface damage.[17] The main options consist of the operators and owners of aircraft.[18]

The operator can generally be defined as the entity (person, organization, or enterprise) engaged in, or offering to engage in an aircraft operation. Although the operator will normally be the entity that both uses the aircraft and profits economically from such use, difficulties can arise if the aircraft is controlled by one entity, whereas another entity profits economically.[19] Plain logic would dictate that the actual user/operator should be held absolutely liable as the person in control of the aircraft at the time of the accident or incident involving surface damage. Under French legal doctrine, this problem has not been clarified.[20] The German liability regime has opted for joint and several liability of the user and the original operator in cases of short use.[21]

The other main entity is the owner of the aircraft. If the owner and operator of the aircraft are one and the same person or entity, no specific difficulties will arise. If the owner of the aircraft is not engaged in the operation of the aircraft, but can merely be qualified as the financier or lessor, the legislature should specifically make a distinction between those two entities in order to guarantee that the specific liability regime does not apply to the financiers or lessors of the aircraft.

Under the Rome Convention of 1952, the regime of absolute liability is primarily attributed to the operator of the aircraft. The main rule holds the operator to be the person who was making use of the aircraft at the time the damage was caused. However, if control of the navigation of the aircraft was retained by the person from whom the right to make use of the aircraft was derived, that person is considered to be the operator. The registered owner is presumed to be the operator and can be held liable upon proof of the contrary.[22]

Under most of the national liability regimes that have been reviewed, liability is also primarily attributed to the operators of aircraft, although the exact definitions of that entity vary slightly per regime.[23] In some cases, the owner can also be held liable under the regime at hand under certain conditions.[24]

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17 *See* paragraph 1.2 of this study.

18 Unlawful use will be dealt with separately in paragraph 6.10 of this study in relation to the terrorist attacks of '9/11' in the United States.

19 As has been touched upon in (sub-) paragraphs 2.9 and 4.3.1 of this study, this has led to a divergence of opinion concerning the entity that should be liable under the French liability regime.

20 *See* sub-paragraph 4.3.1 of this study.

21 *See* sub-paragraph 4.3.2 of this study.

22 *See* sub-paragraph 3.4.1 of this study.

23 Exceptions to the rule include the English Civil Aviation Act, which attributes liability to the owner of the aircraft, *see* sub-paragraph 4.3.3 of this study. However, upon closer scrutiny, this generally comes down to the actual operator of the aircraft.

24 *See, e.g.*, sub-paragraphs 4.3.1 and 4.3.5 on the French and Australian regime in that context.

In the aftermath of the terrorist attacks of '9/11' in the United States, the problem of liability of aircraft operators for unlawful use and/or wrongful taking of aircraft has regained enormous importance. Incidentally, that problem provides yet another implicit argument to enact specific regimes of liability in this field. For if surface damage is governed by general and unlimited fault liability or negligence, that could lead to potential bankruptcy of the implicated aircraft operators in case they are held to be negligent in relation to unlawful use of the severity of '9/11'. A possible solution to the problem is to limit liability of the aircraft operator for unlawful use up to the level of obtainable insurance coverage for the risks posed by war and terrorism. Such a solution was adopted by U.S. Congress , albeit after the events took place, in the aftermath of '9/11' by means of the Air Transportation Safety and System Stabilization Act.[25] In the preliminary ICAO Draft Convention which is meant to update the system of Rome, damage relating to acts of unlawful interference, war, and terrorism, has also been limited up to a capped maximum level.[26] And on the basis of the justification that catastrophic events should not be borne by aviation alone, such solutions seem the most feasible manner to deal with the problem of unlawful use in the sphere of liability.

As to the types of aircraft that fall under the regime, the ideal starting point for any legislature would be to define the term 'aircraft' and to subsequently determine which types of aircraft and their function (military, civilian, state, etc) fall under the regime at hand.

In the Rome Conventions, the term aircraft has not been defined, but left to the discretion of the court seized of the case.[27] The discussed national regimes apply slightly varying definitions of the term aircraft. The French regime, for instance, defines aircraft as all machines capable of rising into- or circling in the air and the German regime comes close by defining aircraft as instruments designed to move in the air.[28]

On the question of scope of types of aircraft and their functions that are encompassed by existing regimes, variations prevail. The Rome Convention of 1952 does not apply to military, customs, or police aircraft, as the jurisdiction of the International Civil Aviation Organization is limited to international civil air transport. This sheds light on an inherent advantage that national legislatures have above the international legislature in this field: a broader scope of types of aircraft can be brought under the framework of national regimes. For national regimes can be made to cover (inter) national civil aircraft as well as military and state aircraft, as the French regime does.[29] Furthermore, the potential scope of types of aircraft covered by the regime can also be

25 *See* sub-paragraph 5.10.1 of this study.
26 *See* sub-paragraph 3.11.2 of this study.
27 *See* sub-paragraph 3.4.5 of this study.
28 *See* sub-paragraphs 4.3.1 and 4.3.2 of this study.
29 *See* sub-paragraph 4.3.1 of this study.

broadened by national legislatures. The regime of the Civil Aviation Act of the United Kingdom can serve as an example, which covers surface damage caused by balloons, kites, gliders, airships, aeroplanes, powered lift and rotorcraft.[30]

Generally speaking, one could argue that the broader the scope of types of aircraft covered, the better the regime. For it does not make much difference whether the surface damage is inflicted by an F-16 or a Boeing 747 from the perspective of third parties. Another inherent advantage of a broad scope of types of aircraft that fall under a regime is that potential collision cases between all those types of aircraft can also be encompassed by the regime by means of a rule of joint and several liability. Liability regimes that cover as broad a scope of types of aircraft as possible are therefore held to create the most feasible and uniform approach to liability in this field for all parties concerned.

6.7 UNLIMITED OR LIMITED LIABILITY

The fourth question posed in the introduction of this study concerned the problem whether a specific regime in this field should be based on unlimited or limited liability.[31] Unlimited liability implies that the person or entity addressed by the regime will have to pay full compensation for damage that can be attributed to him on the basis of the liability regime at hand. As that person or entity will generally also have to pay full compensation if he is established to be at fault or negligent in absence of any regime, a regime based on the combination of absolute and unlimited liability would merely fortify the position of third parties in the establishment of liability and ultimately lead to the comparable result of full compensation. Dependant on the legal system at hand, the only difference would then lie in the fact that the scope of the protective norm of fault or duty of care under negligence could be drawn more broadly in terms of types of recoverable damage and persons entitled to claim than under regimes based on absolute liability. Such a narrowed down scope of the protective norm or duty of care under absolute liability could automatically serve as an important quid pro quo for that more severe basis of liability.[32]

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30 *See* sub-paragraph 4.3.3 of this study.

31 *See* paragraph 1.2 of this study.

32 German civil law, for instance, generally excludes the possibility of claiming damages for bereavement or immaterial loss (*Schmerzengeld*)., under most of its specific regimes based on absolute liability, *see* E. Deutsch, Allgemeines Haftungsrecht (2) 446-447 (1996). In this field, the only exception to that rule concerns immaterial loss caused by military aircraft, which is recoverable, *see* § 53 (3) LuftVG; Geigel at 1176-1177. However, it has been argued that such claims should be permitted under regimes based on absolute liability in German

However, the legislature could also decide to grant aircraft operators addressed by a specific regime more protection by legally limiting the regime. The following justifications have been enumerated by Drion for legally limiting liability in this field:[33]

1 Analogy with maritime law with its global limitation of the shipowner's liability;
2 Necessary protection of a financially weak industry;
3 Catastrophic risks should not be borne by aviation alone;
4 Necessity of the carriers or operators being able to insure themselves against these risks;
5 Possibility for potential claimants to take insurance themselves;
6 Limitation of liability as a counterpart to the aggravated system of liability imposed upon the carrier and operator;
7 Avoidance of litigation by quick settlements;
8 Unification of the law with respect to the amount of damages paid.

As has been established, most of these arguments do not stand the test of closer scrutiny. In short, the inadequacy of a system of legally limited liability is specifically revealed under an international regime of liability on the grounds that the potential damage can vary so widely worldwide and in due course of time. For legal limitation of liability can lead to the situation whereby the limits are grossly inadequate to cover the amount of surface damage inflicted by an aviation accident in a developed country, whereas those same limits would easily cover the amount of surface damage inflicted by a similar aviation accident in an underdeveloped country. This means that a just unification of the law with respect to the amount of damages paid is never adequately possible in practice.

The quid pro quo of absolute liability on the one hand and limitation of liability on the other hand could be justified to a certain extent if claimants could fall back on the applicable rules of fault liability or negligence in order to claim for damage in excess of the legal limits. Such a solution has been opted for in the German and Austrian regimes in this field.[34] However, the Rome Convention of 1952 has been based on a practically unbreakable system of limitation of liability by making unlimited liability dependent on proof of a deliberate act or omission of the operator as opposed to his mere fault or negligence![35]

Aside from the international system of Rome and the national regimes of Germany and Austria, the other national regimes that have been evaluated

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literature, *see* H. Kötz, Gutachten und Vorschläge zur Überarbeitung des Schuldrechts, Band II, 1824-1825 (1981).

33 *See* paragraph 2.10 of this study.

34 *See* sub-paragraph 4.5.2 of this study.

35 *See* sub-paragraph 3.5.4 of this study.

in this study are all based on unlimited liability, although specific exceptions to that rule have sometimes been enacted within those regimes for cases of unlawful use of the aircraft.[36] Notably, liability of the implicated air carriers arising from '9/11' has been limited after the event took place under 'Air Transportation Safety and System Stabilization Act.'[37]

The International Law Association's proposals for an integrated system of civil aviation liability in international carriage by air and in respect of surface damage were also based on the principle of unlimited liability. The predicted effects of a combination of absolute and unlimited liability would be the channeling of liability to the operator, who in turn would be able to (re)claim from other liable parties by means of the applicable rules of subrogation.[38]

The only really valid exception to the basic principle of unlimited liability lies in the third assertion that catastrophic risks should not be borne by aviation alone. That assertion has specifically regained its importance after the terrorist attacks on the United States of September 11, 2001. For under such a scenario, the combination of absolute and unlimited liability would be too much to bear for the aviation industry. Thus, liability could justifiably be legally limited up to the level of insurance coverage in cases of unlawful use. As has been argued in the previous paragraph, such a regime of legal limitation in the specific area of liability for unlawful use or wrongful taking of aicraft should be enacted by all legislatures, even those who rely on the general rules of fault liability or negligence. This is recommended in order to protect the implicated aircraft operator(s) from bankruptcy, especially as such events may now be perceived as foreseeable by courts in the aftermath of '9/11'.

6.8 INSURANCE AND INSURABILITY

In this study, a number of issues relating to aviation third party liability insurance have been dealt with on the basis of the fifth question if insurance coverage should be compulsory in this field.[39] The issues under consideration concerned the question how insurance contracts can be defined and which scenarios are covered or excluded by insurance policies in this field. Furthermore, the links that exist or are presumed to exist between insurance law and liability law have been explored. Such links include the notion that unlimited liability is not insurable and the link that can be made between insurers and third parties by means of direct actions.

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36 *See, e.g.,* sub-paragraph 4.3.4 of this study on the Swiss regime in that context.
37 *See* sub-paragraph 5.10.1 of this study.
38 *See* paragraph 3.10 of this study.
39 *See* paragraph 1.2 of this study.

Recapitulating, the following picture emerges. As a starting point, the situation in absence of any legislative interference has been described in which aircraft operators are free to take out insurance coverage for third party liability from aviation insurers. The rationale for not requiring compulsory insurance or other security requirements lies in the notion that aircraft operators will generally take out liability insurance coverage anyhow.[40]

It is important to bear in mind that third party liability insurance can only be obtained to certain levels of coverage and that blanket coverage is not obtainable. This means that there is always a risk that the actual damage will exceed the obtained level of coverage by aircraft operators and that they will have to bear the extra loss above coverage themselves. The level of coverage obtainable will depend on factors such as the weight of the aircraft and the type of policy opted for.[41]

Legislatures faced with the problem of liability for surface damage can opt for compulsory insurance mechanisms or other security requirements for third party liability for those operators addressed by the regime at hand as an extra financial safeguard for compensation of victims.

In this study, such requirements have been discussed on three levels: the international level of the Rome Convention of 1952 and the suggestions made by the International Law Association; the supranational level of European community law; and the national level of the states within the scope of this study. A brief recapitalution of these three levels will be made in the following three subparagraphs (6.8.1–6.8.3). A number of final observations and recommendations will be made in a final subparagraph (6.8.4).

6.8.1 Third party liability insurance requirements under the Rome Convention and the ILA Draft Convention. Direct actions.

Under the Rome Convention of 1952, a compulsory system of insurance or other security requirements was not achieved. For the general rule holds that contracting states may require the operators of aircraft of other contracting states to be insured for damage as specified by the Convention and up to the limits set out in the Convention.[42]

The Draft Convention proposed by Cheng and Dutheil de la Rochère under auspices of the International Law Association set out to make such requirements mandatory by requiring every operator to maintain insurance or other forms of security in such amount, of such type and in such terms as the State

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40 In Australia, for example, third party liability insurance is currently not required in this field, *see* sub-paragraph 4.5.5 of this study.

41 *See* paragraph 2.11 of this study, in which the usual exclusions under liability policies are also dealt with.

42 *See* paragraph 3.6 of this study.

of registry and/or the State of the operator may specify.[43] This can be hailed as a more constructive move in view of the fact that a facultative option is effectively of little use to guarantee that potential liability of the operator will be met financially. However, the other idea proposed in the Draft Convention to hold the states of registry responsible for liabilities of the operator and of the persons furnishing financial security to the extent that such liabilities have not been met, is more controversial. According to the Draft Convention, such responsibility also arises if the state of registry only allows the operator to obtain financial security only up to specified maximum levels.[44] The latter scenario can of course be easily circumvented by the requirement of specified minimal levels of coverage as opposed to compulsory maximum levels, which is a far more logical move for any legislature. But to automatically shift responsibility to the State of registry in cases of damage in catastrophic cases which cannot be met by the operator and its insurers seems a bridge too far, especially in light of the terrorist attacks of September 11, 2001 on the United States. An ad-hoc scheme of partial compensation by means of specific governmental funds, as has been enacted by the United States government in the aftermath of '9/11', seems more likely to gain acceptance by States of registry worldwide. The suggestion of an international common fund for catastrophic aviation accidents, which was also proposed under the Draft Convention, has also become of renewed interest in view of those terrorist attacks and deserves closer scrutiny.[45]

6.8.1.1 Direct actions

The possibility of direct actions was first considered during the drafting period of the Rome Convention of 1933, but turned out to be controversial, which led to the codification of the Brussels Protocol of 1938. Under the regime of the Rome Convention, direct actions were only permitted under certain conditions.[46] The ILA Draft Convention only allows a direct action if the law of the competent court so provides.[47]

Three main objections to the possibility of direct actions can be raised: first, that it would be unfair to insurers if third parties could potentially obtain more rights than the insured parties. Scenarios could easily be envisaged in which certain contractual provisions in the policy would bar compensation to the operator, for instance, if the contract has expired or does not cover certain forms of suffered damage (e.g. noise).

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43 *See* sub-paragraph 3.10.2 of this study.
44 *See* sub-paragraph 3.10.2 of this study.
45 *See* sub-paragraph 3.10.2 of this study.
46 *See* paragraph 3.6 of this study.
47 *See* paragraph 3.6 and sub-paragraph 3.10.2 of this study.

Second, that the only case in which a direct action can be of interest, that is, when the operator at hand faces potential bankruptcy, can also be dealt by the legislature without resorting to the possibility of direct actions. This has been achieved under the Rome Convention of 1952 by enacting the rule that any sums due to an operator from an insurer shall be exempt from seizure and execution by creditors of the operator until claims of third parties under the Convention have been satisfied.[48] Third, that if the possibility of a direct action implies that the claim against the operator has to be abandoned, this could turn out to be disadvantageous for claimants in cases where the total amount of damage exceeds the level of coverage. For in such cases, claimants will be deprived of a part of their claim from the operator, even if the operator does not risk potential bankruptcy in spite of the fact that he will have to grant a certain percentage of compensation above his insurance coverage. In practice, insurers will often take over claims handling in the aftermath of aviation accidents from the implicated operators and other potential liable parties. However, that should not imply that third parties are automatically deprived of their right to claim from the implicated aircraft operators directly if they so desire.

6.8.2 Third party liability insurance requirements under European Community law

European Community law in this field currently merely consists of the air carrier licensing requirement that air carriers and operators falling under the scope of Community law should be insured to cover liability in case of accidents, in particular in respect of passengers, luggage, cargo, mail, and third parties.[49] Remarkably, no minimal levels of compulsory coverage have been codified. This means that an aircraft operator could theoretically obtain insurance coverage for potential liability for a single Euro in order to comply with European licensing requirements.

However, a proposal for a regulation of the European Parliament and of the Council on insurance requirements for air carriers and aircraft operators was launched on 24 September 2002, which aims to fill in the basic requirement of compulsory insurance by means of various tiers of compulsory insurance coverage, dependant on the MTOW of the aircraft. As has been discussed, a number of facets of the proposed regulation are still under discussion, such as the question to what extent market failure should be taken into account.[50] A remarkable difference between the proposal and the current status quo is that the proposal is also meant to govern non-Community air carriers and

48 *See* paragraph 3.6 of this study.
49 *See* Article 7 of Council Regulation (EEC) No 2407/92 of 23 July 1992, OJ L 240, 24.8.1992.
50 *See* paragraph 4.9 of this study.

aircraft operators flying to or from Community airports as well as over territory of Member States. This has been interpreted as being in conformity with the Chicago Convention of 1944.[51]

The proposal can be hailed as a move toward a greater degree of harmonization and a level playing field in the European Community. For it manages to clarify to what level of liability coverage the aircraft operators and air carriers that fall under its scope should be insured or backed up by other securities.

6.8.3 Third party liability insurance requirements under national law

Aside from the aforementioned general insurance requirement prescribed by European Community law, most states of registry prescribe compulsory insurance or other security requirements for third party liability for aircraft operators within the scope of their jurisdiction. Exceptions include the United Kingdom, France, and Australia. But even in the United Kingdom, such requirements are implicitly compulsory, since the granting of an air service license depends on aircraft operators being able to satisfy the Civil Aviation Authorities that they can meet their financial obligations in case of liability.[52]

In many cases, compulsory levels of minimal insurance coverage have been linked to the weight of the aircraft, such as in the German, Austrian, Swiss, and United States requirements. Under the limited third party liability regimes of Germany and Austria, the prescribed levels of compulsory insurance coverage correspond with the legal limitations.[53] Notably, the Swiss regime has combined a main rule of unlimited liability with certain minimal levels of compulsory insurance coverage, but has legally limited liability up to those levels in cases of damage caused by illegal users or other persons not employed by the operator.[54] Such a rule is of comparative importance to other legislators and could regain importance in the aftermath of the terrorist attacks of September 11, 2001 on the United States.

6.8.4 Final remarks and recommendations on insurance

Whether on an international, supranational, or national level, insurance or other security requirements are only deemed useful if made compulsory and filled in by certain minimal levels of coverage dependant on the varying weight of aircraft. However, legislatures should bear in mind that insurance coverage

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51 *See* paragraph 4.7 of this study.
52 *See* paragraph 4.5.3 of this study.
53 *See* paragraph 4.5.2 of this study.
54 *See* paragraph 4.5.4 of this study.

is often obtained in combined policies with a single maximum. In such cases, both the required level of second and third party liability coverage will have to be specified. This can be done by also specifying the level of required coverage per passenger.

The International Law Association proposals for updating the system of Rome in this respect are not all satisfactory. In my view, the proposed automatic link between insurance requirements and potential liability of the States that have enacted such requirements under certain conditions, such as when *maximum* levels of coverage are only allowed, is not recommendable. At most, States can create specific funds to help compensate victims of surface damage in cases of catastrophic disasters, such as the September 11 attacks on the United States. But not many States will be keen to adhere to automatic liability in such cases. As has also been argued, the legal right to direct actions is not recommended either. In the normal aftermath of aviation accidents or incidents, a system whereby insurers grant indemnity to insured operators that subsequently grant compensation to those legally entitled to such compensation, seems workable and fair enough. De facto claims handling by which insurance companies, as opposed to the insured operators, grant compensation directly to the victims can always be arranged under such a system.

Finally – and in conjunction with the arguments raised against limitation of liability in this field – it has to be conceded that unlimited liability cannot be completely insured in view of the fact that insurers do not provide for unlimited coverage in any field of endeavor. However, in my view this objection does not satisfy a structural link to a legally limited liability regime. Only in extremely catastrophic cases, such as the September 11 attacks, should such links play a role. The discussed Swiss provision in which liability is limited up to the compulsory levels of coverage could provide a solution in such cases. But for 'normal' aviation accidents, the risk of flying uninsured from a certain level of coverage onward should preferably fall on those parties taking that risk, as opposed to those suffering from it.[55]

A more feasible solution for such cases, without necessarily having to fall back on any statutory limitation liability, has been enacted in Article 6:109 BW of the Dutch Civil Code, which allows judges to moderate the extent of liability whenever full liability would lead to unwanted consequences. Factors that are taken into consideration include the circumstances of the case, the relationship between the parties concerned, and their financial capabilities. However, liability cannot be moderated to a level which is lower than the

55 The same argument can be illustrated on a more personal level. If I decide to take out personal third party liability insurance coverage, my personal level of obtained coverage (*e.g.* up to 500.000 Euro) should not have the effect of limiting my potential liability to that level. If I inflict damage for 600.000 Euro, this should generally mean that the insurer has to grant compensation for 500.000 Euro and that the remaining 100.000 Euro can still be claimed from me.

applicable level of insurance coverage. The great advantage of such a solution is that liability is then only limited on a case by case basis after the event took place and not beforehand.[56]

6.9 THE FEASIBILITY OF REGIMES ON AN INTERNATIONAL, SUPRANATIONAL OR NATIONAL LEVEL

The question whether a regime of liability in this field should be enacted on an international and/or supranational and/or national level will be dealt with in sub-paragraphs 6.9.1–6.9.3 respectively.

6.9.1 The feasibility of the Rome Convention of 1952 as amended by the Montreal Protocol of 1978

In Chapter 3 of this study, the system of Rome as well as the suggestions made under auspices of the International Law Association to update those instruments have been discussed. In the final remarks and recommendations raised in paragraph 3.11 of that chapter, the main pillars of the system have been evaluated. Suggestions have also been made to redraft or abolish certain of those pillars in order to update the regime to more modern day standards. The final question posed in that evaluation concerned the necessity of the system as a whole. In this sub-paragraph, a brief recapitalution of these points will be given on the basis and scope of absolute liability (1), defences (2), limitation of liability (3), insurance (4), jurisdiction (5), and finally necessity or feasibility of the system as a whole (6).

1 Basis and scope of absolute liability

The basis of absolute liability should be maintained as a central pillar of the system of Rome in view of the arguments raised in its favor in this study. Unfortunately, the scope of absolute liability of the system has not been resolved satisfactorily as to the question whether damage caused by flight in non-conformity with air traffic regulations is covered or not. As has been argued in view of the severe basis of absolute liability, such noise-related claims (including sonic boom) should not be covered by the absolute liability regime.[57]

In my opinion that scenario should be completely left to general principles of applicable fault liability, negligence, or other existing headings of liability as a quid pro quo to the severe basis of absolute liability. The main argument for this plea lies in the notion that absolute liability should serve as a useful

56 *See* sub-paragraph 3.11.3 of this study in which that suggestion was also made.
57 *See* sub-paragraph 3.11.1 of this study.

alternative to negligence or fault liability in view of difficulties that can arise in proving negligence or fault liability as well as the number of defences that can be invoked under those bases of liability, such as Act of God or force majeure. But these problems are mainly perceived to play a role in cases of genuine aviation accidents or at most cases where parts of the aircraft or things or persons transported by the aircraft fall from the aircraft and cause personal injuries or property damage.

In any case, however severe, of damage caused by noise or sonic boom, on the other hand, the aircraft will remain intact, the pilot can be heard, and the Flight Data Recorder and Cockpit Voice Recorder are easily accessible. Such a limited scope of absolute liability also concurs with the outcome of Article 1(1) of the earlier Montreal Draft of the Rome Convention of 1952, which read:

> any person who suffers damage on the surface, other than damage due to noise or to passage by aircraft in normal flight, shall be entitled to compensation upon proof only that the damage was caused directly by an aircraft in flight or by any person or thing falling therefrom.[58]

Another way of making even more absolutely sure that damage caused by aircraft in flight is excluded can be achieved by narrowing down the absolute liability regime by means of the 'contact' or 'impact' criterion (e.g. by codifying 'upon proof only that the damage was caused by the impact of the aircraft').

Complete exclusion of noise and sonic boom also corresponds to the opinions of the delegates of important aviation nations such as the United States, Canada, Great Britain during the Montreal Conference of 1978.[59] Such an exclusion has also been made under the Australian national regime of the Damage by Aircraft Act 1999 through application of the 'impact' criterion.[60]

2 Defences

The current defences available under the Rome Convention(s) are not felt to raise great difficulties. In view of the terrorist attacks of September 11, 2001 on the United States, the potential liability of operators of aircraft for damage caused by unlawful users has become of importance. Evidently, absolute liability for damage caused by such unlawful use could lead to unwanted effects such as potential bankruptcy of the implicated operators, if such liability were to be unlimited. Such scenarios of unlawful use should thus either be left out of the regime of absolute liability entirely or at least limited to the extent of obtainable insurance coverage. In that respect, the current defence that the operator can prove that he has exercised due care to prevent such

58 *See* sub-paragraph 3.3.2 of this study.
59 *See* sub-paragraph 3.9.2 of this study.
60 *See* sub-paragraph 4.4.5 of this study.

use could regain importance if the Rome Convention manages to attract more ratifications in the future. But as proven lack of due care may then lead to unlimited liability, a preference can be made to limit liability under the scenario of unlawful use, irrespective of the basis of liability that governs it.

3 Limitation of liability

The objections against limitation of liability have been dealt with in paragraph 6.7 of this chapter. The key objection to the legal limitation provisions of the Rome Convention of 1952 and their update in the Montreal Protocol of 1978, is that the level of potential surface damage can vary enormously worldwide. This would thus place surface victims of the more developed countries in a less advantageous position than those in less developed countries. In short, uniformity can never be realized fairly on an international level by means of any system of limitation of liability.

The other main objection lies in the fact that in order to escape the limited liability regime, claimants will have to prove that the damage was caused by a deliberate act or omission of the operator or his servants or agents done with the intent to cause damage.[61] The least one would expect is that claimants can fall back on the general rules of fault liability or negligence in such cases.

Therefore, the suggestions made under auspices of the International Law Association to completely dispense with the provisions on limitation of liability are to be hailed. At most, a specific provision could be introduced by which the judge seized of a case can reduce the legal obligation to repair damage if awarding full compensation would lead to clearly unacceptable results on a case by case basis.

In the first preliminary draft of Article 3 of the ICAO Draft Convention, such a laudable move toward unlimited liability has been made. Hopefully, that draft will survive later stages of drafting discussions.[62]

4 Insurance

The main objection to the insurance and security provisions of the Rome Convention of 1952 is that they have been codified in a complex, but non-compulsory fashion.

In my view, they should either be made compulsory as an extra safeguard for actual compensation in order to have any effect, or otherwise dispensed with altogether. If made compulsory, certain minimal levels of required coverage based on MTOW of the aircraft can be introduced. Another alternative could lie in merely requiring adequate insurance coverage or other guarantees, and

61 *See* sub-paragraph 3.5.4 of this study.
62 *See* sub-paragraph 3.11.3 of this study.

leaving more specific requirements to the adhering States of registry of the aircraft.[63]

5 Jurisdiction

The single forum solution involving the *loci delicti* under the Rome Convention of 1952 was perceived as the best way to guarantee that the limitations set out in the Convention were distributed fairly amongst claimants. In view of the objections raised against limitation of liability in general as well as the objections raised against the single forum in this study, a more feasible alternative would be to reinstate the so-called *forum rei*, that is, the defendant's ordinary place of residence. That solution would correspond with the jurisdictional provision of the Rome Convention of 1933.[64]

An even more bold suggestion would be to also include the more controversial so-called *forum actoris* under certain conditions in cases where the victim of surface damage is not a resident of the *loci delicti*, nor of the of the defendant's ordinary place of residence. Such a solution would be comparable to the so-called fifth jurisdiction of Article 33 of the Montreal Convention of 1999. Conditions to be fulfilled could include criteria such as the fact that the operator in question operates to or from the country of principal and permanent residence of the third party.[65]

The greatest advantage of the *forum actoris* would be that that forum is best equipped to determine the level of damages suffered by the third party, as it can easily apply the damage laws of his place of principal and permanent residence.

6 Necessity and feasibility

Even if the system of Rome were to be modernized satisfactorily, the question of necessity and feasibility of such a uniform regime of liability in this field remains difficult to resolve. The main arguments in favor of uniformity hold that international civil aviation as well as potential victims on the surface are then subjected to the same standards of liability for surface damage worldwide, which would create a global level playing field. But even is such an objective were realized, the problem remains that the scope of such an international regime ultimately remains limited to cases of foreign civil aircraft from Contracting States causing damage in the territory of other Contracting States.

Another argument against real necessity of such an international regime is the notion that the international character of damage to third parties is by its very nature far less pronounced than the international character of damage to for instance passengers. Generally speaking, third parties will be of the

63 In Article 19 of the ICAO Draft Convention, the latter option has been enacted, based on Article 50 of the Montreal Convention, *see* sub-paragraph 3.11.4 of this study.

64 *See* sub-paragraph 3.7.1 of this study.

65 *See* sub-paragraph 3.7.3 of this study.

nationality of the place of the accident or incident. And even the more exceptional cases in which the victim is of another nationality than the *loci delicti*, do not necessarily justify the application of an international regime. For both the determination of liability of the implicated operator(s) as well as subsequent damage suffered by such a victim could also be made by the court seized of the case if liability in this field is governed by national law. The court would simply have to appoint experts in the field of damage law of the nationality or place of permanent residence of the victim in order to assess the level of compensation due. From a perspective of insurance, the point can also be raised that the necessary coverage for third party liability is underwritten satisfactorily to this day, despite the fact that national liability legislation in this field varies.[66] These arguments, specifically that of the limited scope of an international regime in terms of aircraft operators covered by it, point to more feasible alternatives on a national level.

A perhaps more spurious argument concerns the notion that the biggest aviation-generating country in the world, the United States, has generally moved away from specific absolute liability regimes to general negligence in this field. The United States may thus be found unwilling to adhere to any international instrument founded upon absolute liability in the future. And the level of success of any international air law instrument largely depends on adherence by the United States, in view of its prime importance as an aviation nation.

6.9.2 The feasibility of a third party liability regime on a European Community level

In absence of any rules on air carrier's or aircraft operator's liability for damage to persons and property on the ground on a European Community level, the question arises if a supranational Council Regulation or Directive in this field is feasible and on which grounds such an instrument could or should be enacted.

As has been described in this study, the Commission is currently of the opinion that as far as third party liability of air carriers and aircraft operators in case of incidents is concerned, liability has been already sufficiently defined in the Member States.[67]

As has been argued, a legislative instrument on a European Community level which harmonizes the basis and scope of liability for damage to third parties within the European Community, would provide a feasible solution

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66 *See* B.G. Nilsson, *Liability and Insurance for Damage Caused by Foreign Aircraft to Third Parties on the Surface – A Possible New Approach to an Old Problem*, *in* A. Kean (Ed.), Essays in Air Law 181, at 185 (1982).

67 *See* paragraph 4.8 of this study.

for a more level playing field within the European Union for all parties concerned. In view of the fact that a number of Member States already have legislation in force in this field, the instrument of a European Directive containing certain minimal requirements may suffice. This would allow Member States with regimes in force to at most amend their existing legislation on a national level in order to meet such requirements. Member States without any legislation in force would need to create specific legislation in this field on a national level within a certain timeframe that would replace the general regime of fault liability at hand. However, taking the current position of the Commission into account, the problem will remain one to be resolved by national regimes of the Member States in the near future.

6.9.3 The feasibility of a third party liability regime on a national level

The 'fictitious' legislator that has been addressed throughout this study is advised to create a specific statutory regime for third party liability within his national framework of civil or common law. This is substantiated by lack of feasible alternatives both on an international and on a Community level.

The theoretical underpinnings and step by step approach for codification of such a regime that have been discussed in this study can serve as important justifications and guidelines in this respect. In addition to these guidelines, the actual liability regimes in force both on an international and national level can serve as comparative examples from which the national legislator can derive fruitful information and ideas. Regimes in this field codified on a national level have the inherent advantage above international or supranational regimes that they can be tailor-made to fit into the relevant sections or acts on air law of the civil code or common law system at hand. And as has been argued previously, the scope of potential aircraft that can be encompassed by national regimes is always greater than the scope of potential aircraft encompassed by international or supranational regimes. This difference of scope is due to the more limited jurisdiction over civil aviation of both the international ICAO and European Community legislatures.[68]

68 As has been established in this study, the Convention Rome of Rome of 1952 as amended by the Montreal of 1978 only applies to damage caused by international civil aviation in the territory of a Contacting State by an aircraft registered in another Contracting State and not to military, customs, or police aircraft. A national regime could be made to encompass all those categories of aircraft, whether foreign or national.

6.10 A NUMBER OF EFFECTS OF TERRORISM

6.10.1 General observations

The terrorist attacks on the United States of September 11, 2001 have had an enormous impact on the aviation industry as a whole and more in particular on the aviation insurance industry. As to that date, the aviation world had not been confronted by the use of aircraft as bombs and by the subsequent enormity of the level of damage to third parties and property on the surface. The short and long term effects of this calamity are so complex and profound as to justify a whole series of economical, legal, political, and psychological studies and cannot be done justice in the framework of this study. However, a number of important aspects need to be dealt with in conjunction with the main theme of this study – the general plea for absolute, unlimited, and secured liability of aircraft operators for damage to third parties on the surface. Clearly such a regime would lead to disastrous results if applied to severe cases of terrorism as the damage inflicted can vastly exceed normal levels of insurance coverage of the implicated air carriers.

Even if such cases were to be governed by general fault liability or negligence, that could lead to disastrous results for the implicated airlines if proven successfully. That helps to explain the described move of US Congress to limit negligence by means of the regime of the Air Transportation Safety and System Stabilization Act, albeit that this was done after the events of '9/11' took place. Such legislative action can serve as a firm recommendation to national legislatures without any specific limitation provisions in force in the area of liability for unlawful or wrongful use. Notably, a number of discussed national regimes in this field have enacted similar solutions. The Swiss absolute liability regime can serve as an example in which the operator of an aircraft can only be held liable up to the applicable level of mandatory insurance coverage in cases of unlawful use.[69] Alternative measures in cases of catastrophic aviation accidents related to terrorism include the instruments of victim compensation funds and measures of temporary State aid to guarantee continued viability of the aviation industry. These alternatives will be briefly discussed in the next two sub-paragraphs.

6.10.2 Victim Compensation Funds

The only feasible alternative to the applicable rules of liability, which has also been followed by the United States government, is to create a specific compensation fund for the victims of the attacks and their relatives. The primary aim of such a fund is to compensate certain closely defined damages of a

69 *See* sub-paragraph 4.5.4 of this study.

closely defined scope of victims and their relatives.[70] The secondary aim is to try to dissuade potential claimants from going to court and accepting payment from the Fund instead. For any claim under the Fund will result in a waiver of right to file a civil action. The success of any victim compensation fund will largely depend on the number of rightful claimants willing to give up the right to file a civil action in favor of the perhaps more limited compensation available on the basis of the Fund. This will depend largely on the level of generosity of the fund at hand.

6.10.3 Insurance coverage for risks posed by war and terrorism. Governmental measures

In the immediate aftermath of the terrorist attacks, the aviation insurance industry made the move to narrow down third party liability coverage to $ 50 000 000 in cases of loss arising from risks such as war and terrorism.[71] This move could have lead to the grounding of entire fleets if governments worldwide had not intervened by taking care of the terrorism coverage that was terminated by the insurance industry.[72]

In the immediate aftermath of the attacks, U.S. Congress adopted a number of emergency measures. These measures included a direct and immediate aid of $5 billion to compensate the American airlines for direct losses resulting from the closure of airspace and the consequences of the attacks on air traffic for the last four months of 2001, the allocation of federal credit instruments in the form of Treasury loans or loan guarantees of approximately $ 10 billion, and the allocation of $ 3 billion for safety and security of air transport from the Victim Compensation Fund of $ 40 billion.[73]

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70 The provisions for claims from the Fund to be eligible include the rule that claimants must have suffered physical harm, which must constitute a bodily injury treated by a medical profession within 24 hours of the injury; rescue workers can only claim if they suffered physical harm within 96 hours of the impact of the aircraft; awards will not be less than $500 000 for any claim made on behalf of a deceased victim with a spouse or dependent or $ 300 000 for a deceased victim without relatives; loss of earnings based on salary figures for a three year period (1998-2000) up to a maximum of the 98th percentile of individual income in the United States for the year 2000 (=$ 231 000); and presumed non-economic losses up to a maximum of $ 250 000 limit for each dependent with an additional $ 50 000 for a spouse and each dependent of the deceased victim, *see* Morrison, Mahoney & Miller, *Aviation Update*, at 1-2.

71 *See* Dennis Jankelow & Associates, *Terrorist Attacks in the USA, The Implications for the Aviation Insurance Market – Restricted Insurance Coverage Threatens to Ground Airlines/Aviation Worldwide*, at www.jankelow.co.za/terrorism_5.htm.

72 *See* AON, World Trade Center Bulletin, Quarterly Supplement, '*US Extends terrorism cover for airlines' and 'EC extends government terrorism cover'*, July 2002, at 13-14.

73 *See* Communication from the Commission to the European Parliament and the Council, The repercussions of the terrorist attacks in the United States on the air transport industry, Brussels, 10.10.2001 COM (2001) 574 final, at 4-5.

In the same period of time, all Member States of the European Union introduced temporary insurance mechanisms for coverage of third party war and terrorism risks. The initial period of 30 days of coverage was eventually prolonged up to June 2002. These measures were approved by the Council of Ministers on September 22, 2001 on the conditions that they were temporary, strictly regulated and notified to the European Commission.[74] State aid was also granted by the European Commission on certain conditions, such as the condition that compensation was paid in a non-discriminatory manner to all airlines in a given Member State and that it only concerned the costs incurred during the period 11-14 September 2001 following the grounding of air traffic by the American authorities.[75]

Although difficult to predict the long term future, it is safe to say that the normal route of coverage of risks posed by war and terrorism will have to be taken up by the aviation insurance market on the longer run, even if at higher premiums than in the past. But even then, 'normal' coverage will not even come close to the potential level of damage that can be potentially be inflicted by terrorists, as has been demonstrated by '9/11.' For such exceptional cases, extra measures on a governmental level will most likely remain necessary, albeit on an ad-hoc basis and not necessarily as a codified right. However, a more structured approach may also be opted for, for instance by a specific Convention that governs war and terrorism as 'sovereign risks' provided for by adhering States under certain conditions.[76]

6.11 Final remarks and conclusions

At the end of this study, it is time to retrace our steps to its starting point: the Bijlmer air disaster. For the figure of a 'fictitious' legislator, which has been introduced in this study, can refer to any legislature without specific rules in force on aircraft operators' liability for damage to third parties and property on the ground.

In absence of any feasible international or supranational regime in this field, the Dutch legislature is thus advised to create a specific regime in this field in Book 8 of the Dutch Civil Code based on the pillars of absolute and

74 *See* Communication from the Commission on Insurance in the Air Transport sector following the terrorist attacks of 11 September 2001 in the United States, Brussels, 2.7.2002 COM (2002) 320 final, at 3.

75 *See* Commission Communication of 10.10.2001, at 7-8. Notably, state aid was permitted on the basis of Article 87(2)(b) of the Treaty establishing the European Community. The events of September 11, 2001 were held to be exceptional occurrences within the meaning of Article 87(2)(b) Treaty.

76 *See* H. Caplan, *War and Terrorism Insurance, Long term plans for international stability and affordability*, paper presented at the IATA – Airline Insurance Rendezvous –2003, at 2 *et seq*.

unlimited liability, backed up by certain minimal levels of compulsory insurance or other guarantees.

Liability of the aircraft operators for unlawful or wrongful use should form the main exception to that rule, for instance by subjecting the operators of aircraft to a regime based on legally limited liability up to the levels of obtainable insurance coverage for the risks posed by unlawful use.

The main reasons for enacting a specific regime in this field have been policy-based on the position of non-benefitted third parties on the ground. A regime of absolute liability would dispense with any potential problems of proof of fault of the implicated aircraft operators or defences that can be invoked by him under the general rules of fault liability of Article 6:162 of the Dutch Civil Code.

Specific investigation of the cause(s) of an accident would then also no longer be strictly necessary from the perspective of attribution of liability. The conclusion of the Netherlands Aviation Safety Board which held that the Bijlmer air disaster was caused by a combination of the design and inspection of the B 747 pylon need no longer be awaited or used by claimants; for a regime based on absolute liability will automatically channel liability to the operator of the aircraft. A mere link of causation between the occurrence – whether defined as accident or incident – and subsequent damage is all that is needed in order to claim compensation from the implicated operator.

Evidently, El Al should have the full right of redress or subrogation from other potentially liable parties, such as Boeing or potentially implicated Air Traffic Control Agencies. Important 'quid pro quo's' for such a regime could lie in a limited scope of absolute liability, for instance by completely excluding any noise-related claim based on damage caused by mere overflight, whether in conformity or non-conformity with Dutch air traffic regulations or not. Such an approach has been opted for by the Australian legislator, based on the criterium of 'impact' of the aircraft or parts of the aircraft.

In my view, a lot can be said for such a solution as it manages to define the scope of the severe basis of absolute liability far more clearly and fairly than absolute liability regimes which do allow noise- related claims under certain conditions, such as the French and German regime. Furthermore, problems of proof are more likely to arise in cases of genuine accidents than in cases of damage caused by mere overflight, in view of partial or complete destruction of the aircraft and subsequent potential loss of important information in the former case.

Other important quid pro quo's not necessarily related to aviation and not discussed in this study could lie in both the scope of persons entitled to claim as well as the scope of recoverable damages under the absolute liability regime. A manner to do so could lie in the application of the specific damage categories of personal injuries and tangible property damage. Such limitations of scope of duty of care under common law or the so-called *Schutznorm* under civil

law as well as limitations of recoverable damages can be achieved within the liability regime itself. The regime of the United Kingdom, for instance, limits the scope of its liability regime to 'material loss or damage caused to any person or property.'[77]

77 *See* Civil Aviation Act 1982 s76(2) and paragraph 4.4.3 of this study.

Samenvatting

Aansprakelijkheid van de exploitanten en eigenaren van luchtvaartuigen voor schade toegebracht aan personen en zaken op de grond

Het luchtvaartongeval van het El Al vrachttoestel in the Bijlmermeer in 1992, waarbij de 4 mensen aan boord en 44 mensen op de grond omkwamen en twee appartementcomplexen grotendeels werden verwoest, vormde de tragische aanleiding voor dit onderzoek. Het onderzoek richt zich op het probleem van aansprakelijkheid van exploitanten en eigenaren van luchtvaartuigen voor schade aan derden op de grond. Het onderzoek is toegespitst op de vraag aan welk aansprakelijkheidsregime voor schade aan derden de exploitanten of eigenaren van luchtvaartuigen onderworpen zouden moeten worden. Om deze vraag te beantwoorden zijn een aantal deelvragen geformuleerd. Deze deelvragen hebben betrekking op de wijze waarop aan een aansprakelijkheidsregime op dit gebied gestalte kan worden gegeven, de geadresseerden van een dergelijk regime, de mogelijke limitering van wettelijke aansprakelijkheid, en de mogelijke verzekeringsverplichting die aan het regime ten grondslag kan liggen.

In hoofdstuk 2 worden deze deelvragen allereerst vanuit een theoretisch perspectief benaderd door aan de figuur van een fictieve wetgever bouwstenen aan te reiken om een dergelijk aansprakelijkheidsregime op te tuigen. Hiertoe wordt in de eerste plaats onderzocht hoe luchtvaartuigen schade aan derden op de grond kunnen toebrengen. Dit blijkt enerzijds te kunnen door daadwerkelijke impact van (delen van) het luchtvaartuig en/of personen of zaken die door het luchtvaartuig worden vervoerd en anderzijds door overvlucht. Bij overvlucht kan een onderscheid worden gemaakt tussen normale overvlucht en te lage overvlucht in strijd met de geldende luchtverkeersregels.

De algemene regels van schuldaansprakelijkheid of *negligence* van respectievelijk de *civil law* en *common law* rechtsstelsels kunnen op zich als algemene grondslagen van aansprakelijkheid dienen op dit gebied. Daarbij kunnen echter de per rechtsstelsel geldende en in dit terrein belangrijke rechtvaardigingsgronden van onder meer overmacht worden ingeroepen en kan schuld worden betwist. Wel kan de positie van eisers worden versterkt door middel van bijvoorbeeld een rechterlijke omkering van de bewijslast bij schending van verkeers- en veiligheidsnormen onder *civil law* rechtsstelsels of door middel van de zogenaamde doctrine van *res ipsa loquitur* onder *common law* rechtsstelsels. Deze doctrine kan op het gebied van de luchtvaart onder bepaalde om-

standigheden worden ingeroepen om de bewijslast van schuld te verzachten. Hierbij geldt onder meer de voorwaarde dat de oorzaak van het schadetoebrengende onder exclusieve controle van de verweerder moet liggen. De verweerder kan zich op zijn beurt beroepen op het feit dat het desbetreffende ongeval zich buiten zijn schuld om heeft voorgedaan, bijvoorbeeld omdat er sprake was van een onvermijdelijk ongeval, dat onmogelijk met menselijke vaardigheid had kunnen worden voorkomen.

Er wordt eveneens ingegaan op de verhouding tussen de grenzen van het recht van grondeigenaren en de grenzen van het recht van overvlucht op basis van de oude *cujus est solum* doctrine, waarbij de vraag wanneer overvlucht als een inbreuk op het eigendomsrecht kan worden gekwalificeerd centraal staat.

Vervolgens wordt een regime gebaseerd op risico-aansprakelijkheid als mogelijk alternatief voor de toepassing van de algemene regels van schuldaansprakelijkheid of negligence aangereikt. Er wordt hierbij nog onderscheid gemaakt tussen de strengere zogenaamde *absolute liability* en de wat dichter bij schuld liggende *strict liability.* Hierbij dient te worden opgemerkt dat dit mogelijke onderscheid niet te dogmatisch moet worden opgevat, maar veelal blijkt uit de bewoording van het desbetreffende aansprakelijkheidsregime zelf.

Op de vraag waarom risico-aansprakelijkheid de voorkeur kan verdienen boven schuldaansprakelijkheid of *negligence* zijn enkele belangrijke argumenten te geven. Zo kan worden gesteld dat het redelijker is om de aan luchtvaart verbonden risico's bij de participanten in plaats van onschuldige derden te latten liggen. Daarnaast kan worden aangevoerd dat schuld of *negligence* moeilijk aantoonbaar kan blijken te zijn bij luchtvaartongevallen of incidenten. Luchtvaart zou ook beschouwd kunnen worden als een gevaarlijke activiteit, hetgeen een strenger aansprakelijkheidsregime rechtvaardigt. Verder kunnen de aan luchtvaart verbonden risico's gemakkelijker verzekerd worden door luchtvaartexploitanten dan door derden. Ook zou risico-aansprakelijkheid als de logische 'quid pro quo' kunnen worden beschouwd voor het algemene recht van overvlucht, dat in de regel niet door derden kan worden verhinderd. Tot slot wijzen de ontwikkelingen op het gebied van aansprakelijkheid van civiele luchtvervoerders jegens passagiers ook in de richting van algemene toepassing van regimes gebaseerd op risico-aansprakelijkheid. Er zou kunnen worden betoogd dat derden op zijn minst dezelfde rechtsbescherming verdienen als passagiers.

Indien overtuigd door een of meer van bovengenoemde argumenten kan de wetgever gestalte geven aan een specifiek risico-aansprakelijkheidsregime op dit gebied. Hiertoe zal hij moeten bepalen welke vormen van schade onder de reikwijdte van het regime dienen te worden gebracht en tot wie het regime zich richt. Als hoofdregel zou hierbij kunnen worden gedacht aan de exploitant van het luchtvaartuig. Eveneens zal moeten worden onderzocht in hoeverre het regime gebaseerd zou moeten worden op een wettelijk gelimiteerde aansprakelijkheid. De belangrijkste argumenten voor een wettelijke limitering van

aansprakelijkheid zijn hiervoor geëvalueerd. Deze argumenten zijn als volgt: (1) analogie met wettelijke limitering van aansprakelijkheid onder het klassieke zeerecht; (2) noodzakelijke bescherming van een kwetsbare industrie; (3) catastrofale ongevallen zouden niet louter door de luchtvaart gedragen moeten worden; (4) de noodzaak tot verzekerbaarheid; (5) de mogelijkheid voor potentiële slachtoffers om zichzelf te verzekeren; (6) limitering van aansprakelijkheid als quid pro quo voor de zwaardere risico-aansprakelijkheid; (7) het voorkomen van civiele procedures door schikkingen te stimuleren; (8) unificatie van het niveau van schadevergoeding. Met uitzondering van het derde argument zijn deze argumenten in het algemeen te ontkrachten. Het derde argument is relevant geworden in de nasleep van de terroristische aanslagen op de Verenigde Staten van 11 september 2001.

Tot slot zal de fictieve wetgever moeten bepalen of hij aan de personen die onder zijn aansprakelijkheidsregime vallen een verzekeringsverplichting wil opleggen als extra financiële waarborg voor aansprakelijkheid jegens derden op de grond.

Na de bespreking van het theoretisch kader is het bestaande internationale regime op dit gebied van het Verdrag van Rome van 1952, zoals gewijzigd door het Protocol van Montreal van 1978 in hoofdstuk 3 onder de loep genomen. Deze instrumenten worden gemakshalve ook wel aangeduid als het systeem van Rome. Daarbij is tevens een vergelijking getrokken met het voorgaande Verdrag van Rome van 1933. Het voornaamste oogpunt van deze exercitie vormt het aandragen van suggesties voor de mogelijke wijziging van het systeem van Rome in de toekomst. Hiertoe zijn ook de op dit gebied gedane voorstellen tot verdragswijziging van de *International Law Association* (ILA) onderzocht.

Uit deze analyse blijkt dat het systeem van Rome gebaseerd is op een strenge vorm van risico-aansprakelijkheid (*absolute liability*), waarbij nooit geheel duidelijk is geworden wat de reikwijdte van die aansprakelijkheid is. Hiermee wordt gedoeld op de nog openstaande vraag in hoeverre schade veroorzaakt door geluidshinder onder de risico-aansprakelijkheid valt, indien er niet conform de geldende regels gevlogen wordt. Het feit dat het systeem gebaseerd is op een wettelijk gelimiteerde aansprakelijkheid is bekritiseerd, omdat het niet mogelijk wordt geacht om dit op een billijke wijze internationaal te doen. Dit komt omdat het niveau van potentiële schade toegebracht door luchtvaartuigen wereldwijd sterk kan verschillen, gezien de verschillen in welvaartsniveau per land.

De verzekeringsbepalingen van het Verdrag van Rome van 1952 zijn eveneens bekritiseerd op grond van het feit dat ze niet verplicht zijn gesteld, waardoor de zin van de bepalingen in twijfel kan worden getrokken. Tot slot is er kritiek geleverd op het feit dat slechts het forum van de plaats van het ongeval als bevoegd forum is aangewezen onder het Verdrag van Rome van 1952. De ratio bleek te zijn dat een enkel forum het best in staat werd geacht de uit te keren schadevergoeding bij bevonden aansprakelijkheid op grond

van de wettelijke limieten te verdelen over de rechthebbenden. Dit zou namelijk tot moeilijkheden kunnen leiden bij bevoegdheid van meerdere fora.

Het Protocol van Montreal van 1978 heeft het regime van het Verdrag van Rome van 1952 niet structureel weten te wijzigen. Het systeem van Rome is dan ook gezien de bezwaren van verschillende staten tegen het single forum en de wettelijk gelimiteerde aansprakelijkheid in termen van ratificatie niet erg succesvol gebleken.

Om de vraag te beantwoorden hoe het systeem weer levensvatbaar gemaakt zou kunnen worden gemaakt zijn de ILA-voorstellen om verschillende redenen interessant gebleken. Ook al blijkt er kritiek mogelijk op sommige aspecten van de voorstellen, zijn de drie hoofdpijlers van een lovenswaardige eenvoud gebleken. Dit zijn de pijlers van (1) risico-aansprakelijkheid; (2) onbeperkte aansprakelijkheid; (3) verplichte verkeringsdekking. Met name de tweede pijler wordt beschouwd als de enige oplossing om dit aansprakelijkheidsgebied middels een internationaal instrument tot op zekere hoogte te harmoniseren. Internationale wettelijke limitering van aansprakelijkheid zou namelijk in ieder geval voor de slachtoffers wereldwijd nooit tot een level playing field kunnen leiden.

Er zijn eveneens suggesties gedaan om de reikwijdte van aansprakelijkheid aan te scherpen tot schadegevallen die veroorzaakt worden door impact van (delen van) het luchtvaartuig of personen of zaken afkomstig van het luchtvaartuig. Als belangrijkste uitzondering op de onbeperkte aansprakelijkheid zou schade ten gevolge van terrorisme wettelijk dienen worden beperkt op grond van het argument dat dergelijke catastrofale gevallen niet door de luchtvaart alleen gedragen kunnen worden. In het recente ICAO voorstel tot verdragsherziening is een dergelijke onbreekbare limitering op dit gebied ook voorgesteld. Op het punt van jurisdictie is een voorstel gedaan om het forum van de *loci delicti* in ieder geval uit te breiden met het forum rei van de woonplaats van de verweerder en wellicht onder bepaalde voorwaarden ook met het forum actoris van de permanente verblijfplaats van de eiser.

Toch kan meer in zijn algemeenheid de vraag worden gesteld in hoeverre er een noodzaak bestaat om dit aansprakelijkheidsterrein internationaal gedeeltelijk te uniformeren. Het probleem is namelijk dat de reikwijdte van een internationaal regime slechts beperkt is tot schade toegebracht door de internationale civiele exploitanten afkomstig uit verdragssluitende staten aan derden op de grond binnen het territorium van andere verdragssluitende staten. Een voordeel van het alternatief van nationale regelingen is dat zij meer soorten luchtvaart kunnen bestrijken, bijvoorbeeld militaire of recreatieve nationale luchtvaart.

Aan de hand van deze laatste constatering is in hoofdstuk 4 een rechtsvergelijkend onderzoek gepleegd naar aansprakelijkheids- en verzekeringsregels op dit gebied in nationale luchtvaartwetgeving. Hiertoe is een algemeen onderscheid gemaakt tussen de op risico-aansprakelijkheid gebaseerde regimes van Frankrijk, Duitsland, Oostenrijk, het Verenigd Koninkrijk, Zwitserland,

en Australië enerzijds, en de in de Verenigde Staten prevalerende algemene regels van negligence anderzijds.

Uit de vergelijking tussen de nationale risico-aansprakelijkheidsregimes blijkt dat zij in het merendeel der gevallen betrekking hebben op de exploitant van het luchtvaartuig. In sommige gevallen zijn er specifieke bepalingen opgenomen over aansprakelijkheid bij onrechtmatig gebruik van het luchtvaartuig, die wederom van groot belang zijn geworden in de nasleep van de aanslagen van 11 september 2001 op de Verenigde Staten. De in het Zwitserse regime gehanteerde oplossing kan als voorbeeld dienen. Hierin rust een ongelimiteerde aansprakelijkheid op de onrechtmatige gebruiker, terwijl de exploitant wettelijk slechts aansprakelijk gesteld kan worden tot de hoogte van de verplichte verzekeringdekking.

Qua reikwijdte van risico-aansprakelijkheid zijn er belangrijke verschillen aan te wijzen tussen de besproken regimes. Zo laten het Franse, Duitse, en Oostenrijkse risico-aansprakelijkheidsregime onder bepaalde omstandigheden ernstige gevallen van schade veroorzaakt door geluid toe. Hiertoe zijn bijvoorbeeld het Duitse en Oostenrijkse regime afgebakend op basis van het criterium van een ongeval ('*Unfall*'), dat onder het Duitse regime gedefinieerd is als een plotseling van buitenaf afkomstig onvoorzienbaar voorval dat schade aan personen of eigendom veroorzaakt. Toch wordt er een voorkeur gegeven aan een nog strengere beperking van het risico-aansprakelijkheidsregime, waarbij welke vorm van schade ook door overvlucht uitgesloten is. Hiertoe kan het Australische regime tot voorbeeld dienen, waarin de afbakening is geschied op basis van het criterium van impact van het luchtvaartuig of delen of objecten afkomstig van het luchtvaartuig. Een dergelijke afbakening kan worden gerechtvaardigd op grond van het feit dat de bewijslast om schuld of negligence aan te tonen minder onoverkomelijk wordt geacht indien het luchtvaartuig intact blijkt in plaats van te verongelukken. Daarnaast is gebleken dat de meeste regimes zijn gebaseerd op ongelimiteerde aansprakelijkheid, en dat er in de regel een verplichting tot verzekering is gecodificeerd. Voorzover wel wettelijk gelimiteerd, kan aan de limieten worden ontkomen door schuld aan te tonen, hetgeen redelijker wordt geacht dan opzet of grove nalatigheid, zoals vereist is onder het systeem van Rome.

Bij gebrek aan geharmoniseerde aansprakelijkheidsregels binnen het Europees gemeenschapsrecht op dit gebied zijn de huidige en toekomstige verzekeringseisen die op gemeenschapsniveau worden gesteld eveneens geëvalueerd. Hierbij is tevens de vraag geopperd of er argumenten te vinden zouden zijn om eveneens aansprakelijkheidsregels op het niveau van het gemeenschapsrecht dit gebied te harmoniseren.

Het huidige regime van EG-Verordening 2407/92 bepaalt slechts dat de aansprakelijkheid bij ongevallen van luchtvaartmaatschappijen die in de Gemeenschap zijn gevestigd ten aanzien van passagiers, bagage, vracht, post en derden dient te zijn verzekerd. Hierbij worden echter geen specifieke eisen gesteld aan de hoogte van de verplichte dekking.

Het voorstel van de Commissie van 24 september 2002 tot een nieuwe verordening die de verzekeringsvereisten ook voor niet in de Gemeenschap gevestigde luchtvaartmaatschappijen nader invult kan derhalve beschouwd worden als een stap in de goede richting. Kern van het voorstel is een eis van verplichte verzekering tot een zekere hoogte van dekking, die afhankelijk is gesteld van het gewicht van het desbetreffende vliegtuig. Een van de opmerkelijkste aspecten van het voorstel is dat de vereisten ook gelden voor luchtvaartmaatschappijen die louter binnen het Europese luchtruim vliegen zonder daarin te landen. Hoewel waarschijnlijk niet in strijd met de bepalingen van Artikel 5 en 6 van het Verdrag van Chicago, heeft dit ruime bereik van het voorstel wel de vraag van de handhaafbaarheid opgeroepen.

Op basis van een vergelijking met het wel geharmoniseerde regime van aansprakelijkheid van luchtvaartmaatschappijen jegens passagiers van *EG*-Verordening 2027/97 is betoogd dat een meer geharmoniseerde aanpak van aansprakelijkheid jegens derden op gemeenschapsniveau ook gerechtvaardigd zou kunnen worden. Dit zou ook bewerkstelligd kunnen worden met het minder vergaande instrument van een richtlijn, om lidstaten met al bestaande wetgeving op dit gebied wat meer speelruimte te bieden. Aangezien de Commissie heeft aangegeven hier niet voor te voelen, blijft dit terrein voorlopig echter onder verantwoordelijkheid van de lidstaten vallen.

In hoofdstuk 5 wordt nader ingegaan op de ontwikkelingen in de Verenigde Staten. In de Verenigde Staten is het aansprakelijkheidsrecht op dit gebied een andere weg ingeslagen en heeft risico-aansprakelijkheid het afgelegd tegen schuldaansprakelijkheid (*negligence*). De grondslagen van risico-aansprakelijkheid op dit gebied kunnen enerzijds worden afgeleid uit beginselen van ongeschreven *common law* en anderzijds uit gecodificeerde aansprakelijkheidsregimes uit het verleden. De beginselen van ongeschreven *common law* die een grondslag van risico-aansprakelijkheid rechtvaardigden, zijn af te leiden uit de zaak *Rylands* v. *Fletcher* (1866) en de *Restatement of Torts*. Deze beginselen zijn: 1) derden kunnen schade op de grond veroorzaakt door de luchtvaart niet verhinderen; 2) vliegen kan gekwalificeerd worden als een zogenaamde *ultrahazardous activity*; 3) het is onmogelijk om de oorzaken van luchtvaartongevallen te bepalen; 4) luchtvaart heeft nog niet het stadium bereikt waarin de eraan verbonden risico's door de slachtoffers gedragen moeten worden; 5) de notie dat er nog relatief weinig mensen actief zijn op het gebied van de luchtvaart; 6) de eenzijdigheid van de activiteit in termen van winst voor de luchtvaartindustrie enerzijds en risico's voor derden anderzijds; 7) de notie dat de luchtvaartindustrie beter geëquipeerd is om zichzelf te verzekeren voor de eraan verbonden risico's dan derden.

Al wordt de uitkomst van risico-aansprakelijkheid onderschreven, zijn deze argumenten gedeeltelijk bekritiseerd, met name op de correlatie tussen de *ultrahazardousness* (het gevaar) van de activiteit en de grondslag van aansprakelijkheid. Het gevolg van die redenering zou namelijk zijn dat toepassing van

negligence weer gerechtvaardigd zou zijn in 'veiliger' tijden, terwijl schuld dan voor de betrokken derden net zo lastig aantoonbaar kan blijken.

Daarnaast is ingegaan op de toepassing van de *common law* grondslagen van *trespass* en *nuisance* op dit gebied.

De gecodificeerde risico-aansprakelijkheid vindt zijn oorsprong in Secties 4 en 4 van de *Uniform Aeronautics Act*. Het aantal staten dat op basis hiervan gecodificeerde aansprakelijkheidsregimes in het leven heeft geroepen is inmiddels echter teruggelopen tot zes. De ratio van deze omslag van risico-aansprakelijkheid naar schuldaansprakelijkheid (*negligence*) is dat de activiteit van vliegen noch door de rechterlijke, noch door de wetgevende macht van de meeste staten meer als *ultrahazardous* wordt gekwalificeerd.

Mede op basis van eerder in deze studie naar voren gebrachte argumenten kan deze ontwikkeling worden bekritiseerd. Toepassing van *negligence* kan namelijk wel degelijk leiden tot schade die niet gecompenseerd wordt, ondanks de notie dat betrokken mogelijk aansprakelijke exploitanten van luchtvaartuigen vaak bereid tot schikkingen blijken te zijn.

De juridische gevolgen van de terroristische aanslagen op de Verenigde Staten van 11 september 2001 zijn eveneens besproken. Daarbij is nader ingegaan op de twee routes tot schadevergoeding die aan derden openstaan. De eerste route behelst een aanspraak op het compensatiefonds, dat onder de zogenaamde *Air Transportation Safety and System Stabilization Act* door het Amerikaans Congres het leven is geroepen. De andere processuele route is middels diezelfde Act geconsolideerd voor de *United States District Court for the Southern District of New York.* Hierbij is van belang dat de wettelijke aansprakelijkheid van de betrokken luchtvaartmaatschappijen *achteraf* middels de Act is gelimiteerd. Los van het logische motief om de betrokken luchtvaartmaatschappijen te behoeden voor faillissement, zou de vraag kunnen rijzen of dat grondwettelijk toegestaan is.

De opinie van *Judge* Hellerstein van 9 september 2003, waarin hij de eisers groen licht heeft gegeven om te procederen, is in dit kader besproken. Hierbij kunnen enkele kanttekeningen worden geplaatst bij de door Hellerstein geponeerde stelling dat de terroristiche aanslagen als voorzienbaar voor de betrokken luchtvaartmaatschappijen en luchthavenbeveiligingsbedrijven kunnen worden bestempeld. Ook al mag het proces doorgang vinden blijft het probleem voor eisers dat de uiteindelijke gelimiteerde schadevergoeding bij bevonden aansprakelijkheid over een zeer groot aantal eisers verdeeld zal moeten worden.

Al met al is het duidelijk dat onrechtmatig gebruik van luchtvaartuigen ook in de toekomst nader zal moeten worden geregeld, waarbij de optie van wettelijke limitering van aansprakelijkheid van de exploitant een goede oplossing biedt.

Op basis van deze studie is in hoofdstuk 6 een laatste analyse gemaakt van het te prefereren regime van aansprakelijkheid van exploitanten van luchtvaartuigen voor schade aan derden op de grond. Hoewel er zowel inter-

nationaal als op Europees gemeenschapsniveau aansprakelijkheidsregimes mogelijk zijn gebleken, gaat in eerste instantie de voorkeur uit naar nationale regelingen, gezien de ruimere reikwijdte van types van luchtvaartuigen en soorten luchtvaart die onder een nationale regeling gebracht kunnen worden.

Los van de vraag of het een internationale, supranationale of nationale regeling betreft, is hierbij uitgekomen op een onbeperkt risico-aansprakelijkheidsregime, waaraan de exploitanten van luchtvaartuigen onderworpen dienen te worden. Hiervan zou schade veroorzaakt door (te lage) overvlucht als quid pro quo moeten worden uitgezonderd. Daarbij heeft de exploitant vanzelfsprekend regres op andere mogelijk aansprakelijke partijen. Een dergelijk regime zou ondervangen moeten worden door verplichte verzekeringsdekking voor aansprakelijkheid jegens derden. Aansprakelijkheid voor onrechtmatig gebruik zou van de hoofdregel uitgezonderd kunnen worden door op dat gebied een wettelijke limitering van aansprakelijkheid van de exploitant in te lassen.

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