# *Legal Aspects of Aviation Risk Management*

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## ABSTRACT

The thesis in the first part examines the notion of risk and describes the process of risk management with emphasis on the identification of emerging threats to civil aviation and on the adoption of new risk handling techniques.

In the second part, the role of law into the airlines' management regime is examined especially in the light of two prima facie conflicting trends: liberalization of market access and increased State involvement in war risk, safety and security issues. Furthermore, the contractual and tortious / delictual exposures of airlines are being scrutinized and the ways to handle them are being analyzed.

The main objectives are (i) to demonstrate that risk management is not restricted to insurance, but involves a number of techniques and procedures that have the potential not only to minimize risk but also to turn risk into opportunity and value and (ii) to identify the role of law as a management tool in the oncoming liberalized aviation environment.

## RÉSUMÉ

La première partie de la présente thèse discute de la notion de risque et décrit le processus de gestion de celui-ci en mettant l'emphase sur l'identification des nouvelles menaces pour l'aviation civile et sur l'adoption de nouvelles techniques de gestion du risque.

Dans la seconde partie, le rôle du droit dans le cadre de gestion des compagnies aériennes sera examiné et cela, d'une façon plus particulière, à la lumière de deux tendances apparemment contradictoires : la libéralisation de l'accès aux marchés et l'implication croissante de l'État dans les affaires relatives au risque de guerre, ainsi que la santé et la sécurité. De plus, l'exposition contractuelle ainsi que délictuelle/extracontractuelle des compagnies aériennes sera traitée et les moyens de la gérer sera analysée.

L'objectif principal de la présente thèse est double : (i) démontrer que la gestion du risque n'est pas limitée à l'assurance, mais qu'elle implique plutôt un certain nombre de techniques et de procédures qui pourraient non seulement minimiser le risque mais aussi le transformer en opportunité et en valeur; (ii) d'identifier le rôle du droit en tant qu'outil de gestion dans un monde de l'aviation civile de plus en plus libéralisé.

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## 1. INTRODUCTION

Risk management is a fascinating field of study because it is constantly concerned with uncertainty and change. Its importance has grown steadily during recent years and has increased awareness of the need to manage risks rather than depending solely on insurance. The rapid evolution of the risk environment and the dramatic increase of insurance premiums have contributed significantly to this trend.

The aviation industry is in critical need of risk management. It operates in a labyrinth of actors and norms and rarely enjoys sustained periods of profitability. Furthermore, events such as 9/11[1] promulgated further awareness of the risks which the industry must assess. The entities involved face a challenge to embrace and master risk in the face of constantly changing circumstances and uncertain activities. This must be achieved while assuring to their investors and lenders that their return reflects the degree of risk involved. These industry characteristics require the development of risk management techniques to protect both financial stability and the safety of operations

Law plays a predominant role in the design and implementation of a risk management plan. The parties must understand the applicable laws and implement a system to control the risks associated with them. This thesis shall define areas of aviation risks from a legal and regulatory standpoint to enable air carriers to contain, predict and determine the extent of their legal exposures. Furthermore, the role of law in the safety, security and war risk management regime which emerged after 9/11 is examined, especially in the light of two prima facie conflicting trends: liberalization of market access and increased State involvement in safety, security and war risk issues.

[1] September 11th ,2001 terrorist attacks.

## 2. WHAT IS RISK MANAGEMENT?

### 2.1 CONCEPT AND CLASSIFICATION OF RISK

The first step in the risk management process is to define and understand the concept of risk. Risks manifest themselves in many ways and take various forms. Whether it is the risk of losing a driving license because of a car accident or setting up an airline, individuals and businesses face risks every day and thereby becoming risk managers by necessity.

How can we define risk? There is no widely accepted definition, since risk is a multidimensional concept. Black's law dictionary defines it as "*the chance of injury, damage or loss*"[2] and in terms of insurance as "*the chance or degree of probability of loss to the subject matter of an insurance policy*".[3] An engineer may perceive it as the spectrum between uncertainty on the one hand and certainty on the other[4] and a mathematician as the set of triplets: R= {(si,pi,xi)}...where si is a scenario identification or description, pi is the probability of that scenario, and xi is the consequence or evaluation measure of that scenario, i.e., the measure of damage.[5] Risk managers might understand it as the variation in the possible outcomes that exist in nature in a given situation,[6] or as the distribution of possible outcomes in a firm's performance over a given time horizon due to changes in key underlying variables.[7] Although these definitions examine risk from different perspectives, the underlying concept remains the same: uncertainty regarding the result and probability of loss.

After defining risk, the next step is to classify it. Risk classification enables the entities involved to identify and prioritize risks in an organized manner. Only those risks that may impart financial consequences upon the entity are of interest to risk managers. They can be divided into three main categories:

(a) Pure and speculative risks: This is the most important classification regarding risk management. Pure risks exist when there is a chance of loss but no chance of gain, while speculative risks exist where there is a chance of gain as well as the chance of loss.[8] Typical examples of pure risks include accidents, fires, thefts and wars, since they can only bring about the possibility of financial loss. Gambling is an archetypical example of a speculative risk with the

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[2] Henry Black *et al.*, *Black's Law Dictionary* 7th ed. (St. Paul, Minnesota: West Group, 1999), at 1328 [*Black's dictionary*].
[3] *Ibid.*
[4] Rod Margo, "Risk Management and Insurance" (1992) XVII-I Ann. Air & Sp. L. 79 [*Margo, Risk Management*].
[5] Edwin B. Dean, "Risk from the Perspective of Competitive Advantage" (1999), online: Design for Competitive Advantage, Second Edition **http://www.dfca.org/sys/rsk.html** (date accessed May 20, 2003).
[6] Arthur Williams & Richard Heins, *Risk Management and Insurance* 2nd ed. (New York: McGraw-Hill Book Company, 1971) at 4 [*Williams & Heins*].
[7] James W. Deloach, *Enterprise-wide Risk Management* 1st ed. (Great Britain: Arthur Andersen, 2000) at 48.[*Deloach*]
[8] *Williams & Heins*, *supra* note 6 at 13.

probability of both gain and loss. Other examples involve investments in stock market, shifts in government policies, and introduction of new technology, since they offer possibilities for gain. Only pure risks are typified by the risks covered by insurance contracts in the sense that the insured's liability is limited to the actual loss which is in fact proved.[9] The insured effects the insurance contract by the risk of loss, but it does not create the risk of loss by the contract itself, as it happens in a wager.[10] Insurance contracts are designed to protect what the insured possesses rather than enrichment. The insured is not permitted to profit from the existence of the insurance contract, but it should be restored to the prior to loss financial condition.[11]

(b) Static and dynamic risks: Static risks are "*connected with losses caused by the irregular action of the forces of nature or the mistakes and misdeeds of human beings*",[12] while dynamic risks are associated with changes in human wants and technological improvements in machinery.[13] Static losses involve the damage and/or destruction of assets due to dishonesty or human failure, whereas dynamic losses include market depreciation and product obsolescence. Static risks are always pure risks, while dynamic risks include mainly speculative risks.

(c) Fundamental and particular risks: Fundamental risks are group risks, impersonal in origin and effect and unpreventable for the individuals.[14] They involve natural disasters and social, political and economic changes, such as war and unemployment. Particular risks however are personal in origin and effect, and tend to arise out of individual occurrences.[15] They include loss of property by fire, theft and flood; loss of income due to death or disability; liability for personal injury or property damage. Particular risks are always pure risks, while fundamental risks include pure and speculative risks.

Traditionally, risk managers concentrate on managing pure risks of economic, social or physical origin which may cause property, personal or liability exposures. However, the modern approach to risk management presumes that risk managers are concerned with all risks, pure as well as speculative and they examine every situation where there is uncertainty about the future.

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[9] Contracts of insurance are "*contracts of indemnity, and of indemnity only, and...the assured, in case of a loss against which the Policy has been made, shall be fully indemnified, but shall never be more than fully indemnified*" per Brett, L.J. in *Castellain v. Preston* (1883), II QBD 380 at 386.
[10] Raoul Colinvaux, *Colinvaux's law of insurance* 7th ed. (London : Sweet & Maxwell, 1997) at 1.
[11] Emmett Vaughan & Therese Vaughan *Essentials of Insurance: A Risk Management Perspective* 2nd ed. (New York: John Wiley & Sons, Inc, 1995) at 130.
[12] Allan H. Willett, *The Economic Theory of Risk and Insurance* (Philadelphia: University of Pennsylvania Press, 1951) at 14.
[13] A. Wells & B. Chadbourne *Introduction to aviation insurance and risk management* 2nd ed. (Florida: Krieger Publishing Company, Inc, 2000) at 47[*Wells & Chadbourne*].
[14] *Williams & Heins, supra* note 6 at 15.
[15] *Wells & Chadbourne, supra* note 13 at 47.

## 2.2 RISK MANAGEMENT OVERVIEW

Risk management constitutes a central part of strategic management and if properly designed and implemented, it allows a firm to assume additional risks while growing more secure. It improves the link between risk and opportunity and marshals the apprehension of all the factors that may affect an entity.

Risk management can be defined as a process by which an entity attempts to identify and then control or manage risks in such a way that they will be least likely to occur, or in the event of occurrence they will cause least harm, whether caused by loss, damage, disruption, dislocation or inconvenience.[16] Risk management is not merely an act of purchasing insurance coverage, but constitutes a logical, continuous and developing step-by-step procedure to protect and consequently to minimize risks to the firm's property, interests and employees.[17]

It includes the following five stages:

(a) risk identification;

(b) risk measurement;

(c) treatment of risk by:

- elimination
- reduction
- transfer
- retention;

(d) implementation of the selected treatments; and

(e) monitoring of results and considerations of changes in exposures.[18]

The objective of every risk management plan should be "*to manage, control, minimize or eliminate risk, to the end that [the entity's] personnel be protected from hazards, the financial condition of the organization not to be seriously jeopardized, and its material resources be conserved to the maximum extent possible and practical*".[19]

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[16] *Margo, Risk Management, supra* note 4 at 80.

[17] Treasury Board of Canada, "Risk management policy", online: http://www.tbs-sct.gc.ca/pubs_pol.dcgpubs/RiskManagement/riskmanagpol_e.asp (last accessed April 22, 2003).

[18] International Air Transport Association (IATA), "Risk Management Policy and Procedure Guidelines" (2002) at 3 [*IATA Policy*].

[19] Dwight Levick, *Risk Management and Insurance Audit Techniques* 1st ed. (Boston: Shelby Publishing Corp., 1988) at 299.

## 2.3 RISK MANAGEMENT PROCESS

### *2.3.1. Risk identification*

Risk identification is a systematic, on-going process of examining and determining the potential sources of losses faced by the entity. By establishing procedures and communications, a company allows for complete discovery and inventory of the risks that may arise during the course of its activities. Unless a company identifies all the potential losses that it confronts, it will not be able to determine the best way to handle them and it will unconsciously retain unidentified exposures which may create losses of significant magnitude.[20] Risk discovery constitutes the most difficult task in a risk management plan, since it requires in-depth knowledge of the entity's strategic and operational objectives and the market in which it operates.

The first step is to inspect all the activities and assets of the company. In this survey the use of a "risk analysis questionnaire" is indispensable, as it suggests which types of losses the entity may face.[21] These questionnaires are generic by nature and may be used as guidelines for acquiring basic information about the entity and determining areas where further investigation may be needed.[22] However, they should not be relied upon exclusively, since they tend to focus on insurable risks and they may ignore risks which are associated with the entity's special nature of operations.[23] An alternative method could be for the risk manager to develop its own questionnaire. This is a time-consuming task, but has the advantage that the questionnaire will be adapted to the entity's particular exposures and will arrange its risks in a manner which is more meaningful to its risk manager.[24] In the drafting of the questionnaire information could be acquired by brokers, insurance companies, risk management consulting firms and professional associations.

In addition to the questionnaires, a number of other risk identification tools are often used. Financial statements, flow charts and statistical records of past losses detail the firm's operating processes and their careful analysis may reveal exposures that were omitted from the questionnaire.[25] Furthermore, participation in external databases and the allocation of funds and time for scenario analysis, incident investigation and hazard and operability studies constitute valuable tools.[26]

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[20] Passive retention.
[21] Risk analysis questionnaires are widely available through brokers, insurers, insurance agencies and professional associations.
[22] Dwight Levick, *Risk Management and Insurance Audit Techniques* 3rd ed. (Boston: Standard Publishing Corp., 1995) at 3.3 [*Levick*].
[23] Jean-Paul Louisot, "Risk Management for Private and Public Entities" found at Dictionnaire Permanent de l' Assurance ( Paris: Editions Legislatives, 1995) at 22 [translated by author].
[24] *Williams & Heins, supra* note 6 at 58.
[25] *Ibid.* at 61-62.
[26] Tim Unmack, *Civil Aviation: Standards and Liabilities* 1st ed. (Great Britain: LLP Professional Publishing, 1999) at 427[*Unmack*].

Airline risk managers often identify the following specific forms of risk:

(a) Asset risks: these can be divided into physical assets risks, financial guarantees and credit risks, and reputation risks. Physical asset risks can be further divided into real property and personal property risks. The first category includes buildings and tenant improvements in leased buildings, while the second involves airplanes and other leased or owned machinery, furniture, mobile equipments and automobiles. Financial guarantees and credit risks include the risk of dealing with deficient suppliers, consultants and sub-contractors who may not provide proper insurance coverage for their work. Reputation constitutes one of the most valuable assets of airlines and is worthy of particular attention.

(b) Loss of use of property: when an aircraft is damaged or destroyed, the airline, apart from the cost of replacement or repair, suffers a loss of revenue due to the potential delay, cancellation or re-scheduling of flights, passengers' accommodation and alternate passengers' transportation.

(c) Liability losses: air carriers are liable for claims of death or personal injury to its passengers and third parties on the ground; liability for personal injury, medical expenses and lost wages to employees injured in the course of their employment.

(d) Criminal losses: thefts, robberies and acts of fraud or deception from external or internal persons.

(e) Key person losses: the death, injury or sickness of key position holders in the entity may result in reductions in revenues

(f) Systemic risks: economic recession, variations in inflation and changes in passenger travel patterns have an impact on the airline's products and services as well as on interest and currency exchange rates; changes in domestic taxation laws and intergovernmental relations.

*2.3.2. Risk measurement*

Once the potential risks are identified, a proper assessment of the losses associated with them must be conducted. Risk measurement involves the evaluation of the potential impact, in economic terms, that various exposures can have on the entity. This requires a determination of: (i) the probability of such losses occurring (frequency); (ii) the severity of the losses that may occur (severity); (iii) the impact the losses will have upon financial affairs of the entity (impact) (iv); the degree of variation in the losses experienced from one budget year to another (variation); and (v)

the ability to predict the losses that will actually occur during the budget period.[27] The measurement process is vital for the entity to assess the potential threats, to measure both its maximum possible and maximum probable loss and to decide upon the optimum combination of risk management tools.

Frequency measures how often a particular type of loss is likely to occur.[28] As a rule, smaller losses occur more frequently than larger losses. Thus, when measuring the degree of the risk involved, severity[29] becomes the most important factor. A catastrophic but infrequent loss has more serious adverse effects upon an entity's operations and financial stability than a frequent but small loss.

The potential amount of loss is not just the total amount the entity stands to lose, but the total potential loss multiplied by the percentage chance that the loss will occur. [30] An important aspect of that equation for airlines is that loss is not only physical or monetary, but it includes the intangible damage that the carrier's reputation suffers after an accident. To predict the percentage chance that a loss will occur, risk managers use the law of large numbers to project future losses based on the experience of their company's past losses.[31] The law of large numbers is a fundamental law in probability theory and statistics[32] which in general terms indicates that "*as the number of units reviewed increases, the variations in actual experience from predicted experience will decrease*".[33]

However, risk managers will be hampered by a lack of adequate past data and will not be able to analyze a large number of exposures. This detracts from their ability to predict with accuracy the variation between expected and actual losses. However, by increasing the number of exposures reviewed or by utilizing data from external sources such as data from insurers, brokers or other professional associations these problems may be overcome.

Even with a large number of past losses data, risk managers cannot predict future losses with 100% accuracy, since the law of large numbers has two important limitations. First, despite having full regard to the past losses there remains a strong possibility that the actual losses will not

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[27] *Williams & Heins, supra* note 6 at 64.
[28] *Wells & Chadbourne, supra* note 13 at 65, and *Levick, supra* note 22 at 3-5.
[29] The amount of loss that is apt to be sustained.
[30] Brent Dyer, "Risk Management and its Application to Air Carrier Safety" (1992) 62 JALC 491 at 494 [*Dyer*].
[31] George Head & Michael Elliot & James Blinn *Essentials of Risk Financing*, Vol. 1 3rd ed.
(Pennsylvania: Insurance Institute of America, 1996) at 231 [*Head&Elliot&Blinn*].
[32] The scientific definition of the Law of Large Numbers is the following: "*if an event or probability p is observed repeatedly during independent repetitions the proportion of the observed frequency of that event to the number of repetitional converges towards p as the number of repetitions become large*", online: Principia Cybernetica Web http://pespmc1.vub.ac.be/ASC/LAW_NUMBE.html (last accessed July 2, 2003).
[33] *Levick, supra* note 22 at 3-5.

follow the past patterns.[34] The fact that there was no theft of property belonging to the company from its premises within the last 10 years does not mean that there is no risk of theft to company property. Second, the underlying conditions affecting the loss environment might change and thus past losses cannot be used as guidance in predicting future ones.[35] The frequency and severity of directors and officers liability claims, professional liability claims and property losses due to weather conditions have changed remarkably during the last years. Therefore, risk managers may face difficulties in predicting future losses of these kinds based on available data.

Furthermore, the possible impact of the loss is an important consideration. Most entities can afford a $15.000 loss out of liquid assets. However, a $100.000 loss may cause disarray to the company's cash flows and exhaust its credit lines. Larger entities could pay out of their operating expenses a $100.000 loss, but a $1.000.000 loss may severely strain their budget or even force them out of business.

The impact of a particular loss depends upon the direct and indirect consequences of the loss, the size of the entity and its financial condition. However, the size of the entity does not always determine its financial stability and in turn its financial stability does not necessarily determine the availability of cash.[36] For example, the immediate availability of spare equipments or vehicles may be more important than the availability of cash or credit.

*2.3.3. Risk treatment techniques*

Once risks are identified and measured, the techniques employed to resolve the potential risk are evaluated. There are four tools for risk treatment: (a) elimination; (b) reduction; (c) transfer; and (d) retention. Risk managers use elimination and reduction techniques to control risk and transfer and retention methods to finance them.

A) Risk control

*i) Elimination*

Eliminating a risk requires the company to refrain from such risk-bearing activity. In theory, it constitutes the only self-sufficient risk management technique, since a risk that has been eliminated completely cannot produce a loss and thus there is no further need to reduce it or transfer it. In practice it is the least viable option, since entities will not be able to operate if they do

[34] *Head & Elliot & Blinn, supra* note 31 at 231.
[35] *Ibid.*
[36] *Levick, supra* note 22 at 3-6.

not engage in activities that embrace risk.[37] However, a limited application of the technique is possible. A company may decide not to use private aircraft, or to allow its employees to fly aircraft for business. An air carrier may decide to remove aging aircraft from its fleet in order to eliminate the higher crash risk that they may impose. An aircraft manufacturer may discontinue selling a certain type of aircraft which has high product liability exposures, because the liability claims may outweigh the expected revenues from its sales.[38]

*ii) Reduction*

The reduction method involves reducing the risks associated with the entity's activities, without abstaining from them.[39] It can introduce quality control programs which include safety training, early detection programs, security precautions and emergency procedures. By the creation of a dedicated human resources policy the company may be able to reduce labor disturbances and raise personnel morale. Aircraft manufacturers may establish visitor areas, post no smoking signs in the manufacturing areas, set up fire alarms and automatic sprinkler systems, and establish fire divisions so that spread of any fire which strokes a portion of the building would be confined and minimize further damage. Airport authorities can establish procedures to reduce accidents that occur during ground maneuvers on airport aprons and during the movement of aircraft in and out of hangars.[40]

Moreover, air carriers can find it useful to create a set of guidelines for the distribution of information in the event of an accident. Such guidelines may include the type of information, seniority of spokesperson, and interaction with victims in order to maintain a strong public image.[41] Loss reduction techniques involve such policies as: maintaining warehouses at several locations to store inventory; maintain duplicates of valuable documents and records in safe locations; inspect the premises frequently; and cross-train employees to undertake different positions in the entity.

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[37] *Dyer, supra* note 30 at 495.
[38] George Head (ed.) *Essentials of Risk Control,* Vol. 1 3rd ed. ( Pennsylvania: Insurance Institute of America, 1991) at 20.
[39] *Dyer, supra* note 30 at 496.
[40] Ramp incidents alone cost the industry US $3 billion a year which equates to $300.000 per jet aircraft; aircraft struck by another while taxiing: $1.9 million direct costs and $4.9 million indirect costs; aircraft struck by catering truck: $17.000 direct costs and $230.000 indirect costs. (1998 figures) Flight Safety Digest "Operator's Flight Safety Handbook" (2002) May -June at 47. In 2001, 8.591 apron accidents and incidents occurred at airports which handled a total of 23.098.966 aircraft movements. This corresponds to approximately one incident per 2.700 aircraft movements.
[41] David Norton, "Crisis Management Planning for Small Air Carriers, Aircraft Parts Manufacturers, Installers or Maintainers and other Aviation - Industry Participants" (2001) 66 JALC 505 at 549-550 [*Norton*].

B) Risk finance

*i) Transfer*

*a) Transfer for risk financing*

The transfer method involves the contractual allocation or reallocation of the risks that an entity faces. A distinction should be made between contractual transfer for risk financing and contractual transfer for risk control. In the first category, the financial consequences of risks are transferred to another party (transferee) rather than the risk itself. The transferor contractually transfers the financial burden of specified losses to another entity which acts as transferee by agreeing to pay losses to or on behalf of the transferor.[42] The transferee does not bear the legal responsibility of the risk, but all or part of its financial consequences.[43]

In the second category the risk is "physically" transferred to a third party usually through leases, sale agreements, supply contracts, construction contracts, and maintenance contracts.[44] The transferor shifts to the transferee the legal responsibility for performing certain activities, for assuming certain exposures and for bearing losses from those exposures. The transferor does not look for compensation or other indemnity payment from the transferee for any losses, but it expects the transferee to perform the risky activity and to bear the responsibility for any losses that may result.[45] This absence of any expectation of indemnity distinguishes a contractual transfer for risk financing from a contractual transfer for risk elimination or reduction.[46] However, the transferor still has recourse against the transferee, especially in cases of product liability where the transferor markets the products that are maintained or manufactured wholly or partially by the transferee.

The easiest to implement, most popular and most effective way of contractual transfer is through the purchase of insurance. From a legal standpoint insurance is a contract "*whereby one party, called the insurer or underwriter, undertakes, for a valuable consideration [premium], to indemnify the other, called the insured, against loss or liability from certain risks or perils to which the object of the insurance may be exposed, or from the happening of a certain event.*"[47] There must be a risk of loss, to which one party may be subjected by contingent or future events and an assumption of this risk by a legally binding agreement with another. Insurers in their traditional role do not eliminate or reduce risks, but they "*become security [to the insured] that he shall not suffer*

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[42] George Head & Stephen Horn *Essentials of the Risk Management Process*, Vol.2 1st ed. (Pennsylvania: Insurance Institute of America, 1985) at 107 [*Head & Horn*].
[43] *Louisot, supra* note 23 at 53.
[44] *Ibid.* at 35.
[45] *Head & Horn, supra* note 42 at 24.
[46] *Ibid.*
[47] Article 2468 C.C.Q.

*loss, damage or prejudice by the happening of the peril specified in certain things which may be exposed to them".*[48]

Dr. Donald Bunker states that "*the principle upon which insurance is based is the removal of the risk from the shoulders of the individual by spreading it over the whole of the community effecting insurances*".[49] The insurer charges the premium for accepting the risk and pools the premiums of the various persons insured into a general fund. From that fund the insurer will reimburse the insured for their losses and he will preserve an amount for later claims. In the meantime, new insured will be brought into the fund, the already existing will pay their annual premiums and thus the fund will grow. The law of the large numbers then comes into play in the sense that the larger the fund, the more predictable the amount of losses will be in a given period. Since the insured that participate in the fund are exposed to different probabilities of loss, the chance that they will make claims at the same time which would potentially lead to the fund's exhaustion is small.[50]

Insurance provides a certain degree of stability and strengthens the position of the insured entity in the capital markets. It reduces uncertainty and enables entities to undertake activities that would otherwise be considered too risky. Thus, it makes feasible risky investment with high return and increases overall productivity. As Peter Drucker stated emphatically "*it is no exaggeration to say that without insurance an industrial economy could not function at all*".[51] Certainly, the commercial aviation industry could not survive.

For small and medium entities, unlike their larger counterparts insurance is often their first choice as they do not have the required resources to retain a large number of risks and they usually do not dispose the technical and risk management expertise to combine management tools.[52] Thus, insurance enables them to assume more risk and remain competitive.

However, the purchase of insurance coverage is expensive, and insurance contracts are subject to exclusions which make several types of risk uninsurable.[53] Insurers are commercial entities which work for profit. The premium is the fee charged for their services and it covers their

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[48] *Lucena v. Craufurd* (1806) 2 Bos & PNR 269.

[49] Donald Bunker, *The law of aerospace finance in Canada* 1st ed.(Montreal : Institute and Centre of Air and Space Law, McGill University, 1988 ) at 199 [*Bunker*].

[50] Adkisson Consulting, "Basic Insurance Principles" online: The Adkisson analysis http://www.falc.com/basic_insurance_principles.htm (last accessed June 5, 2003).

[51] Peter Drucker, *The New Society* (New York, NY: Harper & Row Publishers, 1950) at 57.

[52] Risk and Insurance Management Society, Inc, "Managing business risk: an introductory course in risk and insurance management" Part III page 18 [*RIMS seminar*].

[53] Costs associated with work-related health, safety or environmental incidents, which may include damage to employees' morale and the entity's reputation.

marketing, loss adjustments and administrative expenses, and their profit. Furthermore, insurance windfalls may provide the incentive to the insured to intentionally cause a loss[54] or to be less careful while dealing with an insured property or activity.[55] Insurance companies develop sophisticated systems of loss control and investigation of losses, but are still open to the danger of fraudulent claims.

Another common way of transferring risks is through disclaimer clauses. Aircraft manufacturers, hangar and maintenance services providers disclaim liability to their customers by means of carefully worded clauses in the purchase or service provision contracts. Furthermore, in agreements concluded between airport authorities and air carriers, clauses are included which require the carrier to indemnify the authority and hold it harmless in respect of damage or liability arising out of its operations at the airport.[56] In these contractual arrangements the transferee agrees to pay losses on behalf of the transferor. The contract will specify the losses for which the transferee will be financially responsible and it may require the transferee to give evidence of financial ability to back up its commitments. Usually the transferee will provide a certificate of insurance evidencing that he purchased insurance coverage adequate to meet its obligations under the risk transfer.[57] In addition, the purchaser of a previously owned aircraft normally will normally transfer the risk of a third party claim for 2 or 3 years or at least to the next heavy check to the previous owner by naming him/her in the insurance policy.

*b) Alternative risk transfer methods (ART)*

The drawbacks of traditional insurance products and especially the mid-1980s crisis in liability insurance capacity caused migration from traditional insurers to alternative risk transfer (ART) methods. ART methods are considered alternative because the client funds a portion of its losses and thus they depart from the basic insurance principle, the pooling of risks.[58] Initially, the main ART methods were self-insurance and captive insurance, but recently they have expanded to include devices as securitization, catastrophe bonds (CAT bonds), contingent capital, finite risk insurance and insurance derivatives.[59] While the hardening of the insurance market constituted the main reason for the growth of ART methods, these techniques offer a number of benefits which

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[54] Moral hazard.
[55] Morale hazard.
[56] *Margo, Risk Management, supra* note 4 at 81.
[57] *RIMS seminar, supra* note 52 at Part III page 14.
[58] M. Klose &D. Oliver, "Understanding the best use of Alternative Risk Transfer Methods" (2003) 17 No.1 The John Liner Review 7 at 8.
[59] Self-insurance and captive insurance are well-established to be considered alternative risk transfer methods. Thus, they will be examined in the next sub-chapter which deals with risk retention methods.

make them attractive to every risk management plan: they can be tailored to specific client problems; they offer multi-year and multi-line coverage; moreover they facilitate the insurance of traditionally uninsurable risks; they provide significant cost savings compared to the current insurance rates; they can be used as evidence of insurance; and they incorporate financial tools, such as derivatives.[60] This growth has been steady and the current "hard" insurance market will benefit ART. However, the collapse of Enron and Arthur Andersen coupled with the collapse of Fortress Re[61] have made many entities cautious of complicated financial methods, and have further damaged the reputation of off-balance sheet financing and thus have restrained the expansion of ART techniques.[62]

Securitization involves "*a process in which assets of the company-originator are pooled, repackaged and then sold to a special purpose corporation [or vehicle-SPV], which then issues securities backed by those assets to investors, and uses the proceeds of the sale to pay its debt to the originator*".[63]

In the insurance context, securitization can be defined as "*the transferring of underwriting risks to the capital markets through the creation and issuance of financial securities*".[64] The insurer rather than transferring its underwriting risks to a re-insurer within the insurance industry transfers them to the broader capital market.[65] Premiums from an insurance company are transferred to a SPV. The SVP in turn issues bonds that provide a high interest rate. An investor purchases the bond and the payments are received by the SVP, which holds cash as a collateral for its obligation to repay interest and principal on the securities issued and losses that may occur.

Furthermore, the SPV issues a conventional reinsurance policy to the insurance company. This ensures that the transaction is being recognized as a reinsurance type for both tax and supervisory purposes.[66] In return for the high interest that he receives, the investor's return is linked with a specified catastrophic event (catastrophic bond), like the occurrence of a hurricane. If the event occurs, the investor will forfeit all or part of the interest and/or principal and/or late payment of

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[60] Swiss Re, "Alternative risk transfer (ART) for corporations: a passing fashion or risk management for the 21st century?" and "The picture of ART", online: www.swissre.com (last visited at 10/6/2003).

[61] In the late 1990s Fortress Re was writing 50-60% of the world market for low-layer aviation exposure, "Besieged Fortress" *Reinsurance* 33:10 (April 2003) at 37.

[62] "Prospects look good for ART" and "Asia moves slowly" *Reinsurance* 33:10 (April 2003) at 20 and 21 respectively.

[63] Y.Gregirchak, *International securitization: Implications for law reform in Ukraine* (LL.M Thesis, McGill University, Law School, 2001) at 10.

[64] R. Gorvett, "Insurance securitization: The development of a new asset class" online: Casualty Actuarial Society http://www.casact.org/pubs/dpp/dpp99/99dpp133.pdf (last accessed June 10, 2003).

[65] D. Leadbetter, P Kovacs & P. Carayannopoulos, "Insurance securitization: Catastrophic event exposure and the role of insurance linked securities in addressing risk", online: http://collection.nlc-bnc.ca/100/200/300/institute_for_catastrophic/iclr_research_paper-ef/no27/insurance_securitization.pdf (last accessed June 10, 2003).

[66] SwissRe "Alternative risk transfer for corporations", online: www.swissre.com (last accessed June 11, 2003).

debt or interest. Through this procedure, the investor in practical terms underwrites a catastrophic risk for an above average expected return, whereas the insurer takes advantage of the increased capacity of the financial markets and avoids the adverse price movements of the insurance markets due to its cycles.

A derivative is a financial instrument whose characteristics and value depend upon the characteristics and value of another asset (called the underlying), typically a commodity, bond, equity or currency.[67] The purpose of such contracts is to secure a profit, or avoid a loss, by reference to fluctuations in the value or price of property of any description, or in an index or other factor specified for that purpose in the contract, or based on the happening of a particular event specified for that purpose in the contract.[68] Depending on the structure of the transaction, they can be divided into swaps; futures and forwards; and options, caps and floors.

An insurance derivative is a financial contract that derives its value from the level of insurable losses that occur during a specified time period.[69] Purchasing an insurance derivative allows any contractually defined loss to be offset by the gain in value of the derivative instrument. A new class of insurance derivatives is known as weather derivatives. Their value depends on risky weather variables, such as temperature, precipitation, or dollar damage from extreme weather.[70] Most weather derivative deals are swaps or options based on temperature indices at specific locations.

Finite risk insurance combines risk funding with risk transfer. The insured estimates its cost of risk over a multiyear period, but it does not transfer much or any risk of loss per occurrence to the insurer. The insured pays a premium to cover the transferred risk that constitutes a pool of funds for the insurer to use to pay losses. Because the insurer is taking only a limited amount of risk, coverage is often available for risks that cannot otherwise be insured at a reasonable price. If losses are lower than the pooled premium, the insurer returns most, or the entire premium to the insured. If the losses exceed the premium, the insured pays additional premium to the insurer.[71] Finite risk insurance enables entities to spread low frequency and high severity risk over time, to stabilize risk costs and to meet creditors' need for evidence of coverage.

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[67] Investorwords.com, online: http://www.investorwords.com/cgi-bin/getword.cgi?1421 (last accessed June 11, 2003).
[68] Appleby Spurling & Kempe, "Bermuda insurance derivatives" online: (last accessed June 11, 2003).
[69] *Louisot, supra* note 23 at 61.
[70] Derivatives' dictionary, online: http://www.margrabe.com/Dictionary/DictionaryUZ.html#sectW (last accessed June 11, 2003).
[71] Illinois captive & alternative risk funding insurance association, online: http://www.captive.com/assoc/icarfia/Finite.htm and Aon Limited, "Navigating captive and finite risk options", online: http://www.aon.com/about/publications/focus/focus_030310.jsp (last accessed June 11, 2003).

A contingent capital arrangement is an agreement entered into before the occurrence of the loss and enables the entity to raise either equity or loan capital at pre-agreed terms following a contractually defined insurance event which exceeds a certain threshold. The insured does not transfer its risks to investors, but after the occurrence of the loss it receives a capital injection to pay its losses. The investor which agrees to purchase in advance equity or debt following a loss is being paid a capital commitment fee. Contingent capital enables entities to sustain operations after a major loss, since the terms of the injection are pre-agreed and therefore are more favorable than the terms they would receive if they had to raise capital on terms agreed after the loss.[72]

*c) Transfer for risk control*

Leasing or other rental arrangement is the most common method of contractual transfer for risk control. Entities can thus avoid the risks associated with property ownership by leasing or renting it. Leasing may be defined as "*a contract by which one of the parties, called the lessor, grants to the other, called the lessee, the enjoyment of a thing, during a certain time, for a rent or price which the latter obliges himself to pay*".[73] From a risk management standpoint, in a leasing contract the lessor and the lessee apportion the risks associated with ownership and use of property. The former usually bears the property loss exposures, e.g. damage, and conveys to the later the right to use the property in return for payment of specified rentals over an agreed time period.[74] However, leasing terms are often tailored to reflect a different sharing of property risks: the lessee may assume some risk in order to achieve a rent reduction.

Another technique of contractual transfer for risk control is to contract out certain activities to other suppliers. Airlines usually outsource major engine and airframe overhauls, aircraft modifications and upgrades to specialist maintenance entities or other airlines with advanced facilities. For example, British Airways launched in mid-90s the model of "virtual airline". It focused on the provision of air services and contracted out a number of its non-core activities: ground transport services at Heathrow and Gatwick to Ryder, in-flight catering to Swissair's Gate Gourmet and third-party terminal and ramp handling at Heathrow's terminals 1 and 2 to other carriers.[75] EasyJet went a step further and in 1995 it even contracted out the aircraft provision and the flying.[76]

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[72] M. Elliot, "Contingent capital arrangements", online: CPCU society http://riskmanagement.cpcusociety.org/file_depot/0-10000000/0-10000/8116/folder/20215/RMQsept.2001.pdf (last accessed June 11, 2003).
[73] Article 1601 C.C.Q.
[74] *Bunker, supra* note 49 at 23.
[75] Rigas Doganis, *The airline business in the 21st century* 1st ed. (London: Routledge, 2001) at 214 [*Doganis airline business*].
[76] *Ibid.*

Although the financial benefits of this model for BA are questionable, the idea behind any outsourcing of activities remains the same: if the entity can outsource certain of its activities to a subcontractor at a lower cost than the cost to perform these activities in-house, the transfer is cost-effective and should be part of the entity's risk management plan.[77] However, the company should pay particular attention to the selection of its subcontractors, since their default may lead to its inability to provide the subcontracted services to its customers. Contracting with highly reputable and financially sound subcontractors who can provide proper insurance coverage for their services constitutes the best protective measure.

ii) Retention

The retention method involves the entity assuming some of the risks itself, either through current expenses, a self-insurance plan or through a deductible imposed by the insurer.[78] The decision whether the entity should assume risk will depend upon a number of factors which, *inter alia*, include the unavailability or the high cost of insurance; a history of tracking, managing and projecting losses; and accurate financial information and profit records which indicate the entity's ability to assume further risk.

*a) Through current expenses*

Retention through current expenses is a way of paying losses as they occur through current revenues. This may be achieved through the introduction of a budget line and division of monthly cash needs depending on the future losses forecast.[79] In the case of a loss occurring, the budgetary allowance should be sufficient to meet such costs. An entity's decision to retain risks through current expenses depends mainly on its financial strength, its seasonal fluctuations in cash flows, and the availability of past losses data which will enable it to predict future losses with accuracy.[80] However, entities should be aware firstly that an unexpected decrease in their cash flow will impoverish their ability to pay losses through current expenses and secondly that a high severity loss will unsettle their overall budget, since it will force them to release cash devoted to other activities.[81] Therefore, this method can be safely used only for low severity risks which do not have the potential to exhaust the available cash.

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[77] *Head & Horn, supra* note 42 at 25.
[78] Active retention
[79] *Louisot, supra* note 23 at 47.
[80] *Head & Horn, supra* note 42 at 115.
[81] *Ibid.* at 116.

*b) Through self-insurance*

Retention through self-insurance requires the entity to periodically set aside an amount of money based on its potential losses to form either an unfunded or funded reserve which can then pay for the losses should they occur.[82] This tactic is economically advantageous for the firm as claims are met from an internal fund thus excluding the insurer's profit.

An unfunded reserve constitutes a liability entered on the debt column of the balance sheet, just above capital and general reserves for which funds have not been set aside.[83] In every accounting period the actual or anticipated losses of the entity are charged to the reserve thereby reducing the entity's earnings for accounting purposes. However, amounts set aside in a reserve are not deductible for tax purposes unlike traditional insurance premiums. They are simply used to allow the entity's shareholders to "*recognize the real financial impact which anticipated or actual losses may have on their organization's financial position*" and to "*forestall the...use of the funds for other purposes*".[84]

A funded reserve, on the other hand, is a liability established on the balance sheet of an entity which is offset by a reserve account funded by cash or other liquid assets for the payment of retained losses.[85] Unlike unfunded reserves, the entity sets aside cash or assets which can be converted into cash on short notice to meet its anticipated losses. For tax purposes the fund held in the reserve account is recognized as deductible expense but only when it is actually used to pay a loss.[86]

However, there is the danger that an unusually high accident rate or a catastrophic loss will occur before the reserve has been built to a sufficient level and thus the entity will not be able to cover its losses. With unfunded reserves there is the further danger that the entity will not have readily available cash to cover the loss, since they constitute just an accounting mechanism.[87]

Workers' compensation insurance is commonly covered by self-insurance plans in large entities, because workplace injuries, diseases or deaths develop high premium costs and they have a higher claim frequency with low severity and a greater degree of predictability.[88] Therefore, entities by self-insuring their employees can save money and exercise more control over their

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[82] *Dyer, supra* note 30 at 497.
[83] Unfunded reserve, online: CCH insurance services http://insurance.cch.com/rupps/unfunded-reserve.htm (last accessed June 6, 2003).
[84] *Head & Horn, supra* note 42 at 117.
[85] Funded reserve, online: CCH insurance services http://insurance.cch.com/rupps/funded-reserve.htm (last accessed June 7, 2003).
[86] *Ibid.*
[87] Marsh Inc, "Captives- A structured alternative" online: http://www.marsh.com/MarshPortal/PortalMain?PID=AppShowDocumentByName&t=1055222990968&6=SvcsSolsRiskReportsMainPage&4=AppShowDocumentByName&3=SubtopicNoRM&2=RiskConsulting&1=SvcsSIns (last accessed June 9, 2003).
[88] *Wells & Chadbourne, supra* note 13 at 62.

potential losses. However, particular attention should be paid to calculating all the costs associated with the self-insurance plans, which *inter alia* include: administration and loss adjustment expenses; plant inspections and first aid training of the employees; compilation and recording of statistics; and medical and rehabilitation services.[89]

*c) Through captive insurance*

A highly organized method of retention is captive insurance. A captive insurance company is defined as "*a company created by a business corporation to supply all or some of the insurance [or reinsurance] needs of the parent company*".[90] There are two main types of captives: (a) pure or single parent captive which is wholly owned by one parent company and it insures or reinsures primarily the risks of the parent company and its subsidiaries, affiliates and customers; and (b) group captive which is owned by two or more companies and it insures or reinsures the risks of the group.[91]

When the captive is a reinsurer, the parent company or the entities forming the group purchase insurance coverage from a direct insurer. The insurer in turn reinsures the majority of the risks with the captive insurance company under pre-agreed terms.[92] The advantage of such a mechanism is that premium cash that would otherwise go to the direct insurer remains within the parent company or the group and is invested to provide further income.[93]

Large business corporations commonly create these companies to avoid operating expenses and reduce the total cost of risks; receive tax benefits; standardize the cover among the group; achieve control over claims process; create capacity to cover risks that cannot be insured through traditional markets or only at prohibitive premium conditions; achieve better access to reinsurance markets and participation in layers of risk with commercial insurers. This affords flexibility in deciding which risks will be retained and reinsured, and additionally allows for stability in payments.[94]

The creation of a captive does not always constitute a better solution than traditional insurance or self-insurance, however as it requires a substantial capital commitment from the parent company for personnel payments, licensing fees, management fees and auditors.

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[89] *Levick, supra* note 22 at 8-2.
[90] Rod Margo, *Aviation Insurance* 3rd ed. (Great Britain: Butterworths, 2000) at 77 [*Margo, Insurance*].
[91] www.casact.org/coneduc/clrs/2002/ handouts/wischmeyer1.ppt (last accessed June 8,2003)
[92] This agreement is referred to as the fronting agreement, because the direct insurer retains a small part of the risks.
[93] *Louisot, supra* note 23 at 48.
[94] Marsh Inc, "The New Realities of Risk: Coping with more Risk", online: http://www.marsh.com/MarshPortal/resources?id=4f44c86fd6c14e83a5442057481cc871 (last accessed May 20, 2003).

Furthermore, it does not offer the same spread of risks as traditional insurance; contractual agreements usually are not satisfied by evidence of captive insurance but they require proof of insurance from a licensed insurer; and premium rates for risks that are not insured in the traditional insurance market are difficult to be determined because of the absence of statistical data.

In deciding whether or not to create a captive the entity should make a feasibility study which will analyze the financial effects of the captive on the parent company, including the tax benefits, present a thorough history of data losses and identify the type and level of the exposures that the entity will retain through the captive. Furthermore, the study will propose brokers specialized in reinsurance that may provide technical and market expertise, if needed, recommend the more convenient captive domicile[95], and select the fronting company based on its financial soundness and underwriting capacity.

An alternative which may be considered especially if a company's insurance needs do not justify the creation of a fully owned captive, is the "rental" captive.[96] The entity does not own the captive, but it is "renting" its infrastructure. It purchases a share of a special class of preferred stocks in the holding company that owns the captive and if it proves successful, the underwriting profits plus investment income that traditionally are gained by the insurance company are returned to the entity.[97] Unlike single parent and group captives, the "rental" captive is owned by insurers or brokers or even other entities which are looking to profit from the fees paid by the participants and to enhance their insurance-product offerings and their client services. The advantages of this technique include overall lower costs because there is no incorporation costs, no commitment of funds required for capitalization, and simplified administration that reduces program costs; easier entry and exit since there is no need for formal liquidation or sale; and avoidance of captive-related legal and regulatory issues.[98] However, the owner of the captive will retain a portion of the profits which will reduce the premium cash flow advantage for the entity and usually he will require to be indemnified for excess losses.[99]

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[95] Some offshore jurisdictions still maintain less stringent regulatory requirements for insurers and reinsurers. Offshore domiciles include Bermuda, Barbados, Cayman Islands, Dublin, Luxembourg, Guernsey, Isle of Man, British Virgin Islands and Turks and Caicos. Onshore domiciles include Vermont, Hawaii, Colorado, Delaware, Tennessee, and Illinois.

[96] Rent-a-captive or cell captive.

[97] *Levick*, *supra* note 22 at 8-15.

[98] Zurich Continental Europe Corporate, "ART- Alternative risk transfer: Rent-A-Captive" online: http://www.zurichbusiness.com/pdf/art_fs.02.rent-a-captive_e.pdf and "Rent-A-Captives" online: Atlantic Risk Services, Inc http://www.atlanticriskservices.com/captivemarket/rent-a-captives.cfm (last accessed July 8, 2003).

[99] CAN Risk services, "Rent-A-Captive", online: http://www.cnabermuda.bm/html/rentacaptive.html (last accessed July 8, 2003).

*d) Through deductibles*

Another method of retaining risks is through deductible clauses in insurance policies. A deductible is a fixed sum or percentage amount of each claim for which the insured is responsible before the insurer's liability to indemnify comes into operation.[100] Thus, if the policy is for $5 million and has a deductible of $1 million, the insurer will be liable for $4 million in excess of $1 million. However, if there is a total or a constructive total loss, deductibles usually do not apply and the insurer covers the loss in full.[101] Deductibles for aircraft are usually $500,000 for narrow-body, $750,000 for B737/A320 types and $1million for wide-body.[102]

Deductibles are used predominantly to prevent the filing of frivolous claims[103] and the consumption of the insurers' administrative time. Furthermore, deductibles may also be advantageous for the insured as he must bear loss up to a specified amount and therefore has the incentive to lower risk.[104] In addition, once the deductible is raised the premiums decrease.[105] These reasons explain why deductibles should be used to retain high frequency-low severity risks.[106] In automobile property insurance deductibles are broadly used, since car accidents usually occur frequently and cause minor damages.

In order to protect against the possibility of retaining a large portion of the risk due to the application of a deductible, entities tend to insure their deductibles. Insurers usually permit the insured to conclude deductible insurance, but they require extensive past claims data and subsequently impose a small deductible. The reason for their reservation is that deductibles give to the insured an interest to the well-being of its property. By reducing them, moral hazards tend to increase.[107]

*2.3.4. Selection of treatments and their implementation*

After considering the pros and the cons of each risk management method, the entity has to determine which techniques it will adopt to handle its risks. Risk management is, above all, an economic function and the techniques adopted should make economic sense to the entity.

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[100] *Margo Insurance*, *supra* note 90 at 121.
[101] *Bunker*, *supra* note 49 at 216.
[102] LPH Pitman Limited, "Aviation and airline insurance", online: http://www.lphpitman.co.uk/aviation.htm (last accessed June 9, 2003).
[103] The loss-adjustment expenses of small claims can easily exceed the amount of the claim itself.
[104] They constitute a tool to control moral hazard.
[105] *Dyer*, *supra* note 30 at 497.
[106] *Williams & Heins*, *supra* note 6 at 208.
[107] *Bunker*, *supra* note 49 at 229.

The proposed techniques should be subjected to a reasonableness test and an economic evaluation.[108] The reasonableness test will examine pragmatic factors which *inter alia* include the availability of resources and infrastructures to support the proposed techniques, and the degree of risk control that they will achieve. The economic analysis will determine the cost of implementing the techniques compared to the benefits expected;[109] measure the economic effect if no action is taken versus the cost of the proposed techniques; prioritize the techniques based on their productive value;[110] and define the risk taking limits of the entity.

Risk managers usually combine a risk control with a risk finance technique for each risk.[111] The risk of airport premises liability can be reduced by establishing emergency assistance procedures; locating guard points at every level of the airport; increasing security surveys; implementing a slips and falls prevention program; providing first-aid training to the employees; establishing random traffic entering and leaving the airport area inspections; and collecting unattended baggage. These measures constitute risk reduction. At the same time, these risks can be transferred through the purchase of airport premises liability insurance. Savings in premium will occur, since the aforementioned measures have reduced the risk.[112]

Guidance regarding the selection of the appropriate risk management technique can be provided by examining the frequency and severity characteristics of the losses. Four categories can be created: (a) Low frequency and low severity: They can be safely ignored, since their impact on the financial stability of the entity will be minor; (b) High frequency and severity: They should be immediately avoided by not engaging in the risk bearing activity or by getting out of it as soon as possible. These risks are difficult to be transferred; (c) High frequency and low severity: These risks are the "usual suspects" for reduction and retention. The risk manager can measure their impact on the entity's operations and financial stability and can forecast future losses. Transfer is not recommended because of the administrative costs of frequently filing small claims; (d) Low frequency and high severity: These risks must be primarily transferred. Their impact is such that the entity cannot afford retaining them. Should they occur, the entity will need an injection of funds

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[108] J. Barry Leonard, "A Case Study: Assessing Risk Systematically" RIMS seminar Last Part[*Leonard*].
[109] The Association of Insurance and Risk Managers, "Risk Management Standard", online: http://www.airmic.com/RiskManagementStandard.asp#insiderms (last accessed May 20, 2003) [*AIRMIC*].
[110] *Leonard, supra* note 108 at 2.
[111] *Wells & Chadbourne , supra* note 13 at 63.
[112] *Ibid.*

which will be provided by its insurer.[113] Reduction techniques can also be proved useful as a supplementary, since they will limit the severity of the loss and the premiums paid to the insurer.

After deciding the appropriate methods of risk treatment, the entity must establish the means of effective implementation, such as selecting an insurer to provide the required coverage with adequate and reasonable rates. Often this selection will be informal, but entities may consider undertaking a formal bidding process, especially if they are dissatisfied with their current broker or insurer, or if they are mandated by law.[114]

The entity may also appoint risk experts who will promote awareness of the risks and their management and create an atmosphere that will encourage the reporting of incidents.[115] Thus the employees will understand their accountability for individual risks and perceive risk management as a key part of the entity's culture.[116]

Furthermore, the allocation of resources for the plan's implementation must be clearly established within each business unit or at the corporate level and those involved in the risk management should follow an implementation timetable and have their roles clearly defined.

The Board of Directors should be aware of the most significant risks; determine the appropriate levels of retention; communicate with the finance and investment community; and establish the entity's risk management objectives and policy.[117] Operational business unit managers should be aware of the risks that fall into their area of responsibility; monitor their business and financial activities; ensure that their unit has incorporated a risk assessment, management and monitoring process; and report to the senior management any perceived new risks or failures of the risk management techniques.[118]

Moreover, the risk management section should produce an entity-wide plan; advise the senior management of the implications of risks on the entity's operations; review the plan and develop risk response processes; ensure that business units report on their risk management techniques; prepare reports for the Board of directors and the audit committee; prepare a risk management procedure guidelines; and communicate such guidelines across the company.

The guidelines should outline the entity's risk management policy and formalize its internal procedures. Furthermore, they should be in writing and contain a statement of goals in the form of

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[113] *Louisot, supra* note 23 at 33.
[114] *RIMS seminar, supra* note 52 at Part IV page 25.
[115] *Unmack, supra* note 26 at 427.
[116] *AIRMIC, supra* note 109.
[117] *Ibid.*
[118] Curtin University of Technology, "Roles of officers in respect of risk management", online: governance.curtin.edu.au/download/ UGP004P1.1_Roles_Officers_18Oct2000.doc (last accessed June 10, 2003).

principles. They should provide guidance for determining which risk management techniques will be used in a way that leaves sufficient leeway to the employee who interprets them and the risk manager who negotiates contracts and insurance coverage.[119] Additionally, they should inform all operating units of their risk management responsibilities and prescribe decisions and actions which will ensure consistency and continuity of the entity's operations.[120] The guidelines should be periodically reviewed and supplemented with new processes and techniques as they are established and implemented.

*2.3.5. Monitoring of results*

The last phase of a risk management plan involves monitoring of the plan's performance. It consists of a combination of regular communications, audits, evaluations and reviews to ensure that risks are effectively identified and assessed, appropriate treatment tactics are in place and opportunities for improvement are identified.[121]

A popular monitoring technique is the risk management and insurance audit. These audits should not be equated to financial auditing which measures the integrity of the entity's financial transactions, but is an objective analysis of the whole risk management plan. It can be conducted by either internal or external auditors, but generally an external firm must be preferred because of its experience and objectivity.

The auditor's main role is to ascertain whether the methods and procedures used conform to the entity's policies and guidelines and to ensure that the identified deficiencies are dealt with.[122] Among the areas that should be monitored and reviewed are: the current insurance program with respect to premium costs and level of protection; the safety and loss prevention programs; the loss records in order to ascertain changes in the frequency and severity of losses; and new risk management products which may reduce the cost of controlling the entity's risks.[123]

When the audit is completed, a written report indicating in a clear, concise and user friendly manner the areas of concern and the recommendations should be compiled. After delivering the report, the auditor should remain in constant communication with the entity's top management in

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[119] R. Mehr & B. Hedges, *Risk Management: Concepts and Applications* (Illinois: Richard D. Irwin, Inc, 1974) at 56.
[120] *IATA Policy, supra* note 18 at 2.
[121] *AIRMIC, supra* note 109.
[122] "Risk Management Audit (Draft)", online: www.tbs-sct.gc.ca/Pubs_pol/dcgpubs/ TB_H4/dwnld/riskdoce.doc (last accessed July 10, 2003).
[123] *Wells & Chadbourne, supra* note 13 at 64.

order to answer questions, clarify information and most importantly assist in the implementation of its proposals.[124]

## 2.4 DISASTER RECOVERY PLANNING

An integral part of every risk management plan is the emergency and disaster recovery plan. Every entity experiences incidents which may have a direct effect on its profitability, reputation and market share and which may prevent it from continuing normal operations. They may include accounting irregularities, terrorism, supply chain interruptions, class action lawsuits, natural disasters, transportation and industrial accidents, medical emergencies, and information security break-ins. The recovery from such incidents must be in the minimum amount of time, with minimum disruption and at minimum cost. The management of the entity must develop and maintain a disaster recovery plan which will reduce the total impact and speed recovery from all kinds of disasters; ensure safety of personnel and customers; lower probability of occurrence; minimize insurance premiums; and achieve orderly recovery.

Disaster plans should be distinguished from emergency plans. An emergency is "*an abnormal situation, present or imminent, which requires prompt action or special regulation of persons or property to protect the health, safety, or well-being of people or to limit damage to records or property*".[125] Disaster is "*an incident or calamity caused by accident, natural causes, or deliberate intent and resulting in serious damage or destruction to records and facilities; a sudden threat to personal safety; or major disruption of operations*".[126] A disaster plan should include emergency measures which will conserve life and property during and after a major loss and will prevent an emergency from becoming a disaster.

In the first instance an emergency management team (EMT) should be created with representation from senior level employees from every major department: finance; public affairs; risk management; information systems; operations; administration; legal; human resources; safety and security; and government and investors relations. Usually the entity's senior officer or management representative will be appointed as team leader. The EMT's first task is to decide on procedural issues including how the team is called into session, what are the alerting protocols and procedures, how are decisions made, where does the team meet, and what resources are needed.

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[124] *Levick, supra* note 22 at 2-10.
[125] http://www.archives.ca/04/04180105_e.html (last accessed July 12, 2003).
[126] *Ibid.*

After establishing clear procedures and protocols, the EMT should create a recovery management plan. This plan will enable the entity to coordinate effectively the activities among the persons having a management role; to establish early warning systems and give clear instructions to all concerned if a crisis occurs; to assess continuously the actual and potential consequences of the crisis; and to continue its operations during and immediately after the crisis.[127]

The third task is to identify the potential disasters that an entity could face and to take steps to eliminate their sources. The disaster identification process will be based on the conclusions of the risk identification part of the entity's general risk management plan. The analysis of the collected data will enable the EMT to develop, implement and document a corporate code of conduct and to create guidelines, which list the events that should be reported and to whom they should be reported.[128] A senior manager should be appointed to whom the employees will direct their concerns regarding the entity's operations, with assurances of anonymity and freedom from victimization.[129] Furthermore, another section of the entity should undertake the responsibility to communicate with the community, the neighbouring industries, and the hospitals, fire and police departments during an emergency.

The fourth task is to divide the entity's functions, services and resources into "critical", "essential" and "deferrable". "Critical" describes the functions that are required immediately or within 24 hours after the declaration of a disaster. As significant client and monetary losses could result, particular attention should be paid to their preservation. "Essential" describes the functions that are required within 48 hours after the declaration of a disaster. Their shut down will result in revenue losses. "Deferrable" describes the functions that are required within 98 hours after the declaration of a disaster. Without these resources, there is no direct significant monetary loss, but employees' morale may suffer.

The fifth task is to appoint sub-groups which will undertake to draft different parts of the plan simultaneously. Four teams can be identified: (a) incident support team; (b) site response team; (c) public affairs team; and (d) legal response and internal investigation team.[130] These teams will submit to the EMT their disaster plans and once reviewed and tested they will be approved and communicated to the employees.

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[127] G. Sikich, "All hazards crisis management planning", online: Stanford University http://palimpsest.stanford.edu/byauth/sikich/allhz.html (last accessed June 13, 2003).
[128] *Norton, supra* note 41 at 537.
[129] Harvey Pitt & Karl Groskaufmanis, "When bad things happen to good companies: A crisis management primer" 1149 Prac. L. Inst., Corp. 307 at 320[*Pitt & Groskaufmanis*].
[130] *Ibid.*

The incident support team (IST) will serve as the execution team of the EMT during the disaster. It should be led by safety or quality managers, since technical issues are fundamental to achieving recovery. The IST will notify the EMT on the progress of incidents that may or may not require its activation and it will decide whether the EMT needs to be augmented in light of the particular disaster. Furthermore, it will ensure that the site response team receives any additional resource necessary to manage the disaster effectively, and it will monitor and modify the overall recovery plan through the disaster.[131]

The site response team (SRT) will handle local emergencies and it will carry out the orders of the EMT and IST. It should be divided into two sub-teams: the technical sub-team and the family/employees assistance sub-team. In case of an aircraft accident, the technical sub-team will support comprehensively the government accident investigation, it will support the airlines internal investigation, and it will help enhance the reputation of the airline as a technically proficient and well managed organization.[132] The family/employees assistance sub-team will address the needs of families and survivors and it will protect the reputation of the airline. With respect to the families of the deceased, the sub-team should be responsible for the autopsies and the issuing of death certificates, the search for bodies, the repatriation of bodies, the memorial services, and the psychological support of the families.[133] With respect to the airline's employees, the sub-team will arrange the hospitalization of the employees who operated the flight and the transportation of their closest relatives and will provide psychological support to their families. Furthermore, it will assure the injured employees and their families about the viability of their jobs and will keep the employees associated with the flight and the unions informed of the real facts of the accident.[134]

The public affairs team will communicate with the mass media and will reaffirm the safety and technical efficiency reputation of the airline. It will monitor the status of the disaster and convene timely press conferences and make press releases. The information released should always be accurate and checked by a counselor for legal implications.

The legal response and internal investigation team will prepare the entity for the legal implications of the disaster, identify the causes of the accident, and institute corrective actions. The team will be responsible to collect important evidence including documents, records or other

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[131] T. Bowman et al., "C-Suite Crisis Management Leadership Lessons Learned and ROI" (Paper presented to the 2003 Risk and Insurance Management Society Annual Conference and Exhibition).
[132] D. Thomas, "The impact of an accident investigation at airlines" (Paper presented to the IATA Airline Insurance Rendezvous, 2001) [*Thomas*].
[133] F. Kagwanja, "Practical problems in the management of catastrophes" (Paper presented to the IATA Airline Insurance Rendezvous, 2001).
[134] *Thomas*, *supra* note 132.

tangible regarding the entity's role in the disaster; prepare the employees for external investigations and inquiries; determine whether any insurance or regulatory notification is required; and analyze the findings of the technical site response sub-team and the reports issued by the government authorities.[135]

The sixth task is to regularly exercise the plan, practice scenarios and revise it. Regular exercises based on potential disaster scenarios will expose issues that had not been addressed to the initial plan, familiarize new employees with the whole process, update the plan's information, provide the employees with real time conditions and keep them on alert.

## 2.5 ENTERPRISE-WIDE RISK MANAGEMENT: THE RESPONSE TO THE NEW RISK REALITY

While the traditional risk management approach is to view risks in isolation, either by risk type or by activity exposed to the risks, thereby concentrating on selected exposures, this approach is no longer feasible in a rapidly evolving risk environment.[136] The globalization and liberalization of markets may create opportunities for expansion and profit, but also reveals new and previously unforeseen areas of risk such as: international mergers and acquisitions; unprecedented dependence on technology; international human resources practices; international fleet operations; changing customer values; weather conditions risk; new regulatory developments; and terrorism.[137]

In the new environment risks and opportunities are closely connected. Risky investments are not only connected with losses and costs, but may yield high rewards. Thus, the entities need to understand both the risks they face and their interrelation in order to optimize their opportunities for growth. The traditional risk management model is no longer adequate to face the new *status quo*, as it fails to link risk management to business strategy and does not promote the identification of the full range of risks and opportunities.

Enterprise-wide risk management (ERM) represents a change in the way that entities approach risk. ERM "*is the process of systematically and comprehensively identifying critical risks, quantifying their impacts, and implementing integrated risk management strategies to maximize enterprise value*".[138] The risk management process constitutes an essential part of the job description of every manager and employee and is no longer the domain of a limited number of

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[135] This analysis may include studies and classifications by the immediate causes, the underlying causes, the nature, and the results of the disasters.
[136] *Deloach, supra* note 7 at 25.
[137] AON Limited, "ERM Trends: What is driving the mandate for a 360-degree view?", online: http://www.aon.com/us/busi/risk_management/risk_consulting/ent_risk_mgmt/erm_trends.jsp ( last accessed May 20,2003).
[138] W. Buchan et al., "ERM: Reality or Fantasy" (Paper presented to the 2003 Risk and Insurance Management Society Annual Conference and Exhibition).

specialists. The objective is economic efficiency of the entity and not just the restoration of operations following an accident. ERM constitutes a positive management process where both the opportunities and the threats stemming from the entity's environment are assessed in order to achieve a long-term sustained growth.[139] Thus, under ERM various departments need to establish common risk management goals and oversight, a common language for risks and a uniform process for developing strategies.[140]

This forward thinking approach will enable the entity to create a risk portfolio, which will include its total exposures away from functional, departmental or cultural barriers and will embrace the full range of its risks. ERM will contribute to the better allocation of capital and resources and will optimize the company's operational efficiency, in so doing it can protect and enhance stakeholder value and it will become a source of competitive advantage.[141]

## 3. AVIATION LEGAL RISK MANAGEMENT

### 3.1. AVIATION RISKS

In the aviation industry, risk can be defined as the uncertainty derived from an aviation activity or as the exposure to losses faced by a party engaging in aviation activities. Types of risks can be loosely classified as: (a). Political risks: war, hijacking and terrorist attacks; confiscation, expropriation, seizure, and deprivation of aircraft; adverse and selective changes in laws and regulations; embargo, civil disorder, and hostilities; (b). Legal risks: professional and fiduciary liability; employment practices liability; contractual, delictual / tortious and products liability; directors and officers liability; (c). Operational risks: theft, loss or damage in an accident; dishonest acts and injury to personnel; natural disasters; errors and omissions in the product line; strikes or personnel's low morale; flight delays and cancellations; runway obstructions; equipment failures; e-commerce failures and data loss; (d). Financial risks: economic[142] and financial[143] currency variations; interest rates' rise; bankruptcy of the entity or of a major debtor or lessee; economic recession; decline in the residual value of an aircraft; tax liability; and (e). Business interruption

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[139] *Louisot, supra* note 23 at 90.
[140] *Deloach, supra* note 7 at 34-37.
[141] *Ibid.* at xi.
[142] "*Economic currency risk is the threat that the costs of a business might become uncompetitive because the real purchasing power of its currency has risen to a point where competitors with costs in other currencies have gained a significant advantage*", *Bunker, supra* note 49 at 117.
[143] "*All other currency risks are financial and are divided into trading risks which arise from selling in currencies other than those of cost, and balance sheet risks which arise from having either more or less assets than liabilities in any given currency other than the currency in which the reporting currency of the corporation is measured*", *Bunker, supra* note 49 at 117.

risks: business affairs of an entity may be interrupted due to one or more of the above risks or other risks.

Aviation risks can further be classified into those resulting in loss/damage to property or assets; to those resulting in death or injury to personnel; and cases of loss or damage resulting in liability to third parties.

From an engineering perspective, aviation risk management seeks to technically control aviation risks so that the highest standard of safety is achieved. This requires stringent attention and discipline in the design, development and operation of aircraft, airports and air traffic control services. The Chicago Convention on International Civil Aviation 1944 (Chicago Convention)[144] and its Annexes provide a fundamental basis for the promotion of flight safety worldwide. Among the eighteen Annexes adopted by the Council of the International Civil Aviation Organization (ICAO), fifteen refer to technical issues of air navigation by prescribing specifications for *"physical characteristics, configuration, material, performance, personnel, or procedure".*[145] They deal with communication systems and air navigation aids;[146] characteristics of airports and landing areas;[147] rules of the air and air traffic control practices;[148] licensing of operating and mechanical personnel;[149] airworthiness[150] and operation of aircraft;[151] collection and exchange of meteorological information;[152] aeronautical maps and charts;[153] and aircraft in distress[154] and investigation of accidents.[155]

The Annexes are complemented by Procedures for Air Navigation Services (PANS) and Regional Supplementary Procedures (SUPPS). The PANS *"contain...operating procedures regarded as not yet having attained a sufficient degree of maturity for adoption as International Standards and Recommended Practices, as well as material of a more permanent character which is considered too detailed for incorporation in an Annex".*[156] SUPPS are similar to PANS in context, but they apply to specific air navigation regions. Therefore, SARPs, PANS and SUPPS form an

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[144] Convention on International Civil Aviation, signed at Chicago on December 7, 1944, online: http://www.iasl.mcgill.ca/airlaw/private.htm#warsaw (last accessed August 15, 2003).
[145] Annex 11, at vi.
[146] Annex 10.
[147] Annex 14.
[148] Annex 2.
[149] Annex 1.
[150] Annex 8.
[151] Annex 7.
[152] Annex 3.
[153] Annex 4.
[154] Annex 12.
[155] Annex 13.
[156] Annex 11

integrated air navigation code[157] which aims at the safety, regularity and efficiency of international air navigation.[158]

Furthermore, civil aviation authorities,[159] aircraft manufacturers,[160] airport authorities,[161] airlines[162] and the International Air Transport Association (IATA)[163] maintain their own flight safety organizations and standing committees which develop standards that frequently are stricter than those contained in the Annexes.

From a legal perspective, aviation risk management seeks to control risks arising out of an issue or event which could require a legal response or action by the aviation related entity that is legal advice, litigation, or an alternative dispute resolution mechanism.[164] Each participant in the industry firstly identifies and assesses its legal exposures and secondly implements a system to control and monitor the risks associated with them.

The legal framework in the field of aviation activities constitutes an amalgam of instruments of public and private international law, domestic legislation, as well as contractual arrangements. This maze of legal norms requires a systematic, integrated and on-going management process that will protect the interest of the entity; minimize the sum of compliance and infringement costs; manage litigation or methods of alternative dispute resolution strategically and efficiently when they occur; and ensure optimal use of the benefits associated with the applicable legal regime.[165]

Aviation legal risk management should not be restricted to core legal issues, such as liability, but it has to take into account the operational, financial and political exposures of the entity. These risks often have significant bearing on the legal choices to be made and they may lead to an

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[157] *Unmack, supra* note 26 at 26.

[158] The uniform application of the specifications included in the International Standards is recognized as necessary for the safety or regularity of international air navigation. The uniform application of the specifications included in the Recommended Practices is regarded as desirable in the interest of safety, regularity or efficiency of international air navigation.

[159] e.g. The Air Safety Support International (ASSI) is a wholly-owned subsidiary company of the UK's Civil Aviation Authority(CAA) and its responsibilities include the regular audit of the civil aviation safety regulatory activities of the Overseas Territories' Departments of Civil Aviation, the safety regulation of all or part of the civil aviation in a territory designated by a territory governor, and the management of CAA's commercial aviation support services, including consultancy, training and international flight crew examinations.

[160] Airbus operates the Aircrew Incident Reporting System (AIRS) which focuses on any operational problem and helps airlines using Airbus aircraft to set up and run their own in-house safety reporting systems, and hosts an annual flight safety conference to which all customer flight safety officers and their associates are invited.

[161] e.g. The FAA's Office of Airport Safety and Standards (ASS) is responsible for all airport program matters pertaining to standards for airport design, construction, maintenance, operations, safety, and data, including ensuring adequacy of the substantive aspects of FAA rulemaking actions relating to the certification of airports.

[162] e.g. the British Airways Safety Information System (BASIS) allows engineers, pilots and safety managers to identify incident trends across aircraft fleets, assess risk and improve communications to all relevant operational departments to ensure that the risk is reduced where possible. Furthermore, US Airways introduced a safety initiative known as line operations safety audit (LOSA). Its core point is to capture data about normal flight operations and the performance of flight crews.

[163] The IATA's Safety Committee (SAC) is an international committee made up of a limited number of elected flight safety managers drawn from airlines and its responsibilities include to monitor aviation safety problems being experienced and identified by airlines and to promote the use of digital flight recorder analysis programs.

[164] Canadian Ministry of National Defence, "Legal Risk Management: A Paper on the Management of DND/CF's Legal Risk", online: Vice Chief of the Defence Staff http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/cosstrat/isrm/annxd_e.asp (last accessed July 1, 2003).

[165] Gerard Hertig, "Legal risk management in private banking", online: University of California, Berkeley http://www.law.berkeley.edu/institutes/law_econ/workingpapers/PDFpapers/hertig_spr02.pdf. (last accessed July 1, 2003).

increased need for legal risk management. For example, the attacks of 9/11 can be primarily classified as political events, but the subsequent cancellation of the third-party war risk liability insurance covering airline operators and other service providers had serious legal implications and necessitated taking legal risk management measures both by States and the private sector.

Furthermore, legal risk management is linked to the levels of insurance premiums since exposure to potential claims is a fundamental element of the insurers' assessment. It allows the participants in an aviation activity either to control internally their legal risks, or transfer or allocate them among each other and therefore reduce their dependence on insurance.[166]

### 3.2. A LEGAL RISK MANAGEMENT PLAN

Legal risk management builds on existing risk management practices and it is linked to the airlines' general risk management plan. It involves the following stages:

(a). Legal risks' identification: By using interviews, questionnaires, templates, checklists and matrices the airline inspects its operations to ensure that it acts in conformity with the various legal obligations imposed upon it and to discover areas of potential liability. Furthermore, contracts and other legal documents which define an airline's relationship with other entities and with international and domestic governmental organizations are scrutinized;

(b). Legal risks' measurement: Once the legal risks are identified, the likelihood that they will take place and their potential impact upon the entity's financial stability is measured. In general, risk likelihood will be categorized according to low, medium, high or very high probability and risk severity will be categorized according to low, medium, high or very high impact. Based on their probability and severity rates the identified risks will be ranked. A short list of the most important legal risks should be prepared;

(c). Legal risks' treatment and implementation: Once legal risks are identified and measured, the airline should decide whether to control or transfer them. It may choose to allocate them to other entities by outsourcing certain of its activities, transfer them to an insurer, or reduce them by establishing procedures to cautiously review contracts before signing. Furthermore, the legal department in collaboration with the risk management section will examine claims or suits the entity is or will be a party to in order to determine the benefit from either pursuing the dispute, diverting it to other conflict resolution mechanisms such as negotiation, arbitration or mediation, or

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[166] Valerie Kayser, *Liability risk management for activities relating to the launch of space objects: today's environment and tomorrow's prospects* (D.C.L. Thesis, McGill University, Law School, 2000) at 20[*Kayser*].

settling. Case merits, related and incidental costs, and overall gains and losses, are factors to be considered.[167] Furthermore, funds should be allocated for the legal training of staff, as well as for processes of evaluating the legal exposures of the entity's subcontractors and suppliers.

(d). Monitoring of results and considerations of changes in exposures: This encompasses introducing consultation and communication processes both internally and externally with customers and sub-contractors, and performing audits and evaluations to ensure that legal risks are effectively identified, assessed and encountered. Upon completion of the required monitoring, a report identifying the legal risk status of the airline may be formulated along with recommendations.[168]

Applying the aforementioned plan presupposes that the airline will appoint departmental representatives, legal managers, a legal risk management coordinator and it will establish a legal risk management committee (LRMC).[169] The departmental representatives will be responsible for identifying legal risks in their business sections and for making a preliminary risk assessment. Following the assessment, they will undertake the management of low probability and impact legal risks, while all other information and data will be forwarded to their respective legal managers.

Legal managers will be responsible for managing legal risks which have a medium to high probability and impact, according to their area of expertise. The regular reporting of the managers to the legal risk management coordinator will ensure a streamlined and effective approach. The coordinator's main task will be to analyze information collected both internally from the departmental representatives, the legal managers and counsels and externally from sub-contractors, suppliers and customers. On the basis of this information he or she can make proposals to both departmental representatives and legal managers regarding the level of risks, the emerging risk trends, as well as ways to control or transfer them and the efficiency of the risk management procedures. Moreover, the coordinator is responsible for reporting regularly to the LRMC with respect to the legal risk status of the airline and the results of the audits.

The LRMC will be responsible for managing the very high probability and impact legal risks that require immediate confrontation. Moreover, it will be activated during disaster recovery plans in

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[167] Haddad & Associates, "Legal risk management department", online: http://www.haddadlaw.net/legal.html (last accessed July 1, 2003).
[168] *Ibid.*
[169] The following plan is based on Canadian Ministry of National Defence, "Legal Risk Management: A Paper on the Management of DND/CF's Legal Risk", online: Vice Chief of the Defence Staff http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/cosstrat/isrm/annxd_e.asp and Canadian Ministry of National Defence, "Legal risk management committee (LRMC)", online: Vice Chief of the Defence Staff http://www.vcds.forces.gc.ca/dgsp/pubs/commit/lrmc_e.asp (last accessed July 2, 2003).

parallel with the legal response and internal investigation team. Its role will be to provide additional advice on urgent and complex legal issues that may arise.

Given the above, the main task is to identify and assess sources of contractual, tortious / delictual and regulatory liability that airlines may encounter. Focus on special issues that lie at the crossroads of legal, financial, political and operational risks, i.e. war risk management and safety and security management will also be within the scope of the thesis. The main objective will be to examine possible ways of managing these risks and to recognize the role of law as a management tool.

## 3.3. LEGAL RISK MANAGEMENT FOR COMMERCIAL AIRLINES

### 3.3.1. Characteristics and trends in commercial airline industry

#### *3.3.1.1. Globalization and liberalization*

The trends of globalization and liberalization are ongoing and inevitable, but the airline industry is lagging behind in adapting to the new economic order. Whilst most corporate players are free to pursue international mergers and acquisitions and enjoy liberal market access, airlines are constrained by the special characteristics of its organization and governance. The Chicago Convention did not achieve its primary purpose to grant traffic rights for international scheduled air services on a multilateral basis, as it provides that any scheduled international air service requires special permission or other authorization from the State flown over or into.[170] This inadequacy led to the development of a bilateral system which is based on national ownership and the designation of flag carriers and subjects air traffic rights, capacity, and frequency of services to negotiations between States.

Currently, the objective of many States is to achieve an "open skies" regime whereby capacity or routing restrictions will be eliminated; unlimited fifth freedom rights will be granted; the removal of pricing restrictions for passengers and cargo; and further code-sharing opportunities will be given to third countries in return for similar rights.[171] However, market access rights are still exchanged mainly on a country-by-country basis and as such are subjected to protectionism. Furthermore, as the majority of the "open skies" agreements continue to apply the traditional national ownership and control criterion for airline authorization, a quintessentially global industry is

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[170] Article 6.

[171] Rigas Doganis, "Liberalization: Past Experience and Future Steps" (Paper presented to ICAO's 5th Worldwide Air Transport Conference, 2003) online: http://www.icao.int/icao/en/atb/atconf5/index.html (last accessed May 20, 2003).

subject to national or regional limits. Furthermore, the airlines are denied full access to capital markets, and cross-borders mergers and acquisitions are prevented.

*3.3.1.2. Unique economic characteristics*

The commercial airline industry is characterized by an economic inconsistency: although demand for its services is growing, it remains marginally profitable.[172] A 3.2% annually growth in gross domestic product (GDP) and a 2.3% annually decline in airline yields from 1970 to 1990 resulted in a 7.2% annually growth rate for air traffic.[173] However, the net operating profit[174] of the scheduled airlines of ICAO's members during the same period did not exceed 4%.[175] In 2002, a 3% growth in GDP coupled with a 2% growth for scheduled air traffic over 2001[176] did not result in profit for airlines. The operating revenues are estimated at US$ 312.500 million and the operating expenses at US$319.800 million, amounting to a net operating loss of 2.3% of operating revenues.[177]

With respect to profitability, the airline industry is highly cyclical. Significant swings from profit to loss occur and the industry's "*lows are lower and longer- and [its] highs are lower and shorter-than the general economy*".[178] This phenomenon constitutes a characteristic of capital intensive industries with a high-fixed cost base.[179] Each cycle lasts eight to ten years and it is connected to economic conditions worldwide.

The recession in United States and Japan which began in the second half of 2000 had an impact on passenger demand. The unemployment rates increased, consumer confidence declined, individuals postponed discretionary traveling, and business travel, which is the economic driver of airline profitability, reduced severely.[180] Furthermore, fuel costs remained high,[181] and labor

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[172] Rigas Doganis, *Flying off course* 3rd ed. (London: Routledge, 2002) at 4 [*Doganis off course*].
[173] Simon Hall (ed.), *Aircraft financing* 2nd ed. (London: Euromoney publications plc, 1993) at 5[*Hall*].
[174] Operating ratio is the operating revenue expressed as a percentage of operating costs. Net operating ratio means the net profit or loss after payment of interest and any other non-operating items, such as subsidies, and income taxes.
[175] *Doganis off course*, *supra* note 172 at 5, Airlines need operating margins of 4% to cover debt and 6% to generate profit: Paul S. Dempsey, "Airlines in turbulence: Strategies for survival" (1995) Vol. 23:15 Transportation Law Journal at 21.
[176] The scheduled traffic carried by the airlines of ICAO's 188 Member States totalled 1.615 million passengers and 30 million tonnes of freight.
[177] International Civil Aviation Organization (ICAO), "Annual Report of the Council 2002", Doc. 9814, online: www.icao.int (last accessed June 28, 2003) [*ICAO Report 2002*].
[178] Randolph Babbitt *Saving the golden goose* (Feb.1995) Air line Pilot at 10.
[179] *Hall*, *supra* note 173 at 17.
[180] Especially in key long-haul markets across the Atlantic, the Pacific and between Europe and East Asia.
[181] The price of Brent crude oil rose from $10.28 per barrel in February 1999 to $28.14 in February 2000 and to $33.4 by the fourth quarter of 2000. Aviation fuel prices reached 104c per gallon in September-October 2000, but they fall back to around 75c per gallon for much of 2001.

contracts were settled at wages increase.[182] As a result, traffic level and average yields went down. The industry was "*on the edge of a downturn*"[183] and airlines were constantly losing money.[184]

The terrorist attacks of 9/11 aggravated the negative effects of this economic downturn. Airlines encountered a massive fall in demand for travel and they were further burdened with escalating costs for security measures[185] and significantly higher insurance premiums.[186] In 2001 the airline industry lost US$12 billion and in 2002 the loss amounted to US$13 billion.[187] The industry's debt-to-equity ratio rose to 90/10, the major airlines were losing US$24 million a day, and 577 aircraft were dormant in the desert.[188] In the months following 9/11 a number of airlines went bankrupt: Ansett, Sabena, Swissair, and Canada 3000. Others undertook immediate measures to reduce their cost bases through extensive labor restructuring, fare adjustments, the extinction of agent commissions, capacity and route reductions and cancellation of aircraft orders.

As 2003 progresses the downturn in the world economy continues to have an impact upon airlines' traffic growth. Furthermore, the conflict in Iraq affected both demand and fuel prices,[189] while the SARS outbreak led to large decline in passenger demand in Asia, the region with the best growth potential.[190] According to IATA, in the first quarter of 2003 there has been an increase of 2.5% in passenger traffic over the same period in 2002, whereas March 2003 showed a decrease of 5.6%,[191] mainly because of the outbreak of the war in Iraq.[192] Furthermore, in May 2003 the international passenger traffic fell 21% from a year ago because of SARS. The overall forecast for 2003 is that passenger traffic will grow by 3.4 to 4.4% compared to 2002. However, it has also been estimated that there will not be a return to pre-9/11 revenue levels until 2005.[193]

It is apparent from the above data that the airline industry is currently suffering from its worst financial crisis ever. The attacks of 9/11 ensured that the present crisis will be more intense

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[182] The agreement between United Airlines and its pilots granted the latter an average 30% wage rise.

[183] Interview of Rigas Doganis (September 14, 2001) on BBC News, Airlines bankruptcy warning, online: http://news.bbc.co.uk/1/hi/business/1544050.stm (last accessed July 1, 2003).

[184] In 2000 USAir announced a US $269 loss, Swissair a $1.7 billion loss, Sabena a $278 million loss and Alitalia a $240 million loss.

[185] In 2002, IATA member airlines spend over US$5 billion to put into operation new security requirements.

[186] According to Marsh, aviation hull and liability insurance premiums raised from US$1.2 billion (pre 9/11) to US$ 3.6 billion (post 9/11), and hull war risk insurance premiums raised from US$30 million (pre 9/11) to US$ 420 million (post 9/11), Simon Harker, "Insurance round up post 9/11: The broker's perspective" (Paper presented to the IATA Airline Insurance Rendezvous, 2003) [*Harker*].

[187] Ralf Oelssner, "Chairman's observations" (Paper presented to the IATA Airline Insurance Rendezvous, 2003) [*Oelssner*].

[188] Paul S. Dempsey, "The cyclical crisis in aviation: causes and potential cures" (Paper presented to ICAO's 5th Worldwide Air Transport Conference, 2003), online: http://www.icao.int/icao/en/atb/ATConf5/Seminar/dempsey.pdf (last accessed June 28, 2003).

[189] Fuel prices increased 107% over 2002. *Ibid.*

[190] IATA's annual report 2003, online: http://www.iata.org/NR/ContentConnector/CS2000/SiteInterface/sites/about/file/ar2003web.pdf?SUBMIT=Go# (last accessed June 28, 2003).

[191] In revenue passenger kilometres (RPK) terms.

[192] IATA MIS report highlights, online: http://www1.iata.org/NR/ContentConnector/CS2000/Siteinterface/pdf/air/airline_mis_report_2003_03.pdf?SUBMIT=Go (last accessed June 28, 2003).

[193] Business week online, "Slightly Friendlier Skies for Airlines", online: http://www.businessweek.com/investor/content/jun2003/pi20030630_4365_pi041.htm (last accessed July 1, 2003).

and longer-lasting than any of the previous cyclical downturns of the industry.[194] A number of airlines are still on the verge of collapsing[195] or under bankruptcy protection[196] and the question arises: Is consolidation the future of the international airline industry?

The European Court of Justice (ECJ) judgment of November 5, 2002[197] passed a clear message regarding consolidation in European Union (EU): The concept of national airline must be dropped and replaced by that of community airline. The nationality clauses in the bilateral air transport agreements are a clear violation of the fundamental right of establishment,[198] and prevent mergers and acquisitions involving Community carriers with international networks. Furthermore, by averting the development of Community carriers with multiple hub systems in different Member States it has in effect put off the creation of a true single European aviation market. The transfer to the Commission of the right to negotiate these bilateral agreements with third countries and the recognition of EU-owned carriers (instead of discriminating between EU carriers on the grounds of nationality) will enable the community carriers not only to grow by strengthening their position in their home markets, but also by investing in other Member States or seeking growth through mergers and acquisitions.[199]

*3.3.1.3. Airlines' strategies for survival and legal risk management*[200]

In the current economic and regulatory volatile environment the first step for airlines is to clarify and establish their corporate mission. Their primary aims should be to innovate and to decide whether they will be global network carriers or niche carriers. This will enable them to focus on their long-term strategies for survival and evolution and to take short-term decisions consistent with their corporate mission.

The second step is to determine their business model. There are three possibilities: firstly, the traditional, secondly, the virtual airline, and finally, the aviation business model. Under the first model, airlines are self-sufficient with most of the ancillary support services and functions

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[194] *Doganis off course, supra* note 172 at 20.
[195] Olympic Airways.
[196] Air Canada, United Airlines, US Air has only just come out of bankruptcy protection
[197] European Commission v. Austria, Belgium, Denmark, Finland, Germany, Luxembourg, United Kingdom and Sweden, Cases C-476/98, C-475/98, C-472/98, C-471/98, C-469/98, C-468/98, C-467/98, C-466/98.
[198] Article 43 of the EC Treaty.
[199] Information derived from: EC, Commission, *Communication from the Commission on the consequences of the Court judgments of 5 November 2002 for European air transport policy* COM(2002)649, online: http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=52002DC0649&model=guichett (last accessed July 2, 2003), and USA Today, "EU Commission seeks control over airline pacts", online: http://www.usatoday.com/travel/news/2003/2003-02-24-european-pacts.htm (last accessed July 2, 2003), and Times online, "EU seeks finish to national airlines concept": online: http://www.timesonline.co.uk/article/0,,5-590658,00.html (last accessed July 2,2003).
[200] The information included in this chapter regarding airlines' strategies for survival derives from *Doganis airline business*, supra note 75 at 210-226.

provided-in house. This is more expensive than outsourcing but the airline controls its operations. The second model consists of outsourcing to external suppliers some or most of non-core activities such as ground handling, in-flight catering, engineering, informatics and thus focusing on air services. The objective is cost reduction. If the sub-contractor offers the service in a lower price, the activity will be outsourced. However, this method entails the danger that in periods of economic downturn where travel demand and revenues drop, there are no counterbalancing revenues from ancillary activities to offset the revenue fall. The third model is based on airlines transforming their internal business units that provide the ancillary support functions into separate specialist companies that sell their services to external clients, especially to other airlines that are not able or willing to provide in-house these functions. This model enables the airlines which provide the services to expand their customer base and generate more revenue. However, it requires resources and infrastructure that many airlines do not have.

The third step is to create a rational alliance strategy. Alliances have been one of the most important growth tools in the airline industry in recent decades either in the form of "equity" or in the form of "joint venture/marketing" alliance.

In "equity" alliances airlines acquire equity or part ownership of another, whereas "joint ventures/marketing" alliances are limited to specific objectives, such as ticketing and baggage; joint fare; reciprocal airport service; joint sales and ticketing office; frequent flyers program; and code-sharing.[201] Paul Dempsey stressed: "*A marketing alliance is the equivalent of dating. If the relationship sours, the parties are free (within specified contractual limits) to break it off. An equity investment is the equivalent of marriage. If the relationship sours, the investor cannot easily extricate himself from his investment*".[202] Alliances allow airlines to increase their network scope and geographic reach; to provide more capacity and enter new markets without having to make large capital expenditures for aircraft purchases or airport infrastructure; to extend their frequent flyer programs; to generate more passengers, freight and revenue; and to reduce their costs.[203]

However, as commercial agreements they entail significant risks especially for medium and small-sized airlines. There is always the danger that entering into an alliance with large air carriers will restrict their control over decisions regarding route development and pricing; and they

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[201] Paul S. Dempsey, "Carving the world into fiefdoms: The anticompetitive future of international aviation" (2002) [unpublished], Seminar at the Institute of Air and Space Law 2002-2003.
[202] *Ibid.*
[203] *Ibid.*

may have to use the ancillary support functions of the major carriers, although they are more expensive than their former suppliers.

To avoid these perils airlines should develop clear alliance objectives and guidelines which will be closely related to their corporate mission. Among the issues to be decided are whether the airline's aim is to generate revenue or to reduce costs; what kind of alliance will best meet their aims; and which are the benefits and the costs of various potential partners. The guiding principle should be that alliances are not an end in themselves, but they constitute tools to achieve the participants' corporate strategy. Only when the benefits derived from them are concrete and well defined, they should constitute part of the airline's corporate tactic.

The fourth step is to establish a long-term cost reduction policy. The high cyclical nature of the industry requires cost control as a long-term measure and not only as a response to a crisis or downturn. Legal risk management can become an indispensable tool for continuous cost containment and reduction. Legal risks are business risks and have the potential to undermine corporate strategy, reputation and financial stability. Airlines firstly should clarify and understand the legal environment in which they operate and secondly they should explore the ways in which and the degree to which they can exploit it to add competitive value to their business and to protect them against unforeseen liabilities.

### 3.3.2. Legal Framework

#### *3.3.2.1. Contractual liability management*

##### *3.3.2.1.1. Contract*

Although "*it is probably impossible to give one absolute and universally correct definition of a contract*",[204] there are two main definitions at common law which cast in terms either of agreements or of promises. The first one defines contract as "*an agreement giving rise to obligations which are enforced or recognized by law*",[205] and the second one defines it as "*a promise or a set of promises for the breach of which the law gives a remedy or the performance of which the law in some way recognizes as a duty*".[206]

Both these definitions have their weaknesses. The first one, which bases the notion of contract on agreement, does not accord with the requirement of consideration. English law does

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[204]Lord Mackay of Clashfern *et al.*, *Halsbury's laws of England* 4th ed. (London : Butterworths, 1998), Vol. 9(1), paragraph 201[*Halsbury's*].
[205] A. G. Guest *et al.*, *Chitty on contracts* 27th ed. (London : Sweet and Maxwell, 1994) Vol. I at paragraph 1-001, page 1[*Chitty*].
[206] American Law Institute, Restatement of the Law of Contracts. Second, as adopted and promulgated by the American Law Institute at Washinghton (St Paul Minn.: American Law Institute Publishers, 1981-) section 1[ *Restatement of contract, second*].

not in general enforce gratuitous promises and requires some form of consideration for a party's promise and not for the parties' agreement.[207] With respect to the second definition, the main problem is that contracting parties describe the relationships that they create in terms of agreement and not in terms of promises, and the courts in turn regard these relationships in the context of the rules of offer and acceptance- which when satisfied form that agreement.[208]

Furthermore, both definitions presume that people enter into contracts after they have made an agreement or promise. They do not consider the scenario where people enter into transactions which are not based on prior agreements or promises, but there is a simultaneous exchange or sale: paying cash for buying goods in a store means that the buyer is exchanging money for the goods that he/she buys. This exchange constitutes a legally binding contract but "*it is artificial to regard it as a contract created by agreement or promises*".[209]

In practical terms, the existence of an agreement in the majority of cases is a condition for the existence of a contract,[210] but this assertion is subject to a number of qualifications. Firstly, law generally speaking applies an objective test for agreement and does not examine the state of mind of the parties: "*an agreement is a manifestation of mutual assent on the part of two or more persons*".[211] The contracting parties "*are to be judged, not by what is in their minds, but by what they have said or written or done*".[212] The rationale of this principle is that uncertainty would result if a contracting party could escape liability by proving that he had no real intention of entering into a contractual agreement.[213]

Secondly, the agreement of the parties does not necessarily determine the scope or the contents of the contract. Contracting parties are expected to observe certain standards of behavior and they are bound by duties to which they have not expressly agreed but they are implied by law. These implied terms are founded on the presumed intention of the parties and upon reason: "*the law is raising an implication from the presumed intention of the parties with the object of giving to the transaction such [business] efficacy as both parties must have intended it should have*".[214]

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[207] *Chitty, supra* note 205 at paragraph 1-001, page 2.
[208] *Ibid.*
[209] P.S.Atiyah, *An introduction to the law of contract* 5th ed. (Oxford: Clarendon Press, 1995) at 39 [*Atiyah*].
[210] This statement does not hold good for promises contained in deeds because they are enforceable by the person in whose favor they are made, even though he/she may not be aware of them. They bind the promisor even before they are communicated to the promisee and therefore without any agreement between the parties.
[211] *Restatement of contract, second, supra* note 206 at section 3.
[212] M.P. Furmston, *Cheshire, Fifoot and Furmston's Law of Contract* 12th ed., (London: Butterworth,1991) at 28, See also *The Hannah Blumenthal* [1983] 1 AC 854 and *The Leonidas D* [1985] 2 All ER 796.
[213] Guenter Treitel, *The law of contract* 10th ed. (London : Sweet & Maxwell, 1999) at 1 [*Treitel*].
[214] *The Moorcock* (1886-90) All E.R. Rep 530,at 534 per Bowen, L.J.

Thirdly, the notion that contracts depend on agreement must be qualified in cases where there is an inequality of bargaining position, so that one contracting party can impose its terms on the other. In the 19th century under the influence of the "will theory" of contract and the laissez-faire philosophy, contracting parties of full capacity were considered to be the best judges of their own interests and they could enter into contractual agreements of their own choice and on their own terms. It was thought wrong for the law to interfere with private agreements on the grounds that the contract was unfair or that one party was economically more powerful than the other and thus able to impose its own terms. The prevailing "*ideologies were freedom of contract and sanctity of contract*",[215] or as Lord Reid observed "*the general principle of English law [is] that parties are free to contract as they may think fit*".[216]

Today, the freedom of contract has largely been restricted both by legislation and court decisions, especially in the law of landlord and tenant,[217] in consumer law,[218] and in employment law.[219] In all these cases, an agreement is the basis of the parties' relationship, but law imposes or regulates many of the obligations arising out of this agreement.[220] Customers, tenants and employees usually contract on standard form terms which are prescribed by the landlords, the services' or goods' suppliers and the employers and which exclude or limit some of their liabilities. The customers can either accept or reject the standard form contract as a whole, but they cannot alter its terms and thus they are in a disadvantageous bargaining position which may be abused by the economically stronger party. In order to restore this inequality and to protect the weakest party, legislation restricts the contractual freedom and it regulates the content and the scope of the contracts in question.

Regardless of which definition is more accurate and the above qualifications, there are four basic essentials to the creation of a contract in common law: existence of two or more separate and definite parties to the contract; agreement between the parties that arises out of an offer and acceptance; intention of the parties to create a legally binding relationship; and consideration which "*may consist either in some right, interest, profit, or benefit accruing to the one party, or some forbearance, detriment , loss, or responsibility given, suffered, or undertaken by the other*".[221] In

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[215] Ewan McKendrick, *Contract law* 3rd ed. (Basingstoke : Macmillan, 1997) at 3.
[216] *Chitty, supra* note 205 at paragraph 1-004, page 6.
[217] Rent Act 1977.
[218] Unfair Contract Terms Act 1977.
[219] Employment Protection (Consolidated) Act 1978.
[220] *Treitel, supra* note 213 at 3.
[221] *Currie v. Misa* (1875) LR 10 Exch 153, at 162 per Lush J.

addition, capacity of the parties to contract and legality of the agreement constitute prerequisites for the formation of a valid contract.

In civil law jurisdictions, contract is defined as "*an agreement under which one or more persons obligate themselves to one or more others, to give, to do or not to do something*"[222] or as "*an agreement of wills by which one or several persons obligate themselves to one or several other persons to perform a prestation*".[223] Article 1108 of the French Civil Code states the four conditions that are essential for the validity of an agreement: consent of the party who obligates himself; capacity to contract; an object certain which forms the subject-matter of the engagement; and a *licit causa* in the obligation.

Under French law contracts generally speaking are divided into "named contracts"[224] and "un-named contracts".[225] The division has its origin in ancient Rome where jurists were enumerating the contracts that were about to be concluded and examined each one of them.[226] The same terminology is still being used in French law, but in a different context. Named contracts are those that are governed by specific rules of the Civil Code. The contracts of sale and lease are typical examples of this and they are governed by Articles 1852 et seq and Articles 1708 et seq respectively. Un-named contracts are those that do not fit into the defined categories and they are subject to general rules of contract law.[227] The parties can conclude contracts according to their will which do not fit in any of the defined categories, but which are subject to the general principles found in the Code.

Commercial contracts are subject to the general principles of contract law, as amended by the laws relating to commerce.[228] Yet, the Commercial Code does not contain any general provision relating to commercial contracts, but a few rules relating to commercial transactions.[229] To fill this gap the jurisprudence has extended the scope of application of these rules and in general has allowed the contracting parties in international contracts to use arbitration clauses and waivers and disclaimers of liability clauses, which normally are declared void in domestic contracts.[230]

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[222] Article 1101 C.c.F.
[223] Article 1378 C.C.Q.
[224] Contrats nommes.
[225] Contrats innomés or sui generis.
[226] Henri et Léon Mazeaud *et al*, *Leçons de droit civil*, t. 1, vol. 2, 8th ed. (Paris : Montchrestien, 1997) at 55.
[227] Article 1107 C.c.F.
[228] *Ibid.*
[229] Michel Alter, *French law of business contracts: general principles* 1st ed. (Louisiana State University: Paul M. Hebert Law Center, Publications Institute, 1986) at 2.
[230] *Kayser, supra* note 166 at 275, and H Fabre, "Insurance strategies for covering risks in outer space: a French perspective" (2002) 18 Space Policy at 281, 283.

Contracts constitute the drive wheel of society no matter what the jurisdiction may be. Our everyday lives and commerce are closely linked to them: buying and selling, employment and services, medical treatment, leases, and transportation are some of their innumerable applications. Although their content varies enormously, their role remains the same: they allocate risks between the parties through exclusion clauses and other related devices and they provide stability and predictability to the transactions, since the parties know both their rights and obligations and their course of action in cases of breach. If one of the parties fails to fulfill its obligations, some sanction is needed and this sanction is provided by contract law. As a result, contract law "*provides the backing to support the whole institution of credit*".[231] Courts or legislation may intervene in the risk allocation process when strong policy reasons dictate that risks should not be allocated in this manner, to interpret contractual terms, or to determine where the loss will fall when the contract does not provide for the occurrence of a particular event.[232]

*3.3.2.1.2. Carriers' classification*

Common law classifies carriers as common and private carriers. The liabilities and rights of common carriers are determined by common law, subject to qualification by statute or by any special contract, whereas the liabilities and rights of private carriers are determined by the contracts of carriage they conclude. The legal status of carriers is closely connected to their power to contract and the legal operation of that contract. Although common carriers' duties arise independently of contracts, the relationship between them and the shippers or passengers usually originates through a contract.[233]

Contracts of carriage are divided into three broad categories: (a). charterparties/air waybills; (b) bills of lading/baggage checks; and (c). passengers' tickets. Charterparties are contracts concluded between charterers and owners of vessels or aircraft for the carriage of goods for a particular voyage[234] or a contract for the use of the vessel or aircraft for a set period of time[235] or a contract which is hybrid of these two forms.[236] Bills of lading are receipts issued by or on behalf of the owner of the vessel or the aircraft in respect of goods loaded on board its vessel or

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[231] *Atiyah, supra* note 209 at 7.
[232] P. Cooke & D. Oughton *The common law of obligations* 1st ed. (London: Butterworth & Co., 1989) at 337.
[233] Samuel Williston & Richard Lord, *A treatise on the law of contracts: Williston on contracts*, 4th ed. (New York: Lawyers Cooperative Publishing, 1995) Vol. 22, at §58:2 [*Williston*].
[234] Voyage charterparties.
[235] Time charterparties.
[236] Trip charterparties.

aircraft.[237] Charterparties evidence the hire of an entire vessel/ aircraft or a large part of it, whereas bills of lading are suitable forms of contract for the carriage of small parcels of goods.[238] Passenger tickets are contracts for the conveyance of persons and the common law that applies to all contracts governs them.[239]

In USA, common carriers are defined as persons who undertake to transport for hire goods or passengers or both for all who reasonably apply, according to the method of transportation which they offer to the public.[240] Under English law common carriers of goods are those who hold themselves out as being prepared to carry for anyone who wishes to engage their services and is prepared to pay their charges.[241] Common carriers of passengers are those who hold themselves out as providing transport from one place to another for all who are prepared to pay their charges.[242]

Common carriers of goods must hold themselves out as being prepared to carry for reward goods of all persons indifferently at a reasonable price as long as they have room.[243] The carriage of goods must be their business and not merely a sporadic occupation.[244] Common carriers of passengers must hold themselves out as being prepared to carry all persons indifferently who wish to be carried at the proper fare.[245] If the carriers reserve to themselves the right to reject persons or goods or if they carry only certain passengers or goods for certain customers they do not constitute common carriers.[246] An airline may be a common carrier even if it is a charter operator,[247] but in order to be considered as such must have an established place of business and a regular schedule of charges.[248] The fundamental rule is that common carriers of both goods and passengers cannot refuse to carry a particular person or for a particular person unless they have reasonable grounds to do so.[249]

Private carriers on the other hand are free to decide with whom they will enter into a contract of carriage. They reserve to themselves the right to accept or reject passengers or goods

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[237] S. Baughen, *Shipping law* 2nd ed. (London: Cavendish publishing limited, 2001) at xvii [*Baughen*].
[238] Chorley & Giles', *Shipping law* 8th ed. (Great Britain: Pitman Publishing, 1987) at 177.
[239] *Ibid.* at 327.
[240] *Williston* , supra note 233 at §58:3.
[241] G. Miller, *Liability in international air transport* in Dr. Ludwig Weber & Louis Grossman Comparative private air law: Selected readings, cases and material Vol. I (Canada: McGill University, 2002) at 217 [*Miller*].
[242] *Ibid.* at 452.
[243] *Halsbury's, supra* note 204 at page 310, paragraph 401 Vol. 5(1).
[244] *Belfast Ropework Co. Ltd. v. Bushell* [1918] 1 KB 210 at 212.
[245] *Clarke & West Ham Corpn* [1909] 2 KB 858, 878 and 882 per Farwell LJ. and Kennedy LJ respectively.
[246] *Halsbury's, supra* note 204 at page 310, paragraph 401 Vol. 5(1).
[247] Lee S. Kreindler, *Aviation Accident law* looseleaf (New York: M. Bender, 2003) at §2.01, page 2-4 [*Kreindler*].
[248] *Jackson v. Stancil,* 253 N.C. 291, 116 S.E. 2d 817 (1960).
[249] *Miller, supra* note 241 at 217.

irrespective of whether their vehicles are full or empty.[250] Airlines commonly preserve some freedom to refuse to accept passengers when they present themselves for carriage.[251]To determine whether a carrier is common or private, an objective test is used, under which the corporate character or the declared purposes of the carrier are immaterial. As long as the service is actually rendered on public basis, the carrier is a common one.[252]

A common carrier of goods is responsible for the safety of goods from the time he accepts them until delivery and he is strictly liable for their loss, delay or damage from any cause whatsoever.[253] It is to all intents an insurer of the safe carriage of the goods he undertakes to carry.[254] Its liability is strict and is subject to only four defenses: (a).act of God;[255] (b) act of the Queen's enemies[256](UK) or act of a public enemy(USA); (c) inherent vice of the cargo;[257] and (d) fault of the consignor[258] (in respect of the packaging or labeling of the cargo).[259] In order to recover, the claimant has to prove that the goods were received by the carrier in good order and delivered in bad order. Once this is established, the burden of proof reverses and it is upon the carrier to prove that it is covered by one of the above exceptions.

Conversely, the obligations of private carriers of goods arise from the contract of carriage which they have concluded. Private carriers who undertake to carry goods for reward become bailees of them and their duty is that of bailees for reward.[260] Unlike common carriers, they can escape liability by proving that they took reasonable care of the goods while they were in their possession.[261]

With respect to the carriage of passengers, the liability of common and private carriers is similar under English law. Both of them undertake to exercise all due and proper care and to carry safely as far as reasonable care and foresight can attain that end.[262] Failure to do so amounts to negligence and they are liable if injury is caused through negligence on their part or on the part of

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[250] *Belfast Ropework Co. Ltd. v. Bushell* [1918] 1 KB 210 at 215 per Baillache J.
[251] Article 7 of IATA's general Conditions of Carriage (Recommended Practice 1724) states: "*In the reasonable exercise of our discretion we may refuse to carry you or your baggage if we have notified you in writing that we would not at any time after the date of such notice carry you in our flights. We may also refuse to carry you.....if one or more of the following have occurred or we reasonably believe may occur: the carriage of you....may endanger or affect the safety, health, or materially affect the comfort of other passengers or crew..*".
[252] *Williston* , supra note 233 at §58:3.
[253] J. David McLean *et al.*(ed), *Shawcross and Beaumont Air law* looseleaf (London: Butterworths, 2002) [*Shawcross*].
[254] *Dale v. Hall* (1750) I Wills 281.
[255] *Nugent v. Smith* (1876) I CPD 423,CA.
[256] *Morse v. Slue* (1672) I Vent 190 at 238.
[257] *Blower v. Great Western Rly Co.* (1872) CP 655 at 663.
[258] *Butterworth v. Brownlow* (1865) 19 CBNS 409.
[259] *Baughen, supra* note 237 at 77, and *Williston* , supra note 233 at §58:26.
[260] *Halsbury's, supra* note 204 at page 367, paragraph 473, Vol. 5(1).
[261] *Baughen, supra* note 237 at 77.
[262] *Christie v. Griggs* (1809) 2 Camp 79.

their employees acting within the scope of their employment[263] or even negligence on the part of all persons to whom they have delegated any task connected with the carriage of passengers.[264] More specifically, air carriers have the duty (a). to take and use all reasonable care and skill to provide an aircraft which is fit for the journey and the carriage of the passengers in question and (b) to take and use reasonable care to carry the passengers safely.[265]

Under US law, common carriers of passengers must show a higher standard of care than private carriers. They do not constitute insurers of the passengers carried[266] but they have the duty to use the highest degree of care.[267] This standard of care should be "*consistent with the practical operation of the aircraft and protection of its passengers from injury*"[268] or "*the highest degree of care which human prudence and foresight could suggest*".[269] On the other hand, private carriers should conduct themselves as a reasonably prudent and careful man would conduct himself in all circumstances, and to take such steps as are reasonably necessary to guard their passengers from such dangers as could reasonably have anticipated.[270]

The law relating to common and private carriers is of diminishing importance especially in the area of carriage by air, since in cases of international carriage[271] the right and liabilities of air carriers are increasingly regulated by international Conventions and in the case of non-international carriage similar rules apply.[272] However, in cases where gratuitous carriage is performed by a person, firm or company which is not an air transport undertaking or in cases where carriage is performed in extraordinary circumstances outside the normal scope of the carrier's business neither of these rules applies and the air carriage is still subject to common law principles.[273]

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[263] *Dudley v. Smith* (1808) I Camp 167.
[264] *Great Western Rly Co. v. Blake* (1862) 7 H&N 987.
[265] *Shawcross, supra* note 253 at VII/9.
[266] *Wilson v. Capital Airlines*, 240 F2d. (4th Circuit, 1957).
[267] *Kreindler*, supra note 245 at §2.07, page 2-32.2 note 2 for a list of cases.
[268] *Urban v. Frontier Airlines*, 139 F. Supp. 288 (D. Wyo.1956).
[269] *Levine v. Long Island R.R.* 289 N.Y. 591, 592, 43 N.E. 2d 722 (1942).
[270] *Shawcross, supra* note 253 at VII/11 and 11a.
[271] In accordance with Article 1(2)of the Warsaw-Hague regime international carriage covers any carriage in which, *according to the parties' agreement*: a) the place of departure and the place of destination are situated within the territories of two High Contracting Parties, even though an unexpected stopover or a transshipment in the carriage takes place, which (transshipment or stopover) may occur within the territory of a State that is not a High Contracting State; and b) the place of departure and the place of destination are situated within the territory of a single High Contracting State, if there is an agreed stopping place within the territory of another State, regardless of whether the "stopping" State is a High Contracting State or not. It should be noted that what determines the international character of an air transportation is not the route which was actually followed or the place of the accident, but the **intention** of the contracting parties (passenger-carrier) which is usually contained in the carriage contract (**passenger ticket**) and in which the places of departure, destination and the agreed stopping places are mentioned. This constitutes the safest criterion as regards the application of the Warsaw-Hague regime, since the characterization of a carriage as international based on fortuitous posterior events would pose an insurmountable obstacle to both air carriers and passengers, since they would be uncertain as regards the applicable regime to their agreement.
[272] e.g. The Carriage by Air Acts (Application of Provisions) Order 1967, Sch 1
[273] *Halsbury's, supra* note 204 at page 532 paragraph 891 and paragraph 891 note 2, Vol. 2(3).

*3.3.2.1.3. The international framework: Warsaw Convention "System" v. Montreal Convention 1999: a comparison*

The Warsaw Convention "System" (WCS) strictly viewed is an amalgam of International Conventions and Protocols,[274] when viewed broadly it also encompasses "collective" special agreements, regional groupings and domestic legislation.[275]

The Warsaw Convention (WC) was conceived to protect the new aviation industry and to unify private international air law in the areas of documentation,[276] jurisdiction[277] and liability.[278] It establishes uniform documentation (passenger ticket, baggage check, air waybill) the format and particulars of which have essentially been followed by the airlines until today.[279] However, the unreasonably exacting formalities and their link with liability increased the carriers' costs, and afforded the passenger a possibility to escape the liability limits, leading sometimes to arbitrary decisions.[280] The Montreal Protocol No.4 (MP4) enabled the air waybill's replacement by electronic data processing and "a receipt for cargo",[281] yet the Guatemala City Protocol, which would permit the replacement of passenger ticket and baggage checks with electronic records, is not in force.

Moreover, the WC reduced to four the possible fora where a claimant, may bring a claim. It helped to avoid major conflict of laws and jurisdiction, but deprived the claimant of the possibility of resorting to the jurisdiction of personal law.

The WC's system of liability was based upon presumption of fault with a reverse burden of proof on the carrier to establish available defenses,[282] a major breakthrough regarding the passenger's protection in 1929. However, as a *quid pro quo* for the aggravated regime of the carrier's liability, it limited the carriers' liability by fixed amounts for death, wounding or other bodily injury of the passenger or for destruction, loss or damage to baggage and cargo and for delay,[283] except in cases of willful misconduct on its part.[284] The WC and the Hague Protocol (HP) which doubled the damage cap tried to synthesize the cost of living in an entire range of countries.[285] Although the value of human life should be identical worldwide, the cost of living differs

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[274] Warsaw Convention1929, Hague Protocol 1955, Guadalajara Convention 1961, Guatemala City Protocol 1971, four Montreal Protocols 1975.
[275] Interim Montreal Agreement 1966, Italian Law No. 274/88, 1992 Japanese Initiative, 1995 IATA Intercarrier Agreement, Council Regulation (E.C.) No.2027/97.
[276] Articles 3-16.
[277] Article 28.
[278] Articles 17-27.
[279] Michael Milde, "Liability in international carriage by air: the new Montreal Convention" in Milde & H. Khadjavi Private International Air Law: Cases and Materials Vol. I (Canada: McGill University, 2002) at 278 [*Milde Montreal 1999*].
[280] *Lisi v. Alitalia*, 390 U.S. 455 (1968) and *Chan v. Korean Air Lines*, 490 U.S. 122 (1989).
[281] Article 5 (2).
[282] Article 20.
[283] Article 22.
[284]Article 25.
[285] 250.000 gold francs for each passenger.

significantly.[286] This unevenness coupled with the world inflation led to dissatisfaction especially in the USA and amounted to a plethora of case law awarding damages to passengers in excess of the established limits through the use of documentation and the concept of willful misconduct.

Furthermore, a series of unilateral actions taken by States, regional groupings and IATA, almost eroded the unified system achieved in 1929: the 1966 Montreal Agreement accepted strict liability and a limit of US$75.000 for any carriage to, from or via the US;[287] the Japanese initiative, the IATA Intercarrier Agreement and the European Community(EC) Council Regulation 2027/97 established a two-tier liability system under which the airlines are strictly liable up to SDR 100,000 and for claims exceeding SDR 100,000 they accept liability based on presumed fault with a reversed burden of proof;[288] the Italian Law No. 274/88 which raised the limit to SDR 100.000 for all Italian carriers and all other carriers operating from, to or via Italy. These unilateral actions offer partial solutions to the limitation of liability problem, but they cannot amend any of the Convention's substantive provisions.[289]

To sum up, the WC 1929 is a widely adopted and therefore successful instrument representing a progressive development in private law, but the multiplicity of instruments attempting to update it seriously questions its viability as an enduring unified system of laws. Its viability is further impaired by the fact that the basic and prevailing text exists only in French yet some of these amendments are authentic in English, Spanish or Russian. Moreover, terms like accident, bodily injury, willful misconduct, the provision on notice, the question whether compensatory or also punitive damages may be claimed and whether the doctrine of *forum non conveniens* may be applied caused considerable difficulties in interpretation and application resulting in differing jurisprudence in different jurisdictions. Finally, the limitation of liability regarding the loss of life, wounding or other injury to passengers in essence denies the victim's entitlement to obtain restitution of the *status quo ante*, which contravenes natural justice. The airlines today are well-insured and they do not need this "subsidy" at the cost of the passenger.[290]

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[286] N. Lachance "The sky is the limit: accident, bodily injury and liability under the Montreal Convention" (2001) XXVI Annals of Air and Space law 143 at 155 [*Lachance*].
[287] Article 1.
[288] Article (ii) of JAL's Conditions of Carriage, Article I of the MIA agreement and Article 3 (2) of the Council Regulation.
[289] Article 32 of Warsaw-Hague Convention states: "*Any clause contained in the contract and all special agreements entered into before the damage occurred by which the parties support to infringe the rules laid down by this Convention, whether by deciding the law to be applied, pr by altering the rules as to jurisdiction, shall be null and void*".
[290] *Milde Montreal 1999, supra* note 279 at 843.

The new Montreal Convention for the Unification of Certain Rules for International Carriage by Air 1999 (MC) incorporates most of the useful norms contained in the WCS into a single cohesive agreement which is equally authentic in six languages:[291]

- the two-tiered liability system of the IATA Agreement which constitutes the most visible and welcome contribution;[292]
- the provisions of the Guatemala Protocol regarding passengers/baggage and of the MP4 regarding cargo which relax the prior requirements as to the documents' contents and enable electronic data processing with minimum "paper-work";[293]
- the essential provisions of the Guatemala Convention extending to the actual carrier the regime applicable to the contracting carrier, especially important with the increasing practice of code-sharing;[294]
- the so-called fifth jurisdiction where a passenger can bring an action for damages for injury or death in the place of his principal and permanent residence, if the defendant has some commercial presence in the same place, a diplomatic victory of USA, but not an innovation.[295]

Furthermore, the New Convention proved to be novel and innovative in the following areas: the carrier is not obliged to pay compensation beyond SDR 100.000 if he can prove the damage was solely due to the negligence or other wrongful act or omission of a third party, an element which must be assessed in the light of the future jurisprudence;[296] State Parties to the MC are required to oblige their carrier to maintain adequate insurance and have the right to require a carrier operating into their territory to furnish evidence of that insurance;[297]and the express provision that "*punitive, exemplary or any other non-compensatory damages shall not be recoverable*" in any action to which the Convention applies.[298] The New Convention maintains the basic structure of the WC and succeeds in reestablishing the unification of private international air law.

However, some opportunities were missed:

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[291] Article 57, English, Spanish, French, Russian, Arabic and Chinese.
[292] Article 17.
[293] Article 3 (passengers), and Article 4 (cargo).
[294]Chapter V, Articles 39-48.
[295] Article 33.
[296] Article 21(2)(b).
[297] Article 50.
[298] Article 29.

- the MC permits arbitration only with respect to the carriage of cargo, and not for passengers' claims, although the general trend is favorable to the wider introduction of arbitration;[299]
- Article 17 is a serious step back from the Guatemala Protocol, referring to bodily instead of personal injury which prima facie excludes standing alone mental injuries. The issue was left to judicial interpretation, which may encourage litigation;
- Article 17 failed to give any guidance regarding the term accident and rejected the wider term event for the carrier's liability regarding passengers;
- the provision on notice was maintained, although it is not a mandatory part of the ticket and no penalty for its absence is provided;[300]
- the willful misconduct standard still applies for breaking the limitations of liability for delay and for baggage;[301]
- the liability relating to checked baggage is limited to SDR 1000 which is hardly covering the cost of the baggage;[302]
- the wording of the 5th jurisdiction may create problems since the concept of principal and permanent residence is unknown in certain jurisdictions;[303]
- the requirement to make advance payments, although it satisfies the EU does not contribute to the unification of law; [304] and
- Article 55 allows the WSC to continue to co-exist indefinitely with the MC, thereby creating possible confusion.

Objectively, the new Montreal Convention can claim success regarding consolidation of texts, but regarding modernization it may have stopped short of its intended destination. However, it certainly guarantees a stable legal regime and compensatory field, able to lead the airline industry into the new millennium.

*3.3.2.1.4. The definition of accident under Article 17: the core of airlines' liability*

Article 17WC renders an air carrier liable for a passenger's death, wounding or bodily injury when caused by an accident on international transportation, while under Article 18WC there need

[299] Article 34.
[300] Article 3(4).
[301] Article 22(6).
[302] Article 22(2).
[303] Article 33(2).
[304] Article 28.

only be an occurrence to make him responsible for checked baggage or cargo losses. The Guatemala Protocol sought to amend Article 17 by making the carrier liable on condition an event causes death or injury, but it never came into force.

Article 17 constitutes the WC's heart, since if an incident occurs in international air transportation, it is not compensable unless it is an accident. What does the term accident mean? The WC does not include any definition or qualification and this creates problems, since the breadth of interpretive possibilities has led to varying results, sometimes contrary to the drafters' goal of creating a liability regime that would generate unwavering results.

The ordinary meaning of accident is similar under English, French, American and German usage and refers to an unexpected, fortuitous or untoward event or happening. However, is it unequivocally tied to aircraft operation? Weigand argues that it does, since firstly the rationale behind reversing the burden of proof was that the carrier would have the most knowledge regarding the accident's cause as it would necessarily involve the aircraft or its operation and secondly because the dictionary definitions of accident are invariably provided by the context in which the word is used.[305]

The drafters of Article 17 in their collective wisdom intended to create an unambiguous rule, but does the subsequent jurisprudence follow their wish?

The starting point is *Air France v. Saks*[306] where the claimant/passenger lost hearing in one ear because of depressurization always encountered during a normal descent. The Court defined accident as something caused "*by an unexpected or unusual event or happening that is external to the passenger*"[307] and denied recovery to Ms Saks because her injury resulted from her own unique reaction to the aircraft's normal and expected operation during the flight. According to the Court, the WC's drafters understood the word accident[308] to mean something different from occurrence[309] and that Art.17 refers to an accident that caused the injury and not to an accident that is the claimant's injury.[310] This means that the cause of the injury and not the occurrence of an injury must satisfy the definition of accident.[311]

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[305] T. Weigand, "Accident, exclusivity, and passenger disturbances under the Warsaw convention" (2001) 16:89 Am U Int'l L Rev. 891 at 914 [*Weigand*].
[306] *Air France v. Saks*,(1985) S.Ct, 470 U.S 392[*Saks*].
[307] *Ibid.* at 405 per O' Connor J.
[308] Article 17.
[309] Article 18.
[310] *Saks* , *supra* note 306 at 393.
[311] *Ibid.*

However, Saks did not expressly answer whether the "*unusual or unexpected event*" requires any causal connection or relationship to aircraft operation or constitutes an inherent risk of air travel. Weigand argues that this relationship is a *sine qua non* of the accident's definition, because any different interpretation would ignore both the decision's context and the intention of the drafters,[312] while Goldhirsch cites *Haddad v. Air France* and rejects such a causal role, because it constitutes a throwback to a negligence cause of action.[313]

In *Barratt v.Trinidad and Tobago Airways*[314] the court held that Article 17 was not limited by any reference to risks inherent in aviation. However, the vast majority of cases seem to have impliedly or expressly linked the unusual event with the airlines operations. To name but a few: *Gotz v. Delta Airlines*[315]-the sudden rise of the aisle seat passenger is not an unusual and unexpected event, the event in question must be a malfunction or abnormality in the aircraft's operation; *Fishman v. Delta Airlines*[316]-scalding of minor claimant with hot water by stewardess is an accident, an injury resulting from routine airline procedures carried out in an abnormal way can be an accident; *Padilla v. OA*[317]-drunken passenger who fell and injured his elbow on the way to the lavatory is not covered by the term accident; *Dias v. Transbrasil Airlines*[318]-injury caused by poor cabin air is an accident; *Arkin v. Trans International Airlines*[319]-injury caused by the failure of a tire on take-off is an accident; *Magan v. Lufthansa German Airlines*[320]-injury caused by light to moderate turbulence that causes injury is not an accident, but severe turbulences may; *Stone v. Continental Airlines*[321]-injuries caused to a passenger by being punched by another without provocation is not an accident, because the assault has no relation to the aircraft's operation; *Price v. BA*[322]-a fistfight that took place on board the aircraft between two drunken passengers is not an accident, because is not a risk particular to air travel; *Langadimos v. AA*[323]-the court required airline personnel to play some role in the commission of a male passenger's sexual assault on another; and *Sethy v. Malev-Hungarian Airlines*[324]- where injury to a passenger who slipped and fell due to

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[312] *Weigand, supra* note 305 at 939.
[313] L. Goldhirsch, "Definition of accident: revisiting Air France v. Saks" in Milde & H. Khadjavi Private International Air Law: Cases and Materials Vol. I (Canada: McGill University, 2002) at 87-88.
[314] *Barratt v.Trinidad and Tobago Airways*, 1990 WL 27590(E.D.N.Y. Aug. 28, 1990) at 1.
[315] *Gotz v. Delta Airlines*, 12 F. Supp.2d 199 (D. Mass 1998).
[316] *Fishman v. Delta Airlines*,132 F. 3d 138 (2nd Cir. 1997).
[317] *Padilla v. OA*, 765 F. Supp. 835 (S.D.N.Y 1991).
[318] *Dias v. Transbrasil Airlines*, 26 Av. Cas. (CCH) 16.048 (S.D.N.Y 1998).
[319] *Arkin v. Trans International Airlines*, 568 F. Supp. 11, 12 (E.D.N.Y 1982).
[320] *Magan v. Lufthansa German Airlines*,181 F. Supp. 2d 396 (S.D.N.Y 2002).
[321] *Stone v. Continental Airlines*, (1995), 905 F. Supp. 823.
[322] *Price v. BA*, 1992 WL 170679 (S.D.N.Y).
[323] *Langadimos v. AA*, 550 F. 2d 152 (3rd Cir.1977).
[324] *Sethy v. Malev-Hungarian Airlines*, 2000 WL 1234660 (S.D.N.Y 2000).

an article of luggage left in the aisle of the aircraft prior to the departure of the flight was not an accident.

Why then in *Wallace v. Korean Airlines*[325] did the Court rule that a passenger's sexual molestation of another passenger while she was sleeping was an accident under Article 17? The Court recognized the division between cases requiring the accident to derive from "*a risk characteristic of air travel*" and those requiring only an unusual or unexpected event and tried to fit the assault into a wide version of the former concept by emphasizing the cabin's darkness and the fact that Ms. Wallace was cramped into a confined space besides two men she did not know.[326] Moreover, according to the Court the length of aggressor's actions could not have been inconspicuous and the flight attendant's failure to notice the problem caused some concern to the Court.[327]

The Wallace case is ill-reasoned and may as a result provide a plethora of conflicting court opinion. Firstly, it misinterpreted the concept of "*risks characteristic of air travel*", by focusing on the argument that the characteristics of air travel were deemed to have increased the claimant's vulnerability to such an assault and ignoring the fact that sexual assault is not a risk fundamentally related to aviation;[328] secondly, it can be argued that the assault was not the accident that caused the injury, but it was in itself the injury; and thirdly, it overlooked the fact that airlines' duty is to carry safely from point A to point B. Airlines do have a duty to supervise the passengers, but not to police their behavior.[329]

Would the Wallace case be justified under the Guatemala Protocol which uses the term event instead of accident? Probably yes, since the rationale behind this change was to expand the scope of carrier liability to passengers. However, the fact that the Guatemala Protocol has never been ratified coupled with the subsequent omission of the term event in the MC 1999 lead us to the conclusion that accident must be interpreted narrowly.

Unfortunately, the MC 1999 does not clarify the field. The term accident is used again without any further definition or qualification and thus there is no guidance whether it refers to the typical risks inherent in air travel or to aircraft's operation or just to unexpected and abnormal risks. The expansion of the term achieved in Wallace could make the carrier "insurer" of all risks on

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[325] *Wallace v. Korean Airlines*, 214 F. 3d 293 (2nd Cir.2000).
[326] *Ibid.* at 293.
[327] *Ibid.* at 300.
[328] *Lachance, supra* note 286 at 151.
[329] *Ibid.* at 150.

board, which is particularly dangerous in the light of the two-tiered unlimited liability regime and the exclusivity of the Convention.[330] Passengers/claimants will do their best to prove that an accident occurred, since in any other case they will have no cause of action against the airline,[331] while if they succeed the airlines will have no limit on their liability.

*3.3.2.1.5. Competition Rules, Merger Regulation and airlines' alliances: the approach of the European Union* [332]

Competition rules and merger regulations constitute an overwhelming legal concern in any form of alliance, as they have the inherent power to restrict or block any such association. Depending on the structure of an airline, it will be evaluated under either the Merger Regulation 1310/97[333] which amended Regulation No 4064/89 on the control of concentrations between undertakings which derives from Arts 87 and 235 of the Treaty of Rome (TR) [Arts 83 and 308 of the Amsterdam Treaty (AT)] or under Regulations 3975/87[334] and 3976/87[335] which arise from Arts 85 and 86 TR (Arts 81 and 82 AT).

The Merger Regulation applies to "*all concentrations*"[336] that have a "*community dimension*". A Community dimension exists where (a). the combined aggregate worldwide turnover of all the undertakings concerned is more than ECU 2.500 million; and (b). in each of at least three Member States, the combined aggregate turnover of all the undertakings concerned is more than ECU100 million; provided that the following additional criteria are met: in each of at least three Member States included for the purpose of point b), the aggregate turnover of each of at least two of the undertakings concerned is more than ECU 25 million and the aggregate Community-wide turnover of each of at least two of the undertakings concerned is more than ECU 100 million,

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[330] *Milde Montreal 1999, supra* note 279 at 286.

[331] Article 29 states: "*In the carriage of passengers, baggage and cargo, any action for damages, however founded, whether under this Convention or in contract or in tort or otherwise, can only be brought subject to the conditions and such limits of liability as are set out in this Convention without prejudice to the question as to who are the persons who have the right to bring suit and what are their respective rights. In any such action, punitive, exemplary or any other non-compensatory damages shall not be recoverable*". It seems that the New Convention follows *El Al Israel Airlines Ltd. v. Tseng*,(525 U.S. 155, 1999) which decided that Warsaw constitutes the exclusive remedy for personal injury claims. However, the inclusion of the words "*in contract or in tort or otherwise*" may create problems, since claimants are likely to argue that a claim can be brought under the Convention or under national law.

[332] A thorough examination of EU Competition rules is outside the scope of this thesis.

[333] Council Regulation (EC) No 1310/97 of 30 June 1997 amending Regulation (EEC) No 4064/89 on the control of concentrations between undertakings, online: http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31997R1310&model=guichett (last accessed August 15, 2003).

[334] Council Regulation (EEC) No 3975/87 of 14 December 1987 laying down the procedure for the application of the rules on competition to undertakings in the air transport sector, online: http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31987R3975&model=guichett (last accessed August 15, 2003).

[335] Council Regulation (EEC) No 3976/87 of 14 December 1987 on the application of Article 85 (3) of the Treaty to certain categories of agreements and concerted practices in the air transport sector, online: http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31987R3976&model=guichett (last accessed August 15, 2003).

[336] Where two undertakings merge or where an undertaking acquires partial or whole ownership of another undertaking, Article 3(1).

unless each of the undertakings concerned achieves more than two-thirds of its aggregate Community-wide turnover within one and the same Member State.[337] In practical terms, these low levels bring the majority of possible air carrier equity alliances within the Commissions jurisdiction and pre-empt to a large extent the jurisdiction of the Member States' competition authorities.[338]

To determine whether the alliance is compatible with the common market, the Commission considers *inter alia* a number of factors: the need to preserve and develop effective competition within the common market in the light of the relevant markets involved and the existence of actual or potential competitors;[339] the market position of the undertakings concerned and their economic and financial power, any legal or other barriers to entry, supply and demand trends for the relevant goods and service;[340] the interests of the intermediate and ultimate consumers; and the development of technical and economic progress provided that it is to consumers' advantage.[341] After considering these factors, if the alliance creates or strengthens a dominant position, resulting in a potential impediment to effective competition within a part of the common market, it will be declared incompatible with the common market principles.[342] The Commission may order the alliance separated, their joint control terminated or any other appropriate measure to "*restore conditions of effective competition*"[343]

Whether marketing alliances will be scrutinized under the Merger regulation or the Competition rules was an issue which caused some concern. This question was answered in Merger Regulation 1310/97 which states: "*To the extent that the creation of a joint venture constituting a concentration pursuant to Art. 3 has as its object or effect the coordination of the competitive behaviour of* ***undertakings*** *[emphasis added] that remain* ***independent*** *[emphasis added], such coordination shall be appraised in accordance with the criteria of Art. 85(1) and (3) of the Treaty*".[344] In practical terms, the majority of marketing alliances will therefore be evaluated under the Competition Rules which stem from Arts 85 and 86 TR (Arts 81 and 82 AT). Art.81 makes automatically void[345] "*all agreements between undertakings... which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market*" unless these agreements "*contribute to*

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[337] Article 1(3).
[338] Paul S. Dempsey, "Competition in the Air: European Union Regulation of Commercial Aviation" (2001) 66 JALC 979, at 1123.
[339] Article 2(1)(a).
[340] Article 2(1)(b).
[341] Article 2(1)(b).
[342] Article 2(3).
[343] Article 8(4).
[344] Article 2(4).
[345] Article 81(2).

*improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit*"[346]. Art.82 prohibits "*any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it....in so far as it may affect trade between Member States*".

Regulation 3975/1987 was issued in order to provide "*detailed rules for the application of Arts 85 and 86 of the Treaty to air transport services*"[347] and it applies only "*to international air transport between Community airports*"[348]. The Regulation grants the Commission to investigate and sanction any alliance that violates Arts 85 and 86.[349] If the Commission finds that there is an infringement of Arts 85(1) or 86 it may "*require the undertakings or associations of undertakings concerned to bring such an infringement to an end*"[350] or it is in its discretion to "*address recommendations for termination of the infringement to the undertakings or associations of undertakings concerned before taking a decision under the preceding subparagraph*"[351]. Undertakings that desire to take advantage of the exemptions of Art. 85(3) may "*submit applications to the Commission*"[352] which, after taking comments from interested parties, may issue a decision granting or denying the exemption or it may simply let the matter pass, in which case after 90 days the exemption becomes effective for a period of 6 years.

Furthermore, Regulation 3976/1987 as amended by Regulation 2344/1990 and Regulation 2411/1992 empowers the Commission to declare that Art.85(1) does not apply to certain categories of agreements between undertakings: allocation of seat capacity and coordination of time-tables; consultations on tariffs; certain agreements on joint operation of new services; slot allocation in airports; and computer reservation systems. According to the Commission these block exemptions "*satisfy a genuine need for legal certainty on the part of air carriers and other market operators, while providing an incentive to abandon previous, more restrictive agreements*"[353]. Under this Regulation, the Council has adopted several more specific Regulations which are no longer in force. Currently, the only block exemption based on Regulation 3976/1987 is Regulation 1617/93 as amended by Regulation 1105/2002. It provides for a block

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[346] Article 81(3).
[347] Article 1(1).
[348] Article 1(2).
[349] Articles 3-8.
[350] Article 4(1)
[351] *Ibid.*
[352] Article 5(1)
[353] EU, Proposal for a Council Regulation repealing Regulation (EEC) No.3975/87 and amending Regulation(EEC) No. 3976/87 and Regulation (EC) No1/2003, in connection with air transport between the Community and third countries COM(2003) 91, paragraph 22, online: http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=52003PC0091&model=guichett (last visited August 10,2003).

exemption regarding consultations on passenger tariffs and slot allocation at airports until June 30, 2005[354].

*3.3.2.2. Tortious/Delictual liability management*

*3.3.2.2.1. Tort/Delict*

The word tort derives from the Latin term torquere, meaning "to twist". It found its way into English through Norman French, where it meant literally "wrong".[355] Today, the word tort denotes a legal wrong committed upon the person or property independent of contract.[356] A more accurate legal definition can be found in Halsbury's Laws of England which describes tort as "*those civil rights of action which are available for the recovery of unliquidated damages by persons who have sustained injury or loss from acts, statements or omissions of others in breach of duty or contravention of right imposed or conferred by law, rather than by agreement, are rights in tort*".[357]

This definition indicates that tort cannot be subsumed under a general concept, such as promise or agreement. On the contrary, "*included under the head of torts are miscellaneous civil wrongs [which] have little in common and appear at first glance to be entirely unrelated to one another..; and it is not easy to discover any general principle upon which they may all be based unless it is the obvious one that injuries are to be compensated, and anti-social behavior to be discouraged*".[358] The role of tort is rather to determine "*the conditions under which the certain losses may be shifted to persons who created or contributed to the risks which in some way lead to these losses [and thus] to balance the utility of a particular type of conduct against the harm it may cause*".[359]

There are three main categories of torts: intentional or deliberate torts, the tort of negligence and strict liability. Intentional torts are further divided into two categories: (a). those affecting personal rights, such as battery, assault, false imprisonment and intentional physical harm; and (b). those affecting property rights, such as trespass to land, conversion and nuisance.

The equivalent of tort in civil law is delict. Under French law, the law of delict has been largely based on Article 1382[360] of the Civil Code, supplemented by Articles 1383[361] and 1384.[362]

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[354] The examination of this Regulation is outside the scope of our essay.
[355] Thomas Lundmark *Common law tort & contract* 1st ed. (Munster: Lit Verlag, 1998) at 1 [*Lundmark*].
[356] *Black's dictionary, supra* note 2 at 1496.
[357] *Halsbury's, supra* note 204 at page 221, paragraph 301, Vol 45(2).
[358] W.L. Prosser, *Handbook of the law of torts*, 4th ed. (St. Paul: West Publishing, 1971) at 2.
[359] *Lundmark, supra* note 355 at 1.
[360] Any act whatever of man which causes damage to another obliges him by whose fault is occurred to make reparation.
[361] Each one is liable for the damage which he causes not only by his own act but also by his negligence or imprudence.

French law bases delict claims on the notion of fault. In order to bring about a claim in delict the claimant must prove that there was a fault of the defendant or a fact generating the damage; that damage has been suffered; and a causal link between the damage and the generating fact.

*3.3.2.2.1.1. Negligence*

Negligence can be defined as "*a conduct which falls below the standard established by law for the protection of others against unreasonable risk of harm*".[363] An action for negligence will succeed if the claimant can prove that: (a). a duty of care is owned by the defendant to the claimant; (b). there was a breach of that duty by the defendant; and (c). damage to the claimant which is not too remote resulted hence.

The principles of common law negligence were established in the notable and legendary case of *Donoghue v. Stevenson*.[364] Before 1932, there was no general duty of care in negligence, but the courts were applying the tort to damage caused in particular circumstances where they decided that a duty should be owed.[365] Lord Atkin's judgment in Donoghue attempted for a first time to find a general principle which would encompass all the circumstances in which the courts had previously held that there could be liability in negligence[366] and which would apply in the absence of valid explanation for its exclusion.[367] His formulation of a "*neighbor principle*" provided "*a unifying thread for those situations in which liability for negligent conduct was imposed*"[368] and built the foundations of the tort of negligence.

The question is whether a duty of care was owed by the defendant towards the claimant. The existence of a duty of care is being determined on a case by case basis and is subject to the satisfaction of the following three requirements: (a). foreseeability of the damage; (b). a sufficiently proximate relationship between the parties; and (c). it must be fair, just and reasonable to impose such a duty.[369] Proximity does not necessarily denote physical proximity, but it refers to "*such close*

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[362] He is liable not only for the damage which he caused by his own act, but also for that which is caused by the act of persons for whom he is responsible, or by things which he has in his keeping.
[363] American Law Institute, Restatement of the Law of Torts, Second, as adopted and promulgated by the American Law Institute at Washington (St. Paul, Minn: American Law Institute Publishers, 1965-) Section 282 [*Restatement second torts*].
[364] *Donoghue v. Stevenson* (1932) AC 562 [*Donoghue*].
[365] Road accidents and chattels regarded as dangerous per se, Michael Jones, *Textbook on torts* 8th ed. (Oxford: Oxford University Press, 2002) at 32-33[*Jones*].
[366] *Donoghue, supra* note 364 at 580.
[367] *Home Office v. Dorset Yacht Co. Ltd.* (1970) AC 1004, 1027 per Lord Reid.
[368] *Jones, supra* note 365 at 33.
[369] *Caparo Industries plc v. Dickman* [1990] 1 All ER 568, 573-574 per Lord Bridge and *Smith v. Bush* [1989] 2 WLR 790, 816 per Lord Griffiths.

*and direct relations that the act complained of directly affects a person whom the person alleged to be bound to take care would know would be directly affected by his careless act*".[370]

Should it be proved that a duty of care is owed, the second matter to be considered is whether the defendant was in breach of the duty of care. This element constitutes the most important aspect of the tort of negligence, as it involves thorough consideration of whether the act or omission of which the claimant complained amounts in law to a negligent act.[371]

To determine the existence of a negligent act, a two stage process has been formulated by the courts. Firstly, the court must decide what standards of care the defendant *should* have exercised in light of the particular circumstances of the case. In judging whether the defendant met his/her standard of care, the hypothetical "*reasonable man*" construct is being used: "*Negligence is the omission to do something which a reasonable man, guided upon those considerations which ordinarily regulate the conduct of human affairs, would do, or doing something which a prudent and reasonable man would not do*".[372] However, reasonable care does not necessarily mean average care. The fact that most people behave in a certain way may lead to the conclusion that the behavior is reasonable, but this is not always the case.[373] Furthermore, the reasonable-person standard is objective and does not make allowances for the personal characteristics of the defendant: an inexperienced driver is not entitled to a lower standard of care,[374] and the wealth of the defendant cannot be used to enhance her duty of care.[375]

Secondly, the court must decide a factual question: whether according to the burden of evidence the defendant's conduct fell below the appropriate reasonable standards. The claimant usually bears the burden of proving that the defendant has been careless. In the case that there are two equally possible explanations for an accident, the court will face the dilemma in deciding which factual scenario most equates with the eventual effects. In such cases where one explanation accords that the defendant was not negligent not forsaking the alternative argument the action will fail.[376] However, when the claimant has insufficient access or no access at all to the facts of the accident, despite the defendant's knowledge, which may not be forthcoming, it would be unfair to

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[370] *Yuen Kun Yeu v. Attorney-General of Hong Kong* [P.C. 1988] 1 A.C. 175.
[371] V. Harpwood, *Principles of tort law* 3rd ed. (London: Cavendish Publishing Limited, 1997) at 21[*Harpwood*].
[372] *Blyth v. Birmingham Waterworks Co.* (1865) 11 Exch 781,784 per Alderson B.
[373] *Lloyd's Bank Ltd. v. E.B. Savory & Co.* [1933] AC 201.
[374] *Nettleship v. Weston* [1971] 2 Q.B. 691.
[375] *Denver & Rio Grande Railroad v. Peterson*, 9 P. 578 (Colo. 1902).
[376] *The Kite* [1933] P 154.

require the claimant to prove negligence. In that case the doctrine of *res ipsa loquitur*[377] comes into play and enables the claimant to prove duty and breach by circumstantial evidence.[378]

The third question is whether the breach of duty complained of is the cause of the damage suffered. Causation is the physical connection between the defendant's negligence and the claimant's damage.[379] This again requires a two stage test: (a). factual causation which seeks to tie the defendant's conduct to the claimant's harm in a physical or scientific way; and (b). proximate or legal cause which seeks to find which of the factual causes is to be regarded as the cause for the purpose of attributing legal responsibility. Factual causation is established if the claimant proves that the defendant's breach of duty "*materially contributed*" to the claimant's loss.[380] To determine that, the "*but for*" rule is being employed by courts: if harm to the claimant would not have occurred "*but for*" the defendant's negligence then that negligence is a cause of the harm.[381] Although this rule has a number of limitations,[382] it is used in order to eliminate irrelevant causes. The burden would be on the claimant to show on the balance of probabilities[383] that the defendant's breach of duty caused the damage. Therefore, if there are conflicting and unsatisfactory explanations for the claimant's loss, the defendant does not have to prove that his explanation is the correct one.[384]

After using the "*but for*" test to eliminate irrelevant factual causes, the court has to decide which is "*the real, substantial, direct, or effective cause....for the purposes of legal liability*".[385] In this process "*the law must abstract some consequences as relevant, not perhaps on grounds of pure logic but simply for practical reasons*".[386] The facts of the particular case have an impact on the decision, but it mainly involves value judgments and policy considerations which place limits on the reach of factual causation.[387]

Even if it is proved that the defendant's negligence caused the loss, the claimant would not be able to recover if compensation for damages is regarded as *too remote* from the accident itself. Two opposing tests are used to determine which damages will be recoverable: the directness or Polemis test, [388] and foreseeability or The Wagon Mound test.[389]

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[377] The thing speaks for itself.
[378] The doctrine will be examined in more detail in sub-chapter 3.3.2.2.1.4.
[379] *Jones, supra* note 365 at 222.
[380] *Bonnington v. Castings Ltd. v. Wardlaw* [1956] 1 A.C. 613, H.L.
[381] *Jones, supra* note 365 at 224.
[382] *Lundmark, supra* note 355 at 69.
[383] At least a 51% likelihood.
[384] *Pickford v. Imperial Chemical Industries plc.* [1998] 3 All ER 462, HL.
[385] *Stapley v. Gypsum Mines Ltd.* [1953] AC 663, 687 per Lord Asquith.
[386] *Liesboch Dredger v. SS Edison* [1933] AC 449, 460 per Lord Wright.
[387] *Lundmark, supra* note 355 at 73-74.
[388]The test was formulated in *Re Polemis and Furness, Whitty & Co. Ltd., Re* [1921] 3 K.B.
[389] The test was formulated in *Overseas Tankship (UK)Ltd. v. Morts Dock & Engineering Co., The Wagon Mound* [1961] AC. 388.

The directness test holds that the defendant is liable as long as the injury follows in a direct, unbroken sequence of events. If the damage is a direct result of the negligence "*the anticipations of the person whose negligent acts has produced the damage appear....to be irrelevant*".[390] The foreseeability test, on the other hand, holds that the defendant is liable if he could reasonably foresee at the time of the breach the kind of damage which actually occurred.[391] However, it is not a requirement the defendant to have foreseen the exact details which may include the extent or degree of injury.[392] Viscount Simonds said that reasonable foreseeability corresponds with the common conscience of mankind, whereas the direct consequences test leads to nowhere but the never-ending and insoluble problems of causation.[393] The strong criticism of the Polemis test in Wagon Mound has led subsequent courts decision to adopt foreseeability as the test of remoteness of damage in negligence.

With respect to airlines' operations, negligence is the most important tort. If a passenger is injured or killed or goods are damaged during carriage by air and the carriage falls outside the UK Carriage by Air Act 1961 and the Carriage by Air Acts (Application of Provisions) Order 1967 or 49 U.S.C. sec. 40105 (Warsaw Convention) in USA, the carrier's liability will depend upon proof of negligence. Furthermore, in aviation accidents claims against airport authorities, air traffic control providers and aircraft manufactures will be based on negligence.[394] This thesis will not study all the cases where liability in negligence in the aviation context may arise, but it will concentrate on liability issues arising form surface damage. In this framework, the examination of the torts of trespass and nuisance is indispensable.

*3.3.2.2.1.2. Trespass*

Trespass to the person is a wrong committed against the personal security or personal liberty of one person by another, [395] trespass to land consists in any unjustifiable intrusion by one person upon land in the possession of another, [396] and trespass to goods involves direct, immediate interference with personal property belonging to another person.[397]

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[390] *Re Polemis and Furness, Whitty & Co. Ltd., Re* [1921] 3 K.B. 560.
[391] *Overseas Tankship (UK)Ltd. v. Morts Dock & Engineering Co., The Wagon Mound* [1961] AC. 388.
[392] *Smith v. Leech Brain & Co.* [1962] 2 QB 405.
[393] *Ibid.* at 425.
[394] Examination of this topic is outside the scope of this thesis.
[395] *Halsbury's, supra* note 204 at 292 paragraph 424, Vol. 45(2).
[396] *Ibid.* at paragraph 473.
[397] *Harpwood, supra* note 371 at 293.

Trespass to the person comprises assault,[398] battery,[399] and false imprisonment.[400] Trespass to land consists of "*directly entering upon land, or remaining upon land, or placing or projecting any object upon land in the possession of the claimant, in any case without unlawful interference*".[401] Trespass to goods involves direct interference with the goods' possession, commonly by taking them or damaging them.[402]

With respect to trespass to the person, the act complained of must be either intentional or negligent.[403] The onus of proof lies upon the claimant to prove that either the act was intentional or that the defendant was negligent, pleading and giving particular of negligence in his statement of claim.[404] However, in *Letang v. Cooper*, Denning MR supported the view that if the act is intentional, the claimant has a cause of action in trespass to the person, whereas if the act is unintentional his only action is in negligence.[405] The claimant need not prove that he suffered damage, but all the damage flowing from the unlawful act is recoverable.[406] In the aviation context, trespass to the person could arise if a passenger of an aircraft was wrongfully detained by the pilot-in-command who exceeded his powers under section 9 of the UK Civil Aviation Act 1982.[407]

Trespass to land is also an intentional tort, but the intention refers to the voluntary nature of the defendant's act, in effect it looks to the entry the claimant's land and not to the intention of the trespassor.[408] Therefore, the deliberate entry upon another's land is sufficient whether or not the entrant knows that he is trespassing. It is no defense that the only reason for the entry was that the entrant had lost his way or even that honestly but erroneously believed that the land was his.[409] However, when the defendant's entry is involuntary, it is not intentional and thus no actionable, e.g. where he is thrown or pushed to the land.[410] Trespass to land is actionable *per se,*[411] but in practice, actions for trespass will normally be brought with damages, unless the claimant wants to deter disputes over boundaries or rights of way.[412]

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[398] Where the claimant is caused to apprehend the immediate infliction of an unlawful physical contract.
[399] When there is an actual infliction of an unlawful physical contact with the claimant.
[400] It constitutes deprivation of liberty.
[401] *Harpwood, supra* note 371 at 174.
[402] *Shawcross, supra* note 253 at I/188.
[403] *Stanley v. Powell* [1891] 1 Q.B. 86; *Fowler v. Lanning* [1959] 1 Q.B. 426.
[404] *Fowler v. Lanning* [1959] 1 Q.B. 426, per Diplock J.
[405] *Letang v. Cooper* [1965] 1 Q.B. 232, at 239 per Denning MR.
[406] Trespass to the person is actionable *per se.*
[407] *Shawcross, supra* note 253 at I/189.
[408] *Jones, supra* note 365 at 494.
[409] *Conway v. George Wimpey & Co. Ltd.* [1951] 2 K.B. 266 at 273-274.
[410] *Smith v. Stone* (1647) Style 65.
[411] *Entick v. Carrington* [1765] 2 Wills K.B. 275 at 291.
[412] W.V.H Rogers, *Winfield and Jolowicz on tort* 15th ed. (London: Sweet & Maxwell, 1998) at 473[*Jolowicz*].

Entry which constitutes trespass can be above or below the surface of the ground or into the airspace above the land. An invasion of airspace above the land may be trespass, but this is limited to the height that interferes with the claimant's ordinary use and enjoyment of the property.[413] Therefore, the flight of an aircraft "*many hundred of feet*" above a house did not constitute trespass.[414] The latin maxim *cuius est solum eius est usque ad coelum at ad inferos*[415] cannot be applied literally because in that case every time an aircraft passed over any land the tort of trespass would be committed. However, if an aircraft falls upon property on the land, it might constitute trespass, no matter the height from where it fell.[416]

In USA, courts generally have followed the same approach by holding that the proprietor's rights extent "*at least to the altitude of the owner's existing and effective reasonable use of the land*".[417] However, in 1983 this altitude was defined: "***500 feet*** *[emphasis added] above ground level in uncongested areas is the diving line between the upper airspace in which aircraft have the right of free passage and the lower airspace in which the owner of the subjacent land is protected against the intrusion of aircraft*".[418]

*3.3.2.2.1.3. Nuisance*

The tort of nuisance is categorized into either public or private nuisance. Clerk and Lindsell define nuisance as "*an act or omission which is an interference with, disturbance of or annoyance to, a person in the exercise or enjoyment of (a) a right belonging to him as a member of the public, when it is a public nuisance, or (b) his ownership or occupation of land or of some easement, profit, or other right used or enjoyed in connection with land, when it is a private nuisance*".[419]

Public nuisance is primarily a crime and can be defined as an act "*which materially affects the reasonable comfort and convenience of life of a class of Her Majesty's subjects*".[420] It involves acts which are injurious to the health, safety or convenience of the public,[421] examples of acts amounting to public nuisance are: obstructing a navigable river by lowering its depth;[422] obstructing

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[413] *Kelsen v. Imperial Tobacco Co. Ltd.* [1957] 2 QB 334 and *Didow et al.* v. *Alberta Power Limited*, [1988] 5 W.W.R. 606 (Alta. C.A.).
[414] *Bernstein v. Skyviews and General Ltd.* [1978] Q.B. 479.
[415] Whoever possesses the land also possesses the sky above it to the highest heavens and the earth beneath to the greatest extent.
[416] *Jolowicz* , *supra* note 412 at 478.
[417] *Schronk v. Gillian*, 380 SW 2d. 743 (Tex Civ. Cas., 1964), 8 Avi Cas. 18, 176
[418] *Powell v. US*, 17 Avi Cas. 17, 988 (US Ct of Clms, 1983)
[419] Margaret Brazier *et al.*, *Clerk and Lindsell on torts* 7th ed. (London: Sweet and Maxwell, 1995) at 889-890[*Lindshell*].
[420] *A-G v. PYA Quarries*, [1957] 2 Q.B. 169 at 184.
[421] *Shawcross, supra* note 253 at I/189.
[422] *Tate v. Lyle Industries Ltd. V. G.L.G.* [1983] 2 A.C. 509.

public highways; holding an "acid house" party;[423] and organizing a festival which caused noise and a large amount of traffic.[424]

Private nuisance can be defined as "*an unlawful interference with a person's use or enjoyment of land, or some right over, or in connection with it*".[425] Although the *"forms which nuisance may take are protean*"[426], it can be divided into three main categories: encroachment on a neighbor's land by tree branches or roots;[427] physical damage to the claimant's land or property on it by flooding,[428] vibration,[429] and noxious fumes which damage the claimant's plants;[430] and interference with the enjoyment of the land by causing unreasonable noise,[431] smoke or fumes,[432] and using premises as a brothel.[433]

However, not every annoyance is actionable, but it is only when the activity interferes with another's enjoyment of land to such a degree as to be an unreasonable interference that it will be regarded as actionable nuisance.[434] To determine that, a number of factors, apart from the act itself, must be taken into consideration: "the *time of the commission of the act complained of; the place of its commission; the manner of committing it....; and the effect of its commission*".[435] The aim of this consideration is to preserve a balance "*between the right of the occupier to do what he likes with his own, and the right of his neighbour not to be interfered with*".[436]

Both trespass and nuisance protect the use and enjoyment of land and property on it. However, trespass is a direct injury and is actionable without proof of damage, while nuisance deals with consequential harm and requires proof of damage to be actionable.[437] Furthermore, trespass does not depend upon a balancing of the parties' rights, as occurs in nuisance.[438] Therefore, it is trespass, if one man throws stones on to another's land, but it is nuisance, if he allows the roots of his trees to grow into his neighbor's land.[439]

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[423] R. *v. Ruffell (David)* [1992] 13 Cr.App.R.(S.) 204, CA.
[424] *A.G. for Ontario v. Orange Productions*, (1971) 21 D.L.R. (3d) 257 (Ont. H.C.).
[425] *Jolowicz , supra* note 410 at 494.
[426] *Sedleigh-Denfield v. O' Callaghan* [1940] AC 880 at 903 per Lord Wright.
[427] *Smith v. Glbby* [1904] 2 KB 448 and *Davey v. Harrow Corporation* [1958] 1 QB 60.
[428] *Sedleigh-Denfield v. O' Callaghan* [1940] AC 880.
[429] *Hoare & Co. v. McAlpine* [1923] 1 Ch 167.
[430] *St Helens Smelting Co. v. Tipping* [1865] 11 HL Cas 462.
[431] *Halsey v. Esso Petroleum Co. Ltd.* [1961] 2 All ER 633.
[432] *Manchester Corpn v. Farnworth* [1930] AC 171, HL.
[433] *Thompson-Schwab v. Costaki* [1956] 1 WLR 335.
[434] *Jones, supra* note 365 at 335-336.
[435] *Stone v. Bolton* [1949] 1 All Rep. 237.
[436] *Sedleigh-Denfield v. O' Callaghan* [1940] A.C. 880 at 903 per Lord Right.
[437] *Lindshell, supra* note 419 at 840.
[438] *Jones, supra* note 365 at 496.
[439] *Butler v. Standard Telephones and Cables Co. Ltd.* [1940] 1 K.B. 399.

In the aviation context, the owner of property would have a remedy in nuisance, "*if the noise and vibration caused by aircraft occasioned him serious disturbance or substantial inconvenience and the availability of the remedy would not depend upon his being able to show that his property had sustained material damage*".[440] Therefore, anyone living near an airport could enforce his remedy against the operator of the aircraft by proving that he was substantially inconvenienced by the noise of the aircraft.[441] To prevent these kind of actions, section 76 of the UK Civil Aviation Act 1982 was introduced which removed certain activities from the ambit of common law trespass and nuisance and granted to the aggrieved party an equally effective remedy for the same activities.[442]

*3.3.2.2.1.4. Negligence, trespass, nuisance and damages on the surface*

Under English law, no legal action can be brought against the owner or the operator of an aircraft for trespass or nuisance provided that the conditions in section 76(1) of the Civil Aviation Act 1982 are met: the civil aircraft must fly at a reasonable height having regard to wind, weather and all the circumstances of the case and must comply with any Air Navigation Order[443] and with specified provisions of the 1982 Act.[444] What constitutes reasonable height has to be determined after an evaluation of all relevant circumstances which apart from the weather conditions may include the size, speed and noise of the aircraft.[445] The protection conferred by the Act extends to all civil flights which comply with section 76(1) and thus is not restricted by analogy to the common law right of passage along a highway.[446]

Section 76(2) provides that if "*material loss or damage is caused to any person or property on land or water by, or by a person in, or an article or person falling from an aircraft while in flight, taking off or landing... damages in respect of the loss shall be recoverable without* ***the proof of negligence or intention or other cause of action*** *[emphasis added], as if the loss or damage had been caused by the willful act, neglect, or default of the owner of the aircraft*". The Act confers a statutory right of action in respect of physical damage caused by an aircraft and imposes a system of strict and unlimited liability. However, the defendant may escape liability partially or fully if he

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[440] *Steel-Maintland v. British Airways Board* [1982] STL 110 at 111 per Lord Jauncey.
[441] *Ibid.*
[442] *Shawcross, supra* note 253 at V/134.
[443] Air Navigation Order, Air Navigation (General) Regulations, the Rules of the Air Regulations, the Air Navigation (Noise Certification) Order, the Air Navigation (Aircraft and Aircraft Engine Emissions) Order, and the Air Navigation (Aeroplane, and Aeroplane Engine Emission of Unburned Hydrocarbons) Order.
[444] Sections 62 (It controls aviation in time of war or emergency) and 81(It prohibits dangerous flying and imposes a criminal penalty).
[445] *Shawcross, supra* note 253 *at V/134.*
[446] *Lord Berstein of Leigh v. Skyviews and General Ltd.* [1978] QB 479.

proves that the loss or damage was caused or contributed to by the negligence of the person who sustained it.[447] Take-off for the purposes of the Act commences when the pilot carries out his take-off drill and begins the take-off run, and landing finishes at the end of the landing run.[448]

If the aircraft has been demised *bona fide*, let or hired out for any period exceeding 14 days to any other person by its owner and no pilot, commandeer, navigator or other operative member of the crew[449] is in the employment of the owner, the liability created under section 76(2) attaches to the person to whom the aircraft has been demised, let or hired out.[450] However, if the aircraft is let or hired out for a period less than 14 days and surface damage is caused by the negligence of the person to whom it is let or hired out, the owner will be entitled to indemnification by that other person against any claim in respect of the said loss or damage.[451] The strict liability regime created by section 76(2) does not preclude bringing an action in negligence against the aircraft's owner, operator, or pilot.

In USA, torts are matter of state law and under the rule established in *Erie Railroad Co. v. Tompkins*[452] federal courts hearing civil suits must apply substantive state law. During 1920s, twenty-four states had statutes imposing strict liability on the part of the owner or lessee of an aircraft for damage caused to property or persons on the ground.[453] Many of these states were using the now obsolete Uniform Aeronautics Act which provided that "*the owner of every aircraft which is operated over the lands or waters of this State* ***is absolutely liable*** *[emphasis added] for injuries to persons or property on the land or water beneath, caused by the ascent, descent or flight of the aircraft...****whether such owner was negligent or not...****[emphasis added]*".[454] In 1943, the Act was withdrawn by the Commission on Uniform State Laws and the number of states imposing strict liability has decreased.[455] Today, only Delaware,[456] Hawaii,[457] Minnesota,[458] New Jersey,[459] South Carolina[460] and Vermont[461] impose strict liability for ground damages resulting from the fall of

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[447] Section 76(2), The Law Reform (Contributory Negligence) Act 1945 applies and enables the court to apportion liability in claims arising under the Civil Aviation Act 1982.
[448] *Blankley v. Godley* [1952] 1 All ER 436n.
[449] Flight crew members concerned with the operation of the aircraft.
[450] Section 76(4).
[451] Section 76(3).
[452] *Erie Railroad Co. v. Tompkins*, 304 US 64 (1938).
[453] *Kreindler*, supra note 247 at § 2.12[9][a] page 2-94.1.
[454] Section 5.
[455] *Kreindler*, supra note 247 at § 2.12[9][a], page 2-95.
[456] Del. Code Ann. Tit 2, §305.
[457] Haw. Rev. Stat. Ann. §§263-265.
[458] Minn. Stat. §360.0112.
[459] N.J. Rev. Stat. §6:2-7.
[460] S.C. Code Ann. §55-360.
[461] Vt. Stat Ann. Tit. 5, §224.

aircraft or debris on the ground.[462] Strict liability is based on the notion that flying is an ultra-hazardous activity and aircraft is an inherently dangerous object.[463] However, it is clear that aviation today should not be regarded as an ultra-hazardous activity, since it has matured to the level that it is comparable to other modes of transportation and human activities. Thus, air travel has become more commonplace and strict liability should not be the general rule for aviation.

On the other hand, some courts have justified strict liability on the grounds that it "*shift[s] the risk of ground damages caused by aircraft from the victim thereof to the better risk bearer*".[464] The owner of the aircraft derives profit or pleasure from its use, whereas people on the ground are wholly innocent and totally unprotected from damage caused by an aviation accident. Their position is not comparable to that of the aircraft's passengers which assume some risk.[465] Furthermore, there might be strict liability in aviation activities which still can be considered as ultra-hazardous, e.g. the use of light aircraft to spray or spread chemical weed-killers.[466]

Some states hold that damages to persons or property on the land or water beneath, caused by landing or crashing an aircraft or dropping an article from an aircraft constitutes a common law trespass for which strict liability is available.[467] Furthermore, courts in California indicated that the same may be the case in flights by an incompetent pilot or at supersonic speed.[468] These cases were influenced by the Restatement (First) of Torts, § 165(c) and *Guille v. Swan*[469] which found strict liability for trespass on the part of a balloonist crash landing in a private garden. However, a series of cases in the 1950s and the 1960s moved away from strict liability at common law: *D' Aquilla v. Pryor*;[470] *Wood v. United Air Lines*;[471] and *Crist v. Civil Air Patrol*.[472] They indicated the differences between the 19th century balloonist and modern air travel and they concluded that in the absence of a statute or in the absence of the nature of the flight being ultra-hazardous[473], there should not be strict liability on the part of the owner or operator of the aircraft to those on the ground.[474] Furthermore, the Restatement (Second) of Torts §165 strengthened this

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[462] FAA, "Liability risk sharing regime for U.S. commercial space transportation: study and analysis, online: http://ast.faa.gov/files/pdf/FAALiabilityRiskSharing4-02.pdf (last accessed July 29, 2003)[*FAA report*].
[463] *Prentiss v. National Airlines*,112 F. Supp. 306 (D.N.J. 1953) ; In English law, the same result could be achieved under the rule of strict liability in *Rylands v. Fletcher* (1868)LR 3, HL.
[464] *Adler's Quality Baker Inc. v. Gaseteria Inc*, 32 N.J. 55, 159 A.2d 97 (1960).
[465] *FAA report, supra* note 462.
[466] *Gotreaux v. Gary*, 94 So 2d 293 (La, 1957) and *Langan v. Valicopters Inc.*, 567 P 2d 218 (Wash, 1977).
[467] *Parcell v. United States*, 104 F. Supp. 110 (D.C. W. Va. 1951) ; *Gaidys v. United States*, 194 F. 2d 762 (10th Cir. 1952) applying Colorado law.
[468] *Boyd v. White*, 128 Cal. App. 2d 641.
[469] *Guille v. Swan*, 19 Johns. 381 (N.Y. S.Ct. 1822).
[470] *D' Aquilla v. Pryor*, 122 F. Supp. 346 (S.D.N.Y. 1954).
[471] *Wood v. United Air Lines*, 223 N.Y.S. 2d. 692 (1961).
[472] *Crist v. Civil Air Patrol*, 278 N.Y.S. 2d. 430 (Sup. Ct. 1967).
[473] e.g. flights for testing experimental aircraft.
[474] *Kreindler*, supra note 247 at § 2.12[9][a], page 2-100.

view by limiting the imposition of strict liability "*to situations where the nature of the flight itself presents a hazard as in the case of testing experimental aircraft*".

In the majority of states ground damage caused by falling aircraft or aircraft parts is governed by negligence. Therefore, a bystander injured by aircraft debris on the ground must prove the required elements of negligence: duty of care, breach of that duty and legal causation. Some states have enacted legislation providing that ordinary tort law applies to aviation accidents,[475] while in others case law has come to the same conclusion.[476]

In order to ameliorate the position of the claimant (bystander) who may find it difficult to collect evidence to prove an airline negligent, the doctrine of *res ipsa loquitur* has been applied frequently: *Skeels v. United States*;[477] *D'Anna v. United States*;[478] *Goodwin v. United States*.[479] For the doctrine to apply there must be an accident which naturally gives rise to an inference of negligence;[480] the instrumentality that caused the accident must have been under the exclusive control of the person charged with the negligence; and the real cause of the damage must have been unknown.[481] Provided each of these conditions is satisfied there is a presumption of negligence and the burden shifts on the owner or operator of the aircraft to show that he/she took all reasonable care.

*3.3.2.2.2. The international framework*

*3.3.2.2.2.1. The 1952 Rome Convention*

In 1933 the "*Convention for the Unification of Certain Rules Relating to Damage Caused to Third Parties on the Surface*" was signed in Rome in order to regulate in a uniform manner liability for damage caused by aircraft to third parties on the surface and to provide for a compulsory system of third party legal liability insurance. However, the limited number of countries that ratified the 1933 Rome Convention[482] led to its replacement by the "*Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface*" (1952 Rome Convention) which was signed at

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[475] Ark. Stat. Ann. §74-110; Ind. Code § 8-21-4-5; Tenn. Code Ann. §42-1-105.
[476] *King v. United States*, 178 F.2d 819 320 (5th Cir. 1949); *Crosby v. Cox Aircraft*, 109 Wash. 2d 581, 746 P.2d 1198 (1987) ; *Maitland v. Twin City Aviation Corp.*, 254 Wis. 541, 37 N.W. 2d. 74 (1949)
[477] *Skeels v. United States*, 72 F. Supp. 372 (La. 1947), a man was killed when an iron pipe fell from an airborne naval target.
[478] *D'Anna v. United States*, 181 F. 2d. 335 (Md. 1950), an auxiliary fuel tank from a Navy aircraft crushed a fruit stand.
[479] *Goodwin v. United States*, 141 F. Supp. 445 (N.D. 1956), a boat was sunk when a practice bomb was dropped on it.
[480] It cannot be applied when the accident involves an experimental type aircraft.
[481] *Scott v. London & St Katherine Docks Co.* (1865) 3 H & C 596.
[482] Only five States signed the Convention.

Rome on October 7, 1952.[483] Furthermore, an amending Protocol to the 1952 Rome Convention was signed in Montreal in 1978 and entered into force on July 25, 2002.

The aim of the 1952 Rome Convention was 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*".[484] To balance these two conflicting interests, the drafters of the Convention adopted a system of strict but limited liability. Under 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,****[emphasis added] be entitled to compensation*".[485] At the same time, Article 11 limits liability according to the weight of the aircraft[486] or with respect to the person killed or injured.[487]

The scope of the Convention is limited by Article 23 which provides that it is applicable to damage caused to third parties "*in the territory of a Contracting State by an aircraft registered in the territory of another Contracting State*".[488] Furthermore, it does not cover situations where "*damage [is] caused to an aircraft in flight, or to persons or goods on board such aircraft*":[489] the 1952 Rome Convention applies only to the damage sustained on the ground as a result of an air collision, but it does not cover the damage caused in the air.[490] Furthermore, the Convention explicitly excludes the right to compensation in the following cases: (a). "*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*";[491] (b). if liability for damage on the surface is regulated by contract, or by law relating to workmen's compensation applicable to a contract of employment between the relevant persons;[492] and (c). If the "*damage [is] caused by military, customs or police aircraft*".[493]

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[483] Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface, signed at Rome on October 7, 1952, online: http://www.iasl.mcgill.ca/airlaw/private.htm#warsaw (last accessed August 15, 2003).
[484] Preamble.
[485] An aircraft is considered to be in flight from the moment power is applied for the purpose of actual take-off until the moment when the landing run ends: Article 1(2). If this power is applied for purposes other than take-off, the Convention does not apply.
[486] e.g. 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 (Article 11 (1) (d).
[487] The liability in respect of loss of life or personal injury shall not exceed 500.000 francs per person killed or injured [Article 11(2)].
[488] Article 23 (1).
[489] Article 24.
[490] I.H.Ph. Diederiks-Verschoor *An Introduction to air law* 6th ed. (The Hague: Kluwer law international, 1997) at 136[*Diederiks*].
[491] Article 1(1).
[492] Article 25, e.g in cases of a contract between an air display organizer and a foreign exhibitor.
[493] Article 26, It follows Article 3(b) of the Chicago Convention.

The liability attaches to the operator of the aircraft which means "*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 is considered the operator*".[494] A person is 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*".[495] The registered owner of the aircraft is presumed to be the operator, unless he proves in the proceedings for the determination of his liability that some other person was the operator.[496] Therefore, in wet leases the owner would be the operator for the purposes of the 1952 Rome Convention, since he provides the crew. On the contrary, in dry leases where the owner provides only the aircraft, the lessee would be the operator, unless he "*had not the exclusive right to use the aircraft days [at the time the damage was caused] for a period of more than fourteen days, dating from the moment when the right to use commence*".[497] In that case the person from whom such right was derived will be jointly and severally liable with the operator.[498]

The operator can exonerate himself completely or partially from liability in the following four instances: (a). if he proves that the damage was caused solely through the negligence or other wrongful act or omission of the person who suffers the damage or of the latter's servants or agents, unless the person who suffers the damage proves that his servant or agent was outside the scope of his authority;[499] (b). if the liable person proves that the damage was contributed to by the negligence or other wrongful act of the person who suffers the damage or of his servants or agents, unless the person who suffers the damage proves that his servant or agent was outside the scope of his authority. In that case the compensation will be reduced to the extent that such negligence or wrongful act contributed to the damage;[500] (c). when an action is brought by one person to recover damages arising from the death or injury of another person, the negligence or other wrongful act or omission of such other person or of his servants or agents will be taken into consideration in establishing the division of liability;[501] (d). if the damage is the direct consequence of armed conflict

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[494] Article 2(1).
[495] Article 2(2).
[496] Article 2(3).
[497] Article 3.
[498] *Ibid.*
[499] Article 6(1).
[500] *Ibid.*
[501] Article 6(2).

or civil disturbance or if the liable person has been deprived of the use of the aircraft by act of public authority.[502]

In case the total amount of claims established are in excess of the liability limits, a reduction will take place: if the claims are exclusively in respect of death or personal injury or exclusively in respect of damage to property, they shall be reduced in proportion to their respective amounts;[503] if the claims are both in respect of death or injury and in respect of damage to property then half of the total sum distributable will be appointed preferentially to death and injury claims and the balance will be proportionally distributed in respect of damage to property.[504]

To deprive the defendant of the liability limits, the claimant must prove that the damage was caused "*by a **deliberate** [emphasis added] act or omission of the operator, his servants or agents [acting in the course of their employment and within the scope of their authority], done with intent to cause damage*".[505] Damage caused by involuntary or reflex acts or omissions or with intent to achieve some other object cannot trigger the operator's unlimited liability.[506] Furthermore, the operator will not bear unlimited liability if he can prove that his servants or agents that caused the damage were acting contrary to his instruction or outside the scope of their normal duties. On the contrary, when it is a matter of limited liability, the operator will remain liable even if his servants or agents "*are using the aircraft in the course of their employment, whether or not within the scope of their authority*".[507] Unlimited liability is also incurred for any person who "*wrongfully takes and makes use of an aircraft without the consent of the person entitled to use it*".[508] Both unlawful taking and use are needed in order to impose unlimited liability, but if a charterer continues to use the aircraft after the end of the charter period is he unlimited liable? Shawcross answers this question on the negative,[509] whereas Unmack leaves it open.[510]

In order to secure the operator's liability, Article 15(1) provides that "*any Contracting State **may** require that the operator of an aircraft registered in another Contracting State shall be insured in respect of his liability for damage sustained in its territory....by means of insurance up to the limits applicable according to the provisions of Article 11*". The 1952 Rome Convention does not provide for mandatory insurance of any aircraft registered in the territory of a Contracting State, but

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[502] Article 5.
[503] Article 14 (a).
[504] Article 14 (b).
[505] Article 12 (1).
[506] *Shawcross, supra* note 253 at V/123.
[507] Article 2(2)(b).
[508] Article 12 (2).
[509] *Shawcross, supra* note 253 at V/124.
[510] *Unmack, supra* note 26 at 356.

it leaves it to the Contracting States to decide whether or not they require this insurance. The insurance will be considered as satisfactory if it is contracted under the terms of the 1952 Rome Convention by an insurer authorized to effect such insurance under the laws of the State of the aircraft's registration or of the State where the insurer has his residence or principal place of business, on the condition that his financial responsibility has been verified by either of the Contacting States.[511]

Insurance can be substituted for by a cash deposit in a depository bank maintained by the Contracting State of registration;[512] by a guarantee given by a bank which is authorized to do so by the Contracting State and whose financial stability has been verified by that State;[513] and by a guarantee given by the Contracting State in which the aircraft is registered, if that State renounces any claim to immunity from suit in respect of that guarantee.[514] The insurer or the person providing security in addition to the defenses available to the operator and the defense of forgery may exonerate his liability if the damage occurred after the security ceased to be effective[515] or if the damage occurred outside the territorial limits provided for by the security, unless the flight deviated from the these limits by *force majeure*, assistance justified by the circumstances or an error in piloting, operation or navigation.[516] If the security expires during a flight, it will be continued in force until the next landing specified in the flight plan, but no longer than twenty-four hours, but if it ceases to be effective for any reason other than the expiration of its terms or a change in operator, it will be continued until 15 days after notification to the appropriate authorities.[517] This extension of the security applies only for the benefit of the person suffering damage,[518] which may also bring direct action against the insurer and the guarantor only if the security is extended or if the operator is bankrupt.[519] The security will be deemed sufficient if in the case of an operator of one aircraft, it is for an amount equal to the limit applicable under Article 11 and in the case of an operator of several aircraft it is for an amount not less than the aggregate of the limits applicable to the two aircraft subject to the highest limits.[520]

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[511] Article 15(2)(a).
[512] Article 15 (4) (a).
[513] Article 15 (4) (b).
[514] Article 15 (4) (c).
[515]Article 16 (1) (a).
[516]Article 16(1)(b).
[517] Article 16(1)(a).
[518] Article 16(4).
[519] Article 16(5).
[520] Article 17(2).

Actions under the Convention are subject to a period of limitation of two years from the date of the incident which caused the damage[521], but the right to institute an action will lapse on the expiration of three years from that date.[522] Actions may be brought only before the courts of the Contracting State where the damage occurred.[523] However, by agreement between any one or more claimants and any one or more defendants, such claimants may take action before the courts of any Contracting State, on the condition that these proceedings will not prejudice in any way the rights of persons who bring actions in the State where the damage occurred.[524] The rationale behind establishing a single forum was to avoid the danger of conflicting judgments and of breaking the liability limits.[525]

*3.3.2.2.2.2. The 1978 Montreal Protocol*

The "*Protocol to Amend the Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface Signed at Rome on 7 October 1952*" (1978 Protocol)[526] was signed in Montreal on September 23, 1978. The 1978 Protocol came into force on June 25, 2002, the ninetieth day after the deposit with ICAO of the fifth instrument of ratification.[527] As between the Parties to the Protocol, the 1952 Rome Convention and the 1978 Protocol is read and interpreted together as one single instrument which is known as the *"Rome Convention of 1952 as Amended at Montreal in 1978"*.[528] Ratification of the 1978 Protocol by any State which is not a Party to the 1952 Rome Convention shall have the effect of accession to the *"Rome Convention of 1952 as Amended at Montreal in 1978"*.[529]

The 1978 Protocol expands the scope of the 1952 Rome Convention by providing that the Convention will apply not only when the damage is caused in the territory of a Contracting State by an aircraft registered in another Contracting State, but also when the operator of the aircraft that caused the damage has his principal place of business or his permanent residence in another Contracting State, whatever the aircraft's registration may be.[530] Article XIII provides that the 1952 Rome Convention will not "*apply to damage caused by aircraft used* ***in*** *[emphasis added] military,*

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[521] Article 21(1).
[522] Article 21(2).
[523] Article 20(1).
[524] *Ibid.*
[525] *Diederiks, supra* note 490 at 146.
[526] Protocol to Amend the Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface, signed at Montreal on September 23, 1978, online: http://www.iasl.mcgill.ca/airlaw/private.htm#warsaw (last accessed August 15, 2003).
[527] Article XVII(1) , The countries that have actually ratified it are: Azerbaijan, Brazil, Burkina Faso, Guatemala, Kenya, Morocco, Niger and Surinam http://www.icao.int/icao/en/leb/MtlPr78.htm (last accessed July 26, 2003).
[528] Article XIX.
[529] Article XXI(2) , e.g. Burkina Faso.
[530] Article XII.

*customs and police services*", instead of "*damage caused by military, customs or police aircraft*".[531] The change indicates that not only aircraft which are owned and operated by the relevant authorities for military, customs and police services are within the exclusion, but also aircraft which are not owned by the relevant authorities but nevertheless they are used in military, customs and police services.[532] Furthermore, nuclear damage is excluded from the scope of the Convention.[533]

With respect to the person who is liable for damage, the 1978 Protocol retains the basic principle that liability attaches to the aircraft's operator. It clarifies though the original Article 2 by providing that if the aircraft is registered as the property of a State, the liability devolves upon the person to whom the aircraft has been entrusted for operation.[534] Therefore, in cases of state-owned airlines, it is the company as such and not the State which will be held liable.

The most important change is concerned with the limits of liability which are significantly increased and are expressed in Special Drawing Rights (SDR)[535] and in monetary units based on gold[536] for those countries which do not use SDRs.[537] For example, the limit of liability in respect of loss of life or personal injury is increased to 125.000 SDRs or 1.875.000 monetary units per person killed or injured.[538] If the claims exceed the liability limits and the claims are both for loss of life or personal injury and for damage to property, the total sum for which the operator is liable[539] will be distributed proportionately and preferentially to meet the loss of life or personal injury.[540] The remainder, if any, will be distributed proportionately among the claims for damage to property.[541]

Furthermore, the 1978 Protocol replaces the word "*security*" with the word "*guarantee*" in the title of Chapter III[542] and simplifies the system of securities provided by the operator by dropping most of the paragraphs of Article 15 of the original 1952 Rome Convention.[543] Contracting States may require that the operators of aircraft will be covered by insurance or guaranteed by other security in order to cover liability for the amounts provided in Article 11 and also furnish evidence of such guarantee, if requested.[544] If the Contracting State overflown believes that the

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[531] Article 26 of the original 1952 Rome Convention.
[532] *Shawcross, supra* note 253 at V/125-126.
[533] Article XIV, The reason for excluding it was that international law places nuclear liability on the shoulders of the operator of the nuclear installation.
[534] Article II.
[535] Article III(1).
[536] Article III(4).
[537] Under the original 1952 Rome Convention the limit was 500.000 francs per person killed or injured.
[538] Article III (2) and (4)(e).
[539] Not one half of the total sum distributable as it was provided by the original 1952 Rome Convention.
[540] Article IV(b).
[541] *Ibid.*
[542] Article V.
[543] It deleted paragraphs 2,3,4,5,6,and 9.
[544] Article VI(a) (1).

insurer or the guarantor are not financially capable of meeting the 1952 Rome Convention's requirements, may request consultation with the State of registration or the State of operator or the State where the guarantees are provided.[545] Matte criticizes this provision on the basis that the 1952 Rome Convention is an instrument of private international law and the intervention of States "*is not necessarily justified and a certain reticence, if not inability, in certain cases on the part of States to remedy the inadequacy of the guarantees can be discerned*".[546] The best solution, according to Matte, would be to refuse the right of overflight until the guarantee requirements are satisfied.[547]

In addition, Article VII of the Protocol amends Article 16 of the original 1952 Rome Convention. It replaces the word "*security*" with "*guarantee*", deletes paragraphs 2 and 3, and restricts the defenses of the insurer and the guarantor by abolishing the fifteen days continuance of the security if it ceases to be effective for any reason other than the expiration of its term, or a change of operator.

The original 1952 Rome Convention has been ratified by 45 States and the 1978 Montreal Protocol by 8 States.[548] The limited number of ratifying States can be attributed to the following reasons: low limits of liability, even though the 1978 Protocol has increased them considerably;[549] domestic legislation in many States provides better protection to third parties on the surface;[550] noise and sonic boom issues are not dealt with in the Convention; and objections were raised against the adoption of a single forum.[551] As Matte stated emphatically, the 1952 Rome Convention achieved "*a compromise...., but as often happens with respect to compromises, nobody was satisfied*".[552]

Currently, ICAO is considering the revision of the 1952 Rome Convention especially in light of 9/11. The areas which are being examined include the adequacy of the liability limits;[553] the need for no-fault up-front payment of a certain amount to the victims within a short time of the accident; the need to establish a mechanism to review the liability limits which will take into account the accumulated rate of inflation; the need to address environmental damage on the ground caused by

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[545] Article VI (a)(2).
[546] Nicolas Mateesco Matte, *Treatise on Air-aeronautical law* 1st ed. (Toronto: The Carswell Co. Ltd., 1981) at 538 [*Matte*].
[547] *Ibid.*
[548] For present parties see http://www.icao.int/icao/en/leb/rome1952.htm and http://www.icao.int/icao/en/leb/MtlPr78.htm (last accessed July 26, 2003).
[549] Canada denounced the original 1952 Rome Convention on June 29, 1976 because of the low limits and Australia denounced it on May 8, 2000.
[550] See UK and USA legislation analyzed in sub-chapter 3.3.2.2.1.4.
[551] *Diederiks, supra* note 490 at 132.
[552] *Matte, supra* note 546 at 534.
[553] It is proposed that a liability regime similar to the two-tier approach of the Convention for the Unification of Certain Rules for International Carriage by Air 1999 should be adopted.

aviation fuel venting, hazardous materials falling from the aircraft, aircraft noise, and engine emissions; and the removal of the single forum concept in favor of multiple fora.[554]

*3.3.2.3. Safety management*

*3.3.2.3.1. ICAO's initiatives*

*3.3.2.3.1.1. Safety Oversight Audit Program: an indispensable safeguard*

The safety of aerial navigation is a primary concern of the aviation community. The Chicago Convention calls for the development of international civil aviation "*in a safe and orderly manner*"[555] and issues ICAO with a mandate "*to develop the principles and techniques of international air navigation ...so as to insure the safe and orderly growth of international civil aviation throughout the world*".[556] Articles 12, 29-35, 37 and 38 create a global set of standards for safety related national legislation, which interconnects ICAO and its member States and allows States to recognize each other's level of implementation of these provisions.

Article 12 requires States to maintain uniform aviation regulations in conformity to the greatest possible extent with those established under the Convention, referring to the most important ICAO's legislative function -the formulation and adoption of International Standards and Recommended Practices (SARPs). Under Article 54(l) ICAO's Council has a mandatory function to adopt SARPs and regarding the rules of the air over the high seas it is empowered to legislate with binding force[557], a unique feature of an international organization. SARPs' require a 2/3 majority vote of **all** the Council Members to be adopted and they come into force after three months, unless a majority of States register their disapproval in that time.[558] Such disapproval never occurred, since in the SARPs developing process Contracting States are extensively consulted. Article 54(l) requires the Council to designate SARPs, *for convenience,* as Annexes to the Chicago Convention and to notify all Contracting States in this regard. This wording indicates that Annexes do not have the same force of law as the Chicago Convention itself.

By Article 37 each Contracting State explicitly undertakes to accomplish the *highest practical degree* of uniformity in regulations, standards, procedures and organization which improve and facilitate air navigation by ensuring that SARPs are followed. This legal obligation is not absolute, since if a State finds it impracticable to comply with the standards, it has the legal duty

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[554] ICAO, Attachment B to State Letter LE 3/14.2-01/62, online: http://www.icao.int/icao/en/LEB/docs/062e_b.djvu (last accessed August 11, 2003).
[555] Convention on International Civil Aviation, December 7, 1944, Preamble.
[556] *Ibid.*, Article 44 (a).
[557] *Ibid.*, Article 12.
[558] *Ibid.*, Article 90.

under Article 38 to notify ICAO immediately of discrepancies between its own practice and the relevant Standard. In turn, ICAO must issue an immediate notification to all other Contracting States of these discrepancies.[559] The rationale behind this filling of differences is to timely warn other States that certain standards are not available in a particular geographic area and thus to protect the flight safety of foreign aircraft.[560]

In theory, SARPs do not have the legal force of the Chicago Convention, they are not subject to the Vienna Convention on the Law of the Treaties and they constitute "soft law". However, States are particularly motivated to comply with them otherwise, with serious financial consequences, the international aviation community will exclude them.[561] Unfortunately, practice does not always keep pace with theory. The problem of insufficient level of compliance with SARPs due to a lack of economic resources or technical knowledge available to certain States and the failure to file differences was known to ICAO which silently tolerated this practice.

The Avianca B-707 accident brought the problem in the surface.[562] The FAA initiated an International Safety Assessment Program in order to determine whether foreign civil authorities are implementing SARPs and whether foreign carriers operating to or from USA are licensed under conditions meeting the SARPs and receive adequate safety oversight from a competent civil aviation authority. This program was criticized as a "strong arm tactic", but it was carried out with the States consent and was in accordance with Articles 1, 11, 16, and 33 of the Chicago Convention.

In 1995, the ICAO Council broke its silence and approved a program to assess the safety oversight function of member States *that specifically requested assistance* to enable them to implement SARPs. The initiative's key point was confidentiality/non-publicity of the findings, which was contrary to Article 38, under which States are legally obliged to publicly notify any non-implementation of ICAO's standards. The program covered Annexes 1,[563] 6[564] and 8,[565] it was

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[559] *Ibid.* Article 38.
[560] Michael Milde, "Enforcement of Aviation Safety Standards- Problems of safety oversight" in M. Milde & H. Khadjavi Public International Air Law: Cases and Materials Vol. I (Canada: McGill University, 2002) 309 at 311[ *Milde safety I*].
[561] *Ibid.*
[562] On January 25,1990, Avianca flight 52 that had left Bogota for New York's John F. Kennedy airport via Medellin ran out of fuel and crashed at Cove Neck, New York, killing 73 people.
[563] Personnel Training and Licensing.
[564] Operations of Aircraft.
[565] Airworthiness.

mostly financed from extra-budgetary means donated by States and entailed a Memorandum of Understanding (MoU) signed between ICAO and the State requesting assistance.[566]

Strict voluntary safety audits were not sufficient. The 32nd ICAO Assembly adopted Resolution A32-11 which urged ICAO to establish a regular, mandatory, systematic and harmonized safety oversight audit program applicable to all contracting States. The 1998 ICAO Universal Safety Oversight Audit Program (USOAP) provides for *mandatory* safety audits which are carried out upon ICAO's initiative and not upon the State's request. However, States' sovereignty is respected, since the audits are undertaken on the basis of a MoU signed between ICAO and the State to be audited.[567] Furthermore, the Resolution provides for "*greater transparency and increased disclosure...in the release of audit results*".[568] Although the transparency requirement constitutes an improvement compared to the 1995 program, the full disclosure of the audits' results is essential to the safe operation of civil aviation.[569] The 33rd Session of the ICAO Assembly expanded USOAP to cover Annex 11 and Annex 14 as of 2004[570] and instructed the Secretary General to undertake a study regarding its application to Annex 13.[571] USOAP in its current form assesses Annexes 1, 6, 8, 11 and 14. By the end of 2002, 180 safety audits were performed and 67 States had received a follow-up mission[572] and in no recorded case has a State publicly refused to undergo the assessment.[573]

Are the audits in compliance with the existing legal framework of ICAO? Under Article 54(i) and (j) is the Council's mandatory function "*to request, collect, examine, and publish information relating to the advancement of air navigation and the operation of international services*" and "*to report to Contracting States any infraction of this Convention*". Not filling a difference under Article 38 constitutes such an infraction.[574] Furthermore, Article 54 (k) mandates the Council "*to report to the Assembly any infraction of the Chicago Convention where a Contracting State has failed to take appropriate action within a reasonable time after notice of infraction*". The Council also has under Article 55 (e) the discretionary power to investigate and report, at any Contracting State's request, any situation which may appear to present avoidable obstacles to civil aviation. Therefore, the

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[566]Monica G. Pukall, "ICAO Safety Standards: A Step in the Direction of Global Governance", online: http://webct.mcgill.ca/SCRIPT/102200301/scripts/serve_home (last accessed May 20, 2003) [*Pukall*].
[567] Resolution A 32-11(3).
[568] Resolution A32-11(1).
[569] *Pukall, supra* note 566.
[570] Resolution A33-8 (7).
[571] Resolution A33-8 (8).
[572] *ICAO Report 2002, supra* note 176.
[573] *Pukall, supra* note 566.
[574] Michael Milde, "*Enforcement of Aviation Safety Standards-Problems of Safety Audits* in M. Milde & H. Khadjavi Public International Air Law: Cases and Materials Vol. I (Canada: McGill University, 2002) 317, at 322 [ *Milde Safety II*].

Chicago Convention gives all necessary powers to the Council to implement the safety standards.[575]

*3.3.2.3.1.2. Article 83bis: Is it enough?*

Registration under Chapter III of the Chicago Convention is based on the notion that the State of Registry assumes responsibility and control over aircraft flight safety. Its functions are listed in Articles 12, 30, 31 and 32 of the Chicago Convention. They prescribe that the State of Registry is to grant the pertinent certificates of airworthiness and licenses for the crew and radio-operators recorded in its registers. These certificates/licenses must be issued or validated in accordance with the SARPs contained in the corresponding Annexes to the Chicago Convention.[576] Furthermore, the State of Operator under Annex 6 is responsible, after an assessment of an airline's capability to operate aircraft, to issue an Air Operator Certificate (AOC) as a prerequisite for engaging in international operations. The advantages of this safety management system are twofold: it ensures that a single set of safety regulations is applied and it makes a specific State accountable in cases of default.

Liberalization led to the development of new practices concerning an aircraft's use, namely leases, charters, code-sharing and interchange. In the framework of these commercial agreements aircraft registered in one State are operated by another State's operator. The result is that often the Registry State loses control of the aircraft and its crew and is unable to exercise its duties and functions vis-à-vis them.[577]

In order to find solutions for these predicaments, different methods were adopted. The first was to arrange for the temporary transfer of aircraft registration under Article 18 of the Chicago Convention. However, this procedure was impractical for short-term leases and some States were reluctant to de-register aircraft which had been temporarily entered on their register. The second solution was to include notes in Annexes 1, 6 and 8 which urged the State of Registry to delegate certain functions and duties to the State of Operator. These arrangements were bilateral in nature, non-binding on third party States and thus the Registry State remained internationally responsible for the aircraft.[578]

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[575] *Ibid.*
[576] Annexes 1, 8.
[577] Benoit Verhaegen, "The Entry into Force of Article 83bis: Legal Perspective in Terms of Safety Oversight" (1997) XXII-II Ann. Air & Sp. L. 269, at 270 [*Verhaegen*].
[578] *Ibid.* at 270-271.

These shortcomings led to Article 83bis[579] which facilitates lease, charter, interchange or any similar agreement and satisfies, according to the Preamble, the desire of the Contracting States to provide for the transfer of certain duties and functions with respect to aircraft to the State of Operator. Article 83bis(a) permits the transfer of the responsibility of the State of Registry to the State of Operator regarding Articles 12, 30, 31, 32(a), in whole or in part, pursuant to lease, charter, interchange or any similar agreement. This allows effective control of airworthiness, licensing and enforcement of the rules of the air by the State of the Operator when the aircraft is outside the Registry State. Article 83bis (a) provides a discretionary and flexible approach, as it does not impose a duty and its ratification does not entail an automatic transfer of functions and duties: "*the State of Registry* ***may, by agreement*** *[emphasis added]..., transfer...*" the relevant duties. These transfers must be expressly made through bilateral agreements, which will cover only the functions and duties attached to Articles 12, 30, 31 and 32(a) and which will expressly mention the aircraft subject to that transfer.

An interesting question is whether these bilateral agreements bind third party States. The answer is found in the affirmative in Article 83bis (b) provided that the third party States have ratified Article 83bis and they have been officially informed about the transfer. Information regarding the transfer may be achieved through registering the bilateral agreement with the Council, which in turn will formally notify the other State Parties to Article 83bis or through direct communication to the other State Parties to 83bis that will be affected by the transfer. The direct approach is preferable in cases of short-term arrangements, but pursuant to Article 83, States remain obliged to register these agreements with ICAO.

However, in practice problems may occur. First, "*wet leases require quick action and airlines seldom have the luxury of sufficient time to fully implement the requirements of Article 83bis".*[580] The direct communication method in practice does not work. Secondly, where an airline's principal place of business is different from its incorporation place and from the place where technical maintenance is carried out poses another problem. Defining the State of Operator as the State where the operator has its principal place of business means that the State of Operator is unable to maintain control of the airline and the aircraft. It is submitted that a possible solution would be to revise the definition of the State of Operator in Annex 6 through reference to the

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[579] Article 83bis- Protocol Relating to an Amendment to the Convention on International Civil Aviation, signed at Montreal on *October 6, 1980,* online: http://www.iasl.mcgill.ca/airlaw/private.htm#warsaw (last accessed August 15, 2003).

[580] Donald Bunker, "Aircraft Wet Leasing: The Perils and the Benefits" (2000) XXV Ann. Air & Sp. L. 67, at 74.

corresponding safety-related duties of States. This would enable the transfer of the safety-related responsibilities to a State more capable of meeting the obligations imposed under Annex 6.[581]

*3.3.2.3.2. IATA's initiatives*

*3.3.2.3.2.1. IATA's role and structure*

The International Air Transport Association (IATA) is the worldwide non-governmental organization of schedules airlines established in 1945 to promote safe, reliable, and secure air services; to foster air commerce and to study the problems connected therewith; to provide means of collaboration among airlines engaged directly or indirectly in international air transport; and to cooperate with ICAO, other international organizations and regional airlines associations.[582] More specifically, IATA's mission is to represent and serve the airline industry and its aims include the financial viability of the industry; the recognition of the importance of the industry to worldwide social and economic development; the provision of high quality, value for money products and services; the development of cost-effective and environmentally-friendly standards and procedures to facilitate the operation of international air transport; and the promotion of safe, reliable and secure air services.[583] IATA assembles 280 airlines which comprise more than 95% of all international scheduled air traffic.[584]

IATA's activities are regulated by its Articles of Association. IATA has an Annual General Meeting (AGM) of its Members which is vested with the ultimate authority to exercise all of the powers of the association.[585] All Active Members have an equal right to representation and each of them has one vote.[586] The Meeting's functions are summarized in Article IX. They comprise establishing IATA's Standing Committees and Conferences;[587] approving the financial statements for the previous year;[588] and appointing the external auditor for the current year.[589]

In addition to the AGM there is a Board of Governors. The IATA's Board of Governors consists of not more than thirty-one persons elected by the AGM from among representatives of

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[581] *Verhaegen, supra* note 577 at 275.
[582] IATA, "Manual on the Regulation of International Air Transport", ICAO Doc.9626, Chapter 3:8 at 3:8-1 and IATA, "Handbook", February 2001, Act of Incorporation, Article 3[*IATA Handbook*].
[583] Adrianus Groenewege, *The Compendium of international civil aviation* 3rd ed. ( Canada, International aviation development corporation, 2003) at 226.
[584] IATA, About us, online: http://www1.iata.org/about/index (last accessed July 3, 2003).
[585] Article VIII.1.
[586] Article XI.
[587] Article IX.3.a.
[588] Article IX.3.f.
[589] Article IX.3.i.

Active Members[590] and it is regarded as the association's executive committee. The Board is authorized to exercise all such powers of IATA as are not by law, the Act of Incorporation or these Articles required to be exercised by a General Meeting.[591] The Board is accountable to the General Meeting for the overall performance of the Association.[592] It is entrusted with a number of duties, including the general management and control of the business, affairs, funds and property of IATA;[593] the approval of the Rules and Regulations of the Standing Committees and the Provisions for the Conduct of the IATA Traffic Conferences.[594]

The Board of Directors has established the following Standing Committees: Cargo Committee;[595] Industry Affairs Committee;[596] Financial Committee;[597] and Operations Committee.[598] Furthermore, the Director General with the approval of the Board of Governors has established the following Special Committees to advice on subjects of particular concern to the air transport industry:[599] Information Management Committee;[600] Environment Task Force;[601] Council on Human Resource Development;[602] and Legal Advisory Council.[603]

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[590] Article XII.1.
[591] Article IX.2.a.
[592] Article IX.2.b.
[593] Article XII.3.c.
[594] Article XII.3.j.
[595] The Cargo Committee acts as an advisor to the Board, the Director General and other relevant IATA bodies on all air cargo industry policy issues. Its duties include mainly agent/carrier relations; cargo automation; cargo handling; cargo facilitation; and cargo related regulatory development, *IATA Handbook*, *supra* note 582 at Rules and Regulations of the Standing Committees: Cargo Committee, Article 1.
[596] The Industry Affairs Committee acts as an advisor to the Board, the Director General and other relevant IATA bodies on all industry affairs and aeropolitical matters connected with international passenger air transport. Its duties include mainly customer service; facilitation; scheduling; tarrifs and pricing, *IATA Handbook*, *supra* note 582 at Rules and Regulations of the Standing Committees: Industry Affairs Committee Article 1.
[597] The Financial Committee acts as an advisor to the Board and the Director General on all financial matters connected with international air transport. Its duties include mainly revenue accounting; taxation; user charges; fuel trade; clearing house; insurance issues; statistical matters; airline cost issues , *IATA Handbook*, *supra* note 582 at Rules and Regulations of the Standing Committees: Financial Committee at Article 1.
[598] The Operations Committee acts as an advisor to the Board and the Director General on all matters that relate to the improvement of safety, security, and efficiency of civil air transport. Its duties include mainly the optimization of engineering and maintenance measures, to improve safety, reliability, and productivity; safe and efficient flight operations and efficient global air traffic management; the optimization of airline safety; the optimization of security measures to enable safe, secure and efficient air transport; the optimization of the aviation infrastructure, *IATA Handbook*, *supra* note 582 at Rules and Regulations of the Standing Committees: Operations Committee, Articles 1 and 2.
[599] Article XII.4.d of the Articles of Association.
[600] The Information Management Committee reports to the Board and is dealing with information technology (IT) issues. Its duties include the following tasks: to address IT issues of strategic importance for the airline industry; to manage the process of development of IT policies, standards, and solutions, *IATA Handbook*, *supra* note 582 at Special and Other Committees: Information Management Committee IMC).
[601] The Environment Task Force advises the Board on environmental matters. Its duties include the following tasks: monitor and respond to environment developments and policies of concern to IATA Member airlines; analyze and assess the implications of such developments and regulations; develop and recommend common industry positions on environmental issues, *IATA Handbook*, *supra* note 582 at Special and Other Committees: Environment Task Force (ENTAF).
[602] The Council on Human Resource Development provides policy guidance on training programs operated by IATA and provides oversight of the training funds established by IATA. *IATA Handbook*, *supra* note 582 at Special and Other Committees: Council on Human Resource Development (CHRD).
[603] The Legal Advisory Council provides legal advises to the Board and other groups, committees and the Director General on industry matters. It also has a pro-active role on matters of legal concern to the aviation industry and acts as an advocate of the air transport industry, *IATA Handbook*, *supra* note 582 at Special and Other Committees: Legal Advisory Council (LAC).

*3.3.2.3.2.2. IATA's safety management techniques*

Giovanni Bisignani, director general and CEO of IATA, stressed the primary aim of the association: "*Safety and security are air transport's top priorities. Without public confidence that flying is safe and secure, there is no future for our industry*".[604] IATA contributes to the improvement of airline safety by analyzing data, identifying concerns, and offering recommendations to the industry.

The Operations Committee has the main responsibility for the improvement of safety and efficiency of civil air transport. It ensures that IATA responds to all issues of technical and operational concern of the industry and furthermore guides, coordinates and oversees the strategic and tactical work undertaken through the Engineering and Maintenance Committee (EMC), the Flight Operations Committee (FOC), the Safety Committee (SAC), the Security Committee (SEC) and the Regional Technical Conferences.[605] The objectives of the Committee include the development and promotion of policies and practices which lead to consistently high levels of operational safety and performance, and the facilitation of an interdisciplinary and interactive approach to serving Members' technical interests.[606]

The EMC develops standards and recommendations[607] for consideration by the Operations Committee in the following areas: aircraft engineering and maintenance activities, airworthiness and reliability issues, aircraft recovery, aircraft performance, and avionics. The Committee has produced the Technical Operations Policy Manual (TOPM) which serves as a reference and guide for those involved in the global development of the airline industry, and the Engineering and Maintenance Committee Information Exchange (EMC-IE) whereby EMC members are able to exchange information on any matter with technical implications.[608]

The FOC assists in all matters that relate to safe and efficient flight, ground operations, and global air traffic management. Its duties include the development of standards and recommendations in all aspects of flight and ground operations; operational requirements and

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[604] Giovanni Bisignani, Speech at the Aerospace Forum Asia , Hong Kong, October 9, 2002.
[605] IATA Handbook Special and Other Committees Articles 2 ands 3
[606] IATA, Operations, online: http://www.iata.org/soi/operations/index (last accessed July 3, 2003).
[607] IATA's standards and recommendations should not be confused with ICAO's SARPS. SARPS apply under treaties between Sovereign States, whereas IATA's standards and recommendations apply only to IATA's members.
[608] IATA, online: http://iata.mondosearch.com/cgi-bin/MsmGo.exe?grab_id=7672320&EXTRA_ARG=SUBMIT%3DGo!&host_id=4&page_id=5323&query=EMC&hiword=EMC+# (last accessed July 3, 2003).

standardization of new technology; human factor aspects; and operational matters of strategic importance.[609]

SAC's primary task is to monitor aviation safety problems being experienced and identified by airlines, and to develop methods to improve safety, such as promotion of the use of digital flight data recorder analysis programs.[610] The Committee has established a discussion group called SWAP (Safety With Answers Provided) which offers airlines' safety departments the opportunity to exchange information regarding cabin safety, operational safety and airside safety.[611] Furthermore, it established the Classification Working Group (CWG) which prepares the annual safety reports; identifies trends in matters of concern in aviation safety worldwide from the accident data available; and makes cost-effective recommendations.[612]

SAC also developed an enhanced and comprehensive safety strategy entitled "Safety Strategy 2000+". The strategy's main concern is the confrontation of the controlled-flight-into-terrain (CFIT), approach-and-landing, and loss-of-control accidents[613] which represent the greatest threat for flight safety.[614] Between 1988 and 1994, 32 CFIT accidents were reported which comprise 41% of the period's passenger fatalities and $1 billion in insurance losses.[615] Regional safety priorities are established and means for safety initiatives are determined and implemented. The evaluation of the impact of these initiatives in combination with continuous monitoring of the industry's safety performance will enable the development of industry-wide safety standards.[616]

Moreover, IATA established the IATA Operational Safety Program (IOSA) in order to standardize, harmonize and rationalize the multiple safety audits that airlines pass every year.[617] IOSA assesses the operational management and control systems of an airline, including *inter alia* safety and quality oversight, flight operations, cabin safety, flight dispatch, engineering and maintenance. The program incorporates quality audit principles and provides for a standardized

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[609] IATA, "Terms of reference, IATA flight operations committee, online: http://www.iata.org/Whip/_Files/WgId_0015/Ai_6_1_b.pdf#Page2 (last accessed July 3, 2003).

[610] IATA, Safety committee, online: http://www1.iata.org/Whip/Public/frmMain_Public.aspx?WgId=10 (last accessed July 3, 2003).

[611] IATA, online: http://iata.mondosearch.com/cgi-bin/MsmGo.exe?grab_id=41552640&EXTRA_ARG=&host_id=5&page_id=3726&query=SAC&hiword=SAC+# (last accessed July 3, 2003).

[612] IATA, online: http://iata.mondosearch.com/cgi-bin/MsmGo.exe?grab_id=41552640&EXTRA_ARG=&host_id=5&page_id=1990&query=SAC&hiword=SAC+ (last accessed July 3, 2003).

[613] CFIT occurs when an airworthy aircraft under the control of the flight crew is flown unintentionally into terrain, obstacles or water, usually with no prior awareness by the crew. This type of accident commonly occurs during the approach-and-landing phase, which begins when an aircraft descends below 5,000 feet above ground level with the intention to conduct an approach and ends when the landing is complete or the flight crew flies the aircraft above 5,000 feet AGL en route to another airport, online: http://www.flightsafety.org/cfit1.html (last accessed July 4, 2003).

[614] IATA Safety strategy 2000+, online: http://www.iata.org/nr/contentconnector/cs2000/siteinterface/pdf/oi/safety_strategy_paper_1.pdf (last accessed July 4, 2003) [*Strategy 2000+*].

[615] Stacy Saphiro, "Aviation underwriter calls for action: Insurers must play safety role" Bus. Ins, April 11,1994 at 12.

[616] *Strategy 2000+*, *supra* note 614.

[617] IATA Operational Safety Program (IOSA), online: http://www1.iata.org/Whip/_Files/WgId_0200/IOSA_Overview.pdf (last accessed July 4, 2003).

audit methodology and structured auditor qualification standards. Its overall purpose is to achieve cost efficiency through a reduction in audit redundancy.[618]

Furthermore, IATA established the Safety Trend Evaluation, Analysis & Data Exchange System (STEADES). The system is based on the British Airways' BASIS software and constitutes a global-wide safety database which provides analysis of safety-related incidents.[619] The database consists of de-identified data held and analyzed by the Flight Safety Foundation, an independent, non-profit, international organization engaged in research, auditing, education, advocacy and publishing to improve aviation safety.[620] STEADES enables airlines to identify areas of potential operating concerns in order to reduce accident potential and thus costs. In addition, it contributes to operating risks assessment.

*3.3.2.3.3. The FAA International Safety Assessment (IASA)*

Prior to 1990 the FAA had minimal concerns about non-US airlines that either operate into the US or operate US-registered aircraft all over the world under the presumption that the civil aviation authorities (CAAs) of the ICAO Contracting States meet their obligations under the Chicago Convention and its Annexes. However, the Avianca B-707 accident brought to light the differences between US Federal Aviation Administration (FAA) safety standards and those followed by CAAs of other nations.

The significant publicity of the event and the complaints of many US operators that certain non-US air carriers undercut the US carriers because of the substantially lower costs of inadequate foreign safety regulations[621] led the FAA to change its policy regarding the safety oversight of non-US air carriers and "*to examine more closely the capabilities of foreign civil aviation authorities to meet their surveillance and oversight responsibilities under international law*".[622] In mid-1991, FAA introduced a preparatory oversight program which included the assessment of 12 countries with airlines seeking authority to operate to and from the USA. The findings compelled the FAA to formally establish the IASA program in order to assess whether a foreign CAA complies with the

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[618] *Ibid.*
[619] IATA, The Steades product, online: http://www1.iata.org/Whip/_Files/WgId_0231/STEADES%20Flyer2.PDF (last accessed July 4, 2003).
[620] Flight safety foundation, online: http://www.flightsafety.org/about_fsf.html (last accessed July 4, 2003).
[621] Anthony Broderick &James Loos, "Government aviation safety oversight-trust, but verify" (2002) JALC 67 1035, at 1039 [*Broderick*].
[622] FAA, "Government oversight of loophole airlines: Hearings before the subcommittee on investigations and oversight of the House Comm. on public works and transportation", 102 Cong. 45 (June 4,1991).

minimum international standards for aviation safety oversight established by ICAO in Annexes 1, 6 and 8.[623]

The program does not evaluate the safety of individual airlines, but it assesses the safety oversight system of each country. It includes meetings with the foreign CAA responsible for providing the safety oversight, reviews of pertinent records and meetings with representatives of the foreign air carriers. Factors to be considered during the assessment include: the State's aviation law; the existence of appropriate and competent regulatory structures to issue the air operator certificate (AOC); the organization and viability of the CAA; the number of technically qualified personnel; the adequacy of surveillance following initial issuance of AOC; the existence of properly approved operations and maintenance manuals; and the existence of adequately trained cabin attendants.[624]

Once the assessment has been completed, the FAA compiles the collected data to decide whether the CAA meets its minimum safety obligations under the Chicago Convention. Initially, the FAA had established three ratings for the status of countries at the time of the assessment: Category I: does comply with ICAO Standards; Category II: conditional; Category III: does not comply with ICAO standards. In May 25, 2000 the FAA decided to use two categories in order to eliminate confusion from having two different categories that address non-compliance with ICAO standards:[625]

- Category I-does comply with ICAO Standards: the country's CAA has been assessed by FAA inspectors and has been found to license and oversee air carriers in accordance with ICAO aviation safety standards. Air carriers licensed by countries in category I face no restrictions in flying into the US or having code-share agreements with US carriers, subject to compliance with Federal Aviation Regulation(FAR) Part 129; having economic authority and insurance information granted by the US Department of Transport (DOT); and their countries having a valid bilateral or open skies agreement with USA;
- Category II-does not comply with ICAO Standards: the FAA assessed the CAA and determined that it does not provide safety oversight of its air carrier operators in

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[623] FAA, Overview of the Federal Aviation Administration flight standards service international aviation safety assessment (IASA) program, online: http://www1.faa.gov/avr/iasa/iasabr15.htm (last accessed July 6, 2003).

[624] Joaquin Archilla, "FAA status of safety oversight in the Latin America/ Caribbean region" (Paper presented to the Aviation week/ Air transport association maintenance, repair and overhaul Conference, 2003), online: http://www.awgnet.com/conferences/html/mro03/archilla.pdf (last accessed July 6, 2003) and *Broderick*, *supra* note 621 at1043-1044.

[625] FAA, "Federal Aviation Administration international aviation safety assessment phase 2 assessment results definitions, online: http://www1.faa.gov/avr/iasa/iasadef5.htm (last accessed July 6, 2003).

accordance with the minimum safety oversight standards established by ICAO. Air carriers licensed from countries in category II with existing operations to the USA will be permitted to continue operations under heightened FAA surveillance. Expansion or changes in services to the USA by such carriers are not permitted, whereas new services may only be added if the aircraft are wet-leased from a U.S. carrier or a carrier authorized by a category I country. Carriers that do not have service to the United States will not be permitted to commence service while in category II, except by using wet-leased aircraft from a U.S. carrier or a carrier authorized by a category I country.

During the first three years of IASA's operation the findings of the assessments were not publicly announced, because the FAA believed that publicity of the safety shortcomings would politicize the process.[626] However, on September 2, 1994 the US DOT identified nine countries out of the thirty assessed by FAA that received conditional approval. The political position was that the public should know when a safety problem has been identified, whereas the position of FAA's technical group was that the disclosure would make more difficult the cooperation of the assessed State.[627] However, apart from some embarrassment caused from the publication of the names, no disputes have ever arisen between the assessed countries and USA. The assessments are carried on a cooperative basis and are within the safety clause found in bilateral agreements on air services.[628]

FAA, has completed, as of 31/3/2003, IASA assessments of 98 countries, 27 of which have been found not to meet ICAO standards for safety oversight.[629] The similarity of IASA's findings to the results of ICAO's safety audits led FAA to change its policy and co-ordinate its actions with ICAO. FAA is in the process of adopting ICAO's documentation for the assessments' conduct and using ICAO's oversight findings to update the IASA program. The main objective of this cooperation is to reduce the redundant on-site visits, in favor of ICAO's USOAP which in turn will lead to greater

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[626] *Broderick , supra* note 621 at 1043.

[627] *Ibid.*

[628] e.g. Article 13 of the US-Canada bilateral agreement provides that "*either party or the aeronautical authorities of either Party may request technical discussions concerning the safety standards maintained and administered by the other Party relating to aeronautical facilities, aircrews, aircraft, and operation of the designated airlines. If, following such technical discussions, one Party finds that the other Party does not effectively maintain and administer safety standards and requirements in these areas that at least equal the minimum standards that may be established pursuant to the [Chicago] Convention, the other Party shall be notified of such findings and the steps considered necessary to conform with these minimum standards, and the other Party shall take appropriate corrective action.*"

[629] Argentina, Bangladesh, Belize, Cote d' Ivoire, Dominican Republic, Ecuador, Gambia, Greece, Guatemala, Guyana, Haiti, Honduras, Kiribati, Nauru, Nicaragua, Organization of East Caribbean States (OECS), Panama, Paraguay, Serbia and Montenegro, Suriname, Swaziland, Trinidad & Tobago, Turks & Caicos, Uruguay, Venezuela, Zaire, Zimbabwe, online: http://www1.faa.gov/avr/iasa/ (last accessed July 6, 2003).

transparency and efficiency of the IASA, and lower costs for FAA.[630] In light of the new approach, FAA and ICAO have developed, using the ICAO TRAINAIR methodology, a series of training packages for government aviation safety inspectors. The program is designed for operations and airworthiness aviation safety inspectors and focuses on the certification of air operators and approved maintenance organizations.[631] Furthermore, the FAA has developed the Model Aviation Regulatory Document to support ICAO's safety oversight program. The Document includes a civil aviation statute, model regulations, and model implementing standards which can be used by countries to review their present laws and regulations and assess whether they meet the country's safety oversight responsibilities.[632]

The model statute provides a legal basis for the establishment of a CAA;[633] requires the registration of aircraft;[634] provides for a system of recordation of such registration;[635] sets forth the statutory bases for certification of aviation personnel and entities and the duties required of aviation operators and airmen;[636] sets forth the civil and criminal penalties that may be imposed by the CAA for violations of the law or the regulations;[637] and establishes the procedure that is to be followed by the CAA in enforcement action.[638] The model regulations are divided in eleven parts which set forth the requirements for the licensing of personnel;[639] the certification and administration of aviation training organizations;[640] the registration of aircraft and the application of nationality and registration marks;[641] the airworthiness of aircraft;[642] the registration and monitoring of approved maintenance organizations;[643] the operation of aircraft;[644] persons or entities to be granted an AOC;[645] and aerial work operations.[646]

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[630] *Broderick*, *supra* note 621 at 1054.
[631] FAA, International aviation safety assessment (IASA), online: http://www1.faa.gov/avr/iasa/ (last accessed July 6, 2003).
[632] FAA, Model aviation regulatory document, online: http://www1.faa.gov/avr/iasa/calr.htm (last accessed July 6, 2003).
[633] Sub-chapter I to IV.
[634] Sub-chapter V.
[635] *Ibid.*
[636] Sub-chapter VI.
[637] Sub-chapter VII.
[638] Sub-chapter VIII.
[639] Part 2.
[640] Part 3.
[641] Part 4.
[642] Part 5.
[643] Part 6.
[644] Part 8.
[645] Part 9.
[646] Part 11.

*3.3.2.3.4. Conclusion*

Increased liberalization entails an increased need to comply fully with ICAO's SARPs. USOAP "*has raised the level of compliance with ICAO minimum standards and [has] given all States sound, objective evidence to help them assess whether AOCs have been correctly issued to foreign operators and adequately monitored by the regulator*".[647] The designed expansion of the program to all safety-related issues coupled with the full implementation of Article 83bis will lead to a valuable "*consensus that aviation safety is a matter of global concern to be governed by international standards*".[648] IATA and FAA play a major role in accomplishing this consensus through their safety management techniques and their close collaboration with ICAO. Safety deficiencies in any part of the world have a wide impact and thus the only way to provide for the enhancement of aviation safety levels worldwide is through extensive cooperation of all the actors concerned.

*3.3.2.4. Security management*

*3.3.2.4.1. ICAO's initiatives*

*3.3.2.4.1.1. Security and 9/11: Global implications of a domestic event*

The events of 9/11 proved in an explicit way that the safety of civil aviation does not concern only risks connected to its operational and physical characteristics, but it also encompasses man-made dangers in the form of violent, aggressive and criminal acts against or with the use of civil aircraft.[649] These risks include the unlawful seizure of aircraft, the holding of hostages in aircraft and at airports, the sabotage of air navigation facilities and the use of aircraft as weapons of mass destruction.[650]

Aviation constitutes a symbol of pride for many States, it is an essential part of international economy and aviation disasters due to the severity of their consequences are broadly covered by the mass media and have an impact on the general public worldwide. For these reasons, commercial aviation has regularly been subject to acts of unlawful interference. The disaster of 9/11 constitutes the last incident in a chain of events going back to 1931 when Peruvian revolutionaries commandeered a Ford Tri-motor.[651] What made 9/11 unique though, apart from the number of the

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[647] ICAO, 5th Worldwide Air Transport Conference, Working Paper No. 68, "Safety Aspects of Liberalization", online: http://www.icao.int/icao/en/atb/atconf5/index.html (last accessed May 20, 2003) .

[648] *Milde safety II, supra* note 574 at 322.

[649] Michael Milde, "The International Fight Against Terrorism in the Air" in M. Milde & H. Khadjavi Public International Air Law: Cases and Materials Vol. II (Canada: McGill University, 2002) at 33 [*Milde terrorism*].

[650] Paul S. Dempsey, "Aviation Security: International & Domestic Law as Deterrants to Aerial Terroris" (Distinguished lectures: Institute of Air and Space Law, McGill University, 2002) [unpublished] [*Dempsey security*].

[651] *Ibid.*

fatalities, is that it hit the biggest and more security-sensitive aviation market and it revealed the profound vulnerability of the aviation industry. It would be a fallacy to believe that 9/11 is a US problem which must be treated only domestically. Civil aviation is a global industry and as such aviation security *"will always be the weakest link in the chain of security somewhere else in the world which will determine the overall strength of the security system".*[652]

*3.3.2.4.1.2. Law as a tool of aviation security management*

The current framework of international law dealing with aviation security is composed of five conventions which were drafted under ICAO's auspices[653] and two agreements which emerged outside ICAO.[654] These security instruments constitute a significant step towards the legal management of unlawful acts of violence. However, their main drawback is that a significant number of States has not ratified them, thereby undermining the universal support needed to ensure optimal results.[655] It is submitted that further proliferation of security-related Conventions is not necessary. What is urgently needed is the full and complete implementation of these Conventions in their practical application.[656]

In light of the drawbacks of these instruments of international law, the burden rests on ICAO to adopt both general legal and specific physical measures in order to prevent and suppress acts of unlawful interference. Article 4 of the Chicago Convention provides the general framework: "*Each contracting State agrees not to use civil aviation for any purpose inconsistent with the aims of this Convention*". This rule finds practical application in Annex 17.[657] It was adopted as a SARP on March 22, 1974 and it has since been updated many times. It is concerned with administrative and coordinative actions as well as technical measures,[658] it is built on various scientific disciplines, psychology, management, and law[659] and it addresses preventive measures for aircraft, airports,

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[652] *Milde terrorism, supra* note 649 at 34.

[653](a). The Convention on Offences and Certain Other Acts Committed on Board Aircraft signed at Tokyo; (b). The Convention for the Suppression of Unlawful Seizure of Aircraft signed at the Hague; (c). The Convention for the Suppression of Unlawful Interference with Civil Aviation signed at Montreal; (d). The Protocol for the Suppression of Unlawful Acts of Violence at Airport Serving International Civil Aviation, Supplementary to the Montreal Convention of 1971, signed at Montreal; (e). The Convention on the Marking of Plastic Explosives for the Purpose of Detection, signed at Montreal.

[654] (a). The European Convention on the Suppression of Terrorism signed at January 27, 1977 ; (b). The Bonn Declaration on Hijacking issued at July 17, 1978.

[655] *Dempsey security, supra* note 650.

[656] *Milde terrorism, supra* note 649, at 37.

[657] Safeguarding International Civil Aviation Against Acts of Unlawful Interference.

[658] Dominique Antonini, "Annex 17 Standards will be Primary Focus of Forthcoming Security System Audits" (2002) 57 No. 5 ICAO Journal, at 11, online: http://www.icao.int/icao/en/jr/2002/5705.djvu (last accessed May 20, 2003).

[659] *Milde terrorism, supra* note 649 at 37.

passengers, baggage, cargo and mail, standards and qualifications for security personnel, and responsive measures to acts of unlawful interference.[660]

In light of the terrorist acts of 9/11, the 33rd Session of ICAO's Assembly adopted Resolution A33-1 entitled "*Declaration of misuse of civil aircraft as weapons of destruction and other terrorist acts involving civil aviation*". It recognized the new and emerging threats to civil aviation posed by terrorist organizations and inter alia urged all Contracting States "*to make contributions in the form of financial or human resources to ICAO's AVSEC mechanism*"[661]; to review Annex 17[662]; to consider the establishment of a Universal Security Oversight Audit Program relating to airport security arrangements and civil aviation security program that would be modeled after the Universal Safety Oversight Audit Program[663]; and directed the Council to convene an international high-level, ministerial conference on aviation security.[664]

On February 19 and 20, 2002, a high-level ministerial conference was held to endorse a global strategy for strengthening aviation security worldwide. It agreed on the establishment of a comprehensive Aviation Security Plan of Action and affirmed that a global aviation security system imposes a collective responsibility on all States. In the Declaration that was adopted at the conclusion of the Conference Contracting States declared their commitments to "*achieve the full implementation of the multilateral conventions on aviation security and the ICAO SARPs and PANS as well as ICAO Assembly Resolutions and Council Decisions relating to aviation security and safety*".[665] They also made a commitment to apply within national territories appropriate additional aviation security measures to meet the level of threat and agreed to "*foster international cooperation in the field of aviation security and harmonize the implementation of security measures*".[666] Furthermore, they committed to ensure that security measures "*are implemented in a most cost effective way in order to avoid undue burden on civil aviation*" and that they "*do not disrupt or impede the flow of passengers, freight, mail or aircraft*". [667]

At the core of the global security plan is the introduction of "*regular, mandatory, systematic and harmonized aviation security audits to evaluate security in place in all Contracting States at*

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[660] *Dempsey security, supra* note 650.
[661] Resolution A33-1(6).
[662] Resolution A 33-1(7).
[663] Resolution A33-1(7).
[664] Resolution A33-1(8).
[665] High-Level Ministerial Conference on Aviation Security (Feb.2002 Declaration) available at M. Milde & H. Khadjavi Public International Air Law: Cases and Materials Vol. II (Canada: McGill University, 2002) at 466.
[666] *Ibid.*
[667] *Ibid.*

*national level and, on a sample basis, at airport level for each State*".[668] The plan also endorsed the establishment of a security follow-up program which will provide States with assistance in improving security by correcting the deficiencies identified by the audit.

Moreover, ICAO's Council, at its 161st Session, renamed the AVSEC Mechanism as the Mechanism for effective implementation of Standards and Recommended Practices contained in Annex 17 and proposed its extension until the end of 2004.[669] The mechanism apart from the security audits includes a number of risk management techniques: the conduct of international aviation security surveys and assessments on a confidential basis, upon request, and recommending methods for the introduction of aviation security measures to meet the requirements of Annex 17; the coordination of an aviation security training program, providing on-the-job counterpart training and topic-focused workshops and regional training seminars; the provision of aviation security equipment, training aids and other equipment appropriate for the enhancement of aviation security.[670] Furthermore, ICAO developed the Aviation Security Training Packages (ASTPs) in order to assist States to implement the aviation security standards contained in Annex 17. The ASTPs consist of individual aviation security training programs which encompass disciplines ranging from basic airport security to specialized areas of aviation security at the State, airport and airline levels.[671]

Pursuant to Resolution A33-1, Amendment 10 to Annex 17 was adopted by the Council on December 7, 2001. Annex 17 requires that the primary objective of each Contracting State is "*the safety of passengers, crew, ground personnel and the general public....in all matters related to safeguarding against acts of unlawful interference with international civil aviation*".[672] It also requires Contracting States to "*establish a national civil aviation security programme*"[673] and to "*designate an appropriate authority within its administration to be responsible for the development, implementation and maintenance of the national civil aviation security programme*".[674] The amended Annex 17 introduces a number of risk management techniques[675]: aircraft, passengers, and their baggage, cargo, and mail must all be checked and screened;[676] flights under an increased

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[668] *Ibid.*
[669] ICAO, Aviation Security (AVSEC) overview, online: http://www.icao.int/cgi/goto_atb.pl?icao/en/atb/avsec/overview.htm;avsec (last accessed May 20, 2003).
[670] *Ibid.*
[671] *Ibid.*
[672] Paragraph 2.1.1.
[673] Paragraph 3.1.
[674] Paragraph 2.1.2.
[675] *Dempsey security, supra* note 650.
[676] Paragraphs 4.2 - 4.6.

threat must be checked so that disembarking passengers do not leave items on board the airport at transit stops;[677] measures should be taken to ensure that during flight unauthorized personnel does not enter the flight crew compartment;[678] catering supplies and operators' stores and supplies intended for carriage on passenger flights must be checked;[679] the pilot-in-command must be notified as to the number of armed persons and their seat location;[680] the carriage of weapons on board aircraft by law enforcement officers and other authorized persons will be allowed under special authorization in accordance with the laws of the States involved.[681]

*3.3.2.4.2. IATA's security management initiatives*

Giovanni Bisignani, Director General and CEO of IATA, stressed: "*Badly conceived security measures are badly hurting the airlines*".[682] To ensure that new and enhanced security measures are effective, internationally harmonized and that cause minimum disruption to passengers, IATA undertakes firstly to collect, analyze, and distribute security information to its Members and secondly to assist in the development of guidelines and measures.[683]

The 58th IATA's Annual General Meeting adopted a security Resolution which inter alia urges States to collaborate with the aviation industry to develop effective and internationally coordinated security measures;[684] to endorse IATA's Recommended security standards;[685] and calls on its member airlines to ensure that effective airline security programs are in place, consistent with ICAO Annex 17 requirements and the IATA Recommended Security Standards.[686]

The Security Committee (SEC) bears the main responsibility for the improvement of security of civil air transport. It comprises 30 security heads of its members airlines and it meets twice a year. Its duties include the formulation, review and updating of policies and procedures to protect civil aviation against acts of unlawful interference.[687] Following the events of 9/11 IATA

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[677] Paragraph 4.2.2.
[678] Paragraph 4.2.3.
[679] Paragraph 4.5.4.
[680] Paragraph 4.6.2.
[681] Paragraph 4.6.4 .
[682] IATA, Security, online: http://www.iata.org/industry_issues/security/index (last accessed July 5, 2003).
[683] *Ibid.*
[684] Final Resolutions, 58th IATA Annual General Meeting, Resolution on security, Article 1 (a), (b).
[685] Article 2.
[686] Article 3
[687] IATA, "The role of IATA and its member in aviation security", online: http://www.iata.org/nr/contentconnector/cs2000/siteinterface/pdf/oi/infosec.pdf#Page2 (last accessed July 5, 2003).

established the Global Aviation Security Action Group (GASAG) to achieve an effective worldwide security system and to ensure public confidence in civil aviation.[688]

The main position of GASAG is that aviation security and its funding should be the responsibility of governments. Events such as the attacks of 9/11 constitute manifestations of threat primarily against States and not against the aviation industry. Therefore, the costs of aviation security should be borne by States from their general revenues and not by taxes and user charges.[689] With respect to aircraft security, GASAG supports a number of risk management techniques: cockpit doors of advanced technology should be installed at aircraft and should be locked at all times, as far as practicable; cabin crews should be trained to non-lethal self defense techniques; a standard list of items prohibited for carriage on board an aircraft should be created; and Man Portable Air Defense Systems (MANPADS)[690] threat response plans should be developed by all States.[691] Furthermore, the group encourages the further examination and assessment of the use of non-lethal protective devices[692] in the cabin area, and the trained use of defensive flight maneuvers.[693]

*3.3.2.4.3. US initiatives*

Traditionally, civil aviation security functions in USA were the shared responsibility of the DOT, the air carriers and the airports operators. The Secretary of Transportation through the Administrator of the FAA was responsible for reviewing threats to civil aviation;[694] determining the procedures and equipments that would deter these threats;[695] and had jurisdiction to prescribe regulations to require screening of passengers and property;[696] protect passengers and property against acts of criminal violence or aircraft piracy;[697] establish security standards at foreign airports and issue travel advisories;[698] require each air carrier to provide passenger manifests;[699] develop a program to accelerate and expand the research, development, and implementation of technologies

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[688] GASAG's members include IATA, the International Air Carriers Association (IACA), the Airports Council International (ACI), the International Federation of Airline Pilots Associations (IFALPA), the International Transport Workers Federation (ITF) and Airbus. Furthermore, Boeing, ICAO and INTERPOL participate as observers.

[689] IATA, security, online: http://www.iata.org/industry_issues/security/gasag.htm (last accessed July 5, 2003) [*IATA security*].

[690] MANPADS are surface-to-air missile systems specially designed to be carried and fired by a single individual.

[691] *IATA security, supra* note 689.

[692] Pepper spray and stun guns

[693] *IATA security*, supra note 689.

[694] 49 U.S.C §44912 (as of 01/02/01).

[695] *Ibid.*

[696] 49 U.S.C §44901 (as of 01/02/01).

[697] 49 U.S.C §44903 (as of 01/02/01).

[698] 49 U.S.C §44907 and 44908 (as of 01/02/01).

[699] 49 U.S.C §44909 (as of 01/02/01).

and procedures to counteract terrorist acts;[700] and certify that explosive detection equipments about to be deployed or purchased can detect the amounts, configurations, and types of explosive material that would likely be used to cause catastrophic damage to commercial aircraft.[701] Furthermore, sections 46502, 46504, 46505, 46506, and 46507 of title 49 U.S.C. set forth the offences of aircraft piracy, interference with flight crew members or flight attendants, carrying weapons or explosives aboard an aircraft, and conveyance of false information or threats.

Air carriers were responsible for screening all passengers and baggage,[702] and hiring and training their employees or contracting for screening services.[703] The airport operators were responsible for providing secure airport facilities[704] and local law enforcement support relating to air carrier and airport security measures.[705] This division of security responsibilities was considered to be adequate to prohibit terrorist acts. The rationale between this sharing of responsibilities was that air carriers should be the ultimate responsible party for screening, because in any other case the continuity of screening would be broken.[706] If they were not responsible for all screening procedures, they would have to transfer the information about security threats to another entity, the FAA or the airport operator, which would be responsible for further scrutinizing the threat. This would disrupt the continuity of the screening process and allow for a security break.[707]

Thus, the successful implementation of this plan was relying to a large extent upon the proper execution of airlines' security duties. However, airlines "*had little enthusiasm for this mission, and usually contracted out the service to the lowest bidder. These firms paid poor wages*[708]*, resulting in poorly educated and trained security workers, and a high turnover rate*[709]*. Many of these workers were not U.S. citizens, and some were illegal aliens*"[710] As a result, in 1978 the screeners were detecting 87% of the potentially dangerous objects FAA agents carried through checkpoints during checks and in 1987 the detection level dropped to 80%.[711] Furthermore, in 1987

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[700] 49 U.S.C §44912 (as of 01/02/01).
[701] 49 U.S.C §44913 (as of 01/02/01).
[702] 14 CFR 108.9 (as 01/01/2001).
[703] 14 CFR 108.23 (as 01/01/2001).
[704] 14 CFR 107.13 (as 01/01/2001).
[705] 14 CFR 107.17 (as 01/01/2001).
[706] United States General Accounting Office, Report to Congressional Committees and Subcommittees, "Aviation Security: FAA's actions to study responsibilities and funding for airport security and to certify screening companies, February 1999, online: http://www.gao.gov/archive/1999/rc99053.pdf (last accessed July 9, 2003).
[707] *Ibid.*
[708] Some of the screening companies at US were paying screeners a starting salary of US$6 per hour or less and at some airports the starting salary was $US5.15 per hour, the minimum wage.
[709] In 1987 turnover among screeners was about 100% per year and from May 1988 through April 1999 it averaged 126%.
[710] *Dempsey security, supra* note 650.
[711] United States General Accounting Office, Testimony before the Sub-Committee on Aviation, Committee on Commerce, Science and Transportation, US Senate, "Aviation Security: Vulnerabilities still exist in the aviation security system", online: http://www.gao.gov/archive/2000/r100142t.pdf (last accessed July 9, 2003).

turnover among screeners was about 100% per year and from May 1988 through April 1999 it averaged 126%.[712]

The events of 9/11 revealed in a tragic but explicit way the shortcomings of the US aviation security system. They brought all aviation activities in USA to a complete halt and they caused a sea change in aviation security. Shortly thereafter, Congress instituted an unprecedented number of new security measures to achieve a secure air travel system and to restore the publics' confidence in flying. On November 19, 2001 the Aviation and Transportation Security Act (ATSA)[713] was signed into law to improve aviation security. ATSA created a new Federal Agency, the Transportation Security Administration (TSA);[714] mandated that explosive-detection systems screen all checked bags for bombs and explosives;[715] required for the first time that all U.S. airport security be handled by federal employees;[716] called for fortified cockpit doors,[717] installation of video monitors to alert pilots in the flight deck to activity in the cabin,[718] more sky marshals aboard planes,[719] and mandatory training for flight crews about how to handle a hijacking;[720] imposed minimum job qualifications and background checks upon security employees;[721] provided for no liability of individuals who assist in thwarting hijacking attempts;[722] and provided for the arming of pilots in certain circumstances.[723]

The TSA is a new federal agency responsible for aviation as well as rail, motor, shipping, and port security initially within the DOT, but by March 1, 2003 within the Department of Homeland Security (DHS). In section 101(f) of ATSA, FAA's authority in Chapter 449, Title 49 U.S.C. to issue aviation security regulations is transferred to TSA. On February 22, 2002, the TSA and FAA published a final rule titled "*Civil Aviation Security Rules*"[724], transferring FAA's regulations governing civil aviation security to TSA.[725] The new agency is headed by the Undersecretary for Transportation for Security, who has broad rulemaking authority. Its duties include regulating

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[712] *Ibid.*
[713] Pub. L. No. 107-71, 115 Stat. 597 (2001).
[714] Section 101 of ATSA -49 U.S.C §114.
[715] Section 110(b) of ATSA- 49 U.S.C § 44901.
[716] Section 110(b) of ATSA- 49 U.S.C § 44901.
[717] Section 104 of ATSA- 49 U.S.C § 48301.
[718] *Ibid.*
[719] Section 105 of ATSA-49 U.S.C § 44917.
[720] Section 107 of ATSA- 49 U.S.C. § 44918.
[721] Section 111 of ATSA- 49 U.S.C. § 44935.
[722] Section 131 of ATSA-49 U.S.C§ 44944.
[723] Section 126 of ATSA-49 U.S.C§ 44903.
[724] 67 FR 8340.
[725] The regulations at 14 CFR parts 107, 108, 109 and 191 to 49 CFR parts 1540, 1542, 1544, 1548 and 1520 and Sec. 129.25 and 129.26 to part 1546.

security in all modes of transport; periodically reviewing threats to civil aviation;[726] and when he/she determines that a "*regulation or security directive must be issued immediately in order to protect transportation security*", it may do so without following any of the normal promulgatory or review processes.[727] Such emergency orders will be reviewed by the Transportation Security Oversight Board (TSOB).[728] However, the Board's role is limited to either ratifying or disapproving the emergency action within 30 days of its issuance.[729]

Pursuant to ATSA, the TSA is specifically responsible for the day-to-day screening operations for passenger air transportation and intrastate air transportation under sections 44901 and 44935.[730] This responsibility includes hiring, training, testing and retaining for Federal security personnel, Federal law enforcement officers, and Federal security managers.[731] The TSA has also responsibility to research, develop and install security equipments and programs at US airports; coordinate transportation security intelligence information; and coordinate security efforts with Federal, State and international agencies and organizations.[732]

On March 1, 2003 the Department of Homeland Security inherited the workforce, programs and infrastructure of the TSA. The reason for this transfer was on the one hand to allow the DOT to remain focused on its core mandate of ensuring that the nation has a modern and efficient transportation infrastructure and on the other hand to secure more effectively the nation's transportation system through the DHS.

On November 25, 2002 the Homeland Security Act (HSA) was signed into law[733] to create a new Department of Homeland Security (DHS) which will prevent terrorist attacks within the US, reduce the vulnerability of the US to terrorism and will coordinate the response to future emergencies.[734]

The DHS coordinates 22 previously disparate agencies and it constitutes the most significant transformation of the U.S. government since 1947, when Harry S. Truman merged the various branches of the U.S. Armed Forces into the Department of Defense.[735] The Secretary of Homeland Security is the head of the new department and its functions include the coordination of

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[726] Section 112 of ATSA,
[727] 49 U.S.C. §114(1)(s)(A).
[728] Its seven members consist of cabinet secretaries or their designees from the departments of Transportation, Defense and Treasury; the CIA; the attorney general; one member of the National Security Council; and one member from the Office of Homeland Security.
[729] Section 102 ATSA- 49 USC §§114(1) (2) (B), 115.
[730] Section 101 of ATSA-49 USC §114
[731] *Ibid.*
[732] *Ibid.*
[733] Public Law 107-296.
[734] Section 101 of the HSA.
[735] US Department of Homeland Security, DHS organization, online: http://www.dhs.gov/dhspublic/theme_home1.jsp (last accessed July 9, 2003).

the DHS with local and government personnel, agencies and authorities, and with the private sector.[736] The US President also appoints the following officers: a deputy secretary of homeland security; an undersecretary for information analysis and infrastructure protection; an undersecretary for science and technology; an undersecretary for border and transportation; an undersecretary for emergency preparedness and response; an undersecretary for management; and a general counsel who shall be the chief legal officer of the department.[737]

The undersecretary for border and transportation is the head of the directorate of border and transportation security.[738] Its responsibilities include inter alia the prevention of entry of terrorists and instruments of terrorism in the USA;[739] secure the borders, territorial waters, ports, terminals, waterways and air, land and sea transportation systems of the USA;[740] and establish national immigration enforcement policies and priorities.[741] The Directorate is home to the U.S. Customs Service, Transportation Security Administration, the border security functions of the Immigration and Naturalization Service, the Federal Law Enforcement Training Center, and the Animal and Plant Health Inspection Service.[742] The TSA will be maintained as a separate entity within the DHS and under the undersecretary for border and transportation for 2 years after the enactment of the HSA.[743]

The HSA made a number of changes in the aviation security regime. Section 425 of the HSA amended section 44901 (d) of title 49 U.S.C., which provided for screening of every piece of checked baggage for explosives by December 31, 2002- an unrealistic deadline. According to section 425 of HSA, if, in his/her discretion or at the request of an airport, the undersecretary of Transportation for security determines that TSA is not available to deploy explosive detection systems required in ATSA by December 31, 2002, then for each airport for which the under secretary makes this determination, the undersecretary shall submit to specific congressional committees a detailed plan for the deployment of the number of explosive detection systems at that airport necessary to meet the requirement as soon as practicable at that airport but no later than December 31, 2003. The undersecretary should take all necessary actions to ensure that alternative means of screening all checked baggage are implemented until the requirements have

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[736] Section 102 (c) of the HSA.
[737] Section 103 of the HSA.
[738] Section 401 of the HSA.
[739] Section 402 of the HSA.
[740] *Ibid.*
[741] *Ibid.*
[742] Section 403 of the HSA.
[743] Section 424 of the HSA.

been met. TSA reported that as of December 31, 2002 about 90% of all checked baggage were screened using explosive detective systems or explosives trace detective equipments and the remaining checked baggage were screened using alternative means.[744]

Furthermore, title XIV of the Act is entitled "*Arming pilots against terrorism*" and mandates the undersecretary of Transportation for security to establish a program to deputize volunteer pilots of air carriers as Federal law enforcement officers, which will be known as "*Federal flight deck officers*" (FFDOs), to defend the flight decks of aircraft against acts of criminal violence or air piracy.[745] Their training will be based on the training of Federal air marshals and the undersecretary will establish procedural requirements to carry out this program not later than 3 months after the date of the act's enactment. The requirements will address the following issues: type of firearm to be used; type of ammunition to be used; standards for training and retraining to qualify and re-qualify; placement of firearm on board the aircraft; an analysis of the risk of catastrophic failure as a result of the discharge of a firearm into sensitive areas of an aircraft; the division of responsibility between pilots; procedures for ensuring the firearm does not leave the cockpit; interaction between FFDOs and Federal Air Marshals; the process for selecting pilots; the storage and transportation of firearms between flights; methods for identifying FFDOs; and methods for validating the credentials of law enforcement officers authorized to carry firearms aboard an aircraft.[746]

The aims of the training will be to ensure that the FFDOs have a level of proficiency required with a firearm comparable to the level of proficiency required of Federal air marshals, that they maintain exclusive control over the firearms at all times, and that they determine properly whether to use the firearm or less than lethal force.[747]

The Act exonerates the air carrier from any liability for claims arising out of a FFDO's use of or failure to use a firearm.[748] Furthermore, the pilots shall not be liable for damages arising out of their acts or omissions in defending the aircraft, unless the officer is guilty of gross negligence or willful misconduct.[749] Furthermore, the carrier shall not prohibit an FFDO from piloting an aircraft

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[744] United States General Accounting Office, "Transportation security administration : Actions and plans to build a results-orientated culture", online: http://www.gao.gov/new.items/d03190.pdf (last accessed July 10, 2003).
[745] Section 1402 of HSA- 49 U.S.C. 44921.
[746] Section 1402 of HSA- 49 U.S.C. 44921 (b) (3).
[747] Section 1402 of HSA-49 U.S.C. 44921 (2) (b).
[748] Section 1402 of HSA-49 U.S.C. 44921 (h) (1).
[749] Section 1402 of HSA-49 U.S.C. 44921 (h) (2).

operated by the carrier, or terminate its employment solely on the basis of his/her participation in the program.[750]

Air carriers may request authorization from the undersecretary to allow its pilots to carry less-than-lethal weapons. [751] Furthermore, the Act mandates the Secretary of Transportation to conduct two studies: the first will evaluate the benefits and risks of providing flight attendants with less-than-lethal weapons[752], and the second one will determine the feasibility of providing armed Federal law enforcement officers (not Federal air marshals) who travel on commercial aircraft with aircraft anti-terrorism training.[753]

Currently, 44 pilots completed training on April 19, 2003 and have been deputized and deployed. They are currently approved only for domestic flights, since the U.S. will need to negotiate bilateral gun control treaties with each country before an FFDO may be allowed to fly with a firearm into that country.[754]

The advocates of arming pilots stress the usefulness of guns in the fight against hijacking and aviation terrorism.[755] However, flight safety should be the guiding element of every new legal measure. The existence of a gun in an aircraft raises questions: what happens if a stray bullet cripples the aircraft? What if the guns end up in the hands of hijackers? Could pilots be distracted from their flying duties by acting as marshals in a crisis? These questions need persuasive answers before allowing firearms in an aircraft. Comprehensively training pilots to use lethal weapons may provide some assurances that firearms will be used properly, but in the restricted and pressurized aircraft environment the chances of mistake are high. The use of non-lethal weapons and self-defense techniques may not be as effective as firearms but they constitute the best available technical compromise between flight safety and security. Acts of unlawful interference should be primarily prevented on the ground and this is where legislators and engineers should point their attention.

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[750] Section 1402 of HSA – 49 U.S.C 44921 (j).
[751] Section 1404 of HSA- 49 U.S.C 44903(i).
[752] Section 1403(e) of HSA.
[753] Section 1404 of HSA.
[754] Subcommittee on Aviation Hearing on the Status of the Federal Flight Deck Officer Program, online: http://www.house.gov/transportation/aviation/05-08-03/05-08-03memo.html (last accessed July 10, 2003).
[755] e.g. see the comments of Allied Pilots Association which represents American Airlines' pilots and coalition of airline pilots association, online: http://www.alliedpilots.org/Public/Topics/ArchivedTopics/ArmingPilots/Archive/dotfaacomments.pdf and http://www.capapilots.org/security/guns.pdf respectively (last accessed July 10, 2003).

*3.3.2.4.4. Conclusion*

Law constitutes one of the most valuable tools to manage aviation security risks. However, *"law, more law and better law...[is not] a panacea freeing the world from the perils of violent acts against aviation security".*[756] A regrettable reality is that law lags behind events and is reactive to situations, rather than the anticipation of them.[757] Effective security risk management should also involve modular application of technological tools, such as biometric identification equipment, machine readable travel document readers and databases containing personal information.[758] States and the private sector should play an active role in this security regime through inter regional cooperation to enhance airport security, sharing technical expertise and provide financial assistance to developing countries.[759] ICAO's security standards and the Universal Security Oversight Audit Program constitute a positive step towards global governance in a field dominated by global interests.[760]

*3.3.2.5. War risk management*

*3.3.2.5.1. The situation before 9/11*

*3.3.2.5.1.1. Insurance policies*

In 1937, the United States insurance industry entered into the War and Civil War Risks Agreement because it suffered tremendous financial losses during the Spanish Civil War.[761] The agreement provided that "*exclusive of the United States and Canada, no underwriter will insure against damages due to war, including civil war*".[762] This was the first time the US insurance market adopted a war risk exclusion clause and the agreement is considered "*the grandfather of modern aviation war risk exclusion*".[763] In the 1970s, after the Pan Am hijacking[764] and the subsequent *Pan American World Airways Inc. v. Aetna Casualty and Surety Co.*[765] case, all risks insurers in USA adopted the Common North American Airline War Exclusion Clause (CWEC) which excludes coverage for losses resulting *inter alia* from: war, invasion, hostilities, irregular warfare;[766] any

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[756] *Milde terrorism, supra* note 649, at 34.
[757] Maria Amore, "The Global Challenge of Aviation Security: The ICAO Ministerial Conference, February 2002", online: http://webct.mcgill.ca/SCRIPT/102200301/scripts/serve_home (last accessed May 20, 2003).
[758] Ruwantissa Abeyratne "Crisis Management towards Restoring Confidence in Air Transport- Legal and Commercial Issues" (2002) 67 JALC 595., at 641 [*Abeyratne crisis management*].
[759] *Ibid.* at 642
[760] *Pukall, supra* note 566.
[761] Kathleen Shannon, "Rulings on War-Risk Exclusions, A Major Concern of Insurers" (1984) N.Y. L. J. at 1.
[762] *Ibid.*
[763] Jason Libby, "War risk aviation exclusions" (1994-1995) 60 JALC 609 at 622.
[764] On September 6,1970.
[765] *Pan American World Airways Inc. v. Aetna Casualty and Surety Co,* [1974] 1 Lloyd's Rep. 207 affd [1975] 1 Lloyd's Rep. 77, Before the PanAm hijacking all risks insurers in USA did not exclude hijacking from the cover of their all risks policies.
[766] To cover groups such as the PFLP guerillas who perform acts of violence without possessing any of the attributes of a de facto government and not representative of or connected to with any state authority, Paragraph (a).

hostile detonation of any weapon of war employing atomic or nuclear fission;[767] any unlawful seizure, diversion or exercise of control of the aircraft, or attempt, threat, by force or threat thereat by persons not necessarily on board the aircraft;[768] strikes, lockouts, riots, civil commotion;[769] vandalism, sabotage.[770]

In 1969, after the Israeli raid on Beirut airport, the London insurance market adopted the AVN 48 War, Hi-jacking and Other Perils Exclusion Clause (Aviation). In 1971, the AVN 48 was replaced by the AVN 48B War, Hi-jacking and Other Perils Exclusion Clause (Aviation), which is presently in force and is inserted in every aviation hull and liability policy.[771] AVN48B which was last amended in 1/10/1996 provides that the policy to which it is attached does not cover claims arising from events which *inter alia* include: war, invasion, civil war, rebellion, revolution, insurrection;[772] strikes, riots, civil commotions or labor disturbances;[773] any malicious act or act of sabotage;[774] confiscation, seizure, restraint, detention, appropriation;[775] 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 the consent of the insured.[776] Furthermore, the policy to which the exclusion is attached does not cover claims arising while the aircraft is outside the control of the insured by reason of any of the above perils.[777]

Some of the aforementioned excluded risks have been written back by the aviation insurance market for a higher rate of premium or for an additional premium:[778] with respect to hulls under clause AVN 51 and with respect to liability under clause AVN 52C which are termed "*extended coverage endorsements*".[779] Under AVN 51, the risks which could be written back included: strikes, riots, civil commotion or labor disturbances;[780] any malicious act or act of sabotage;[781] and 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

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[767] Paragraph (b).
[768] Paragraph (c).
[769] Paragraph (d).
[770] Paragraph (e).
[771] Rod Margo, "11 September 2001- An aviation insurance perspective" (December 2002) XXVII/6 Air & Space Law 386 at 387 [*Margo 9/11*].
[772] Clause (a).
[773] Clause (c).
[774] Clause (e).
[775] Clause (f).
[776] Clause (g).
[777] The aircraft is deemed to have been restored to the insured's control on its safe return to the insured at an airfield not excluded by the geographical limits of the policy and entirely suitable for the operation of the aircraft.
[778] Before the shooting down of the Korean Airlines 747 on September 1, 1983 this endorsement was included in the premium of basic coverage, *Bunker, supra* note 48 at 225, note 139.
[779] Barlow Lyde & Gilbert, Aviation News Letter, "11 September: The aftermath. Climate change in aviation war liability insurance." Issue 7 Winter 2001 at 1[*BLG*].
[780] Clause (i).
[781] Clause (ii).

board the aircraft acting without the consent of the insured.[782] Under ANV 52C, all the risks excluded by AVN 48B were written back with the exception of the risk of hostile detonation of any weapon of war employing atomic or nuclear fusion and/or fusion or other like reaction or radioactive force or matter.[783] Both AVN 51 and AVN 52C provided that their cover "*may be cancelled by either Insurers or the Insured giving notice to become effective on the expiry of seven days from 23.59 hours GMT on the day on which such notice is given*".[784] The rationale behind the notice of cancellation was to allow insurers to reassess the risk and to amend or cancel the coverage with respect to premium levels and geographical limits, provided the initial circumstances change radically.[785]

Furthermore, airlines wishing to obtain "full war risks" coverage could do so by way of the LSW 555B, the aviation hull "war and allied perils" policy, issued by the specialist war market and not by the aviation all risks market.[786] The policy provided coverage against claims excluded from the insured's hull all risk policy: war, invasion hostilities (whether was be declared or not), civil war, rebellion;[787] strikes, riots, civil commotions;[788] any malicious act or act of sabotage;[789] confiscation, seizure, restraint, detention;[790] hijacking or any unlawful seizure or wrongful exercise of control of the aircraft or crew in flight made by any person or persons on board the aircraft acting without the consent of the assured.[791] Furthermore, the LSW 555B policy covered claims for occurrences while the aircraft is outside the control of the assured by reason of any of the above perils.[792]

The policy excluded loss, damage or expense caused by war (whether there will be a declaration of war or not) between "the major powers";[793]any debt, failure to provide bond or security or any other financial cause under court order or otherwise;[794] the repossession or attempted repossession of aircraft either by any title holder, or arising out of any contractual agreement to which any insured protected under the policy may be a party;[795] any detonation of any weapon of war employing atomic or nuclear fusion and/or fusion or other like reaction or

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[782] Clause (iii).
[783] Clause (ii).
[784] AVN 52C clause (c) , similar wording in clause 4 of AVN 51.
[785] *Margo 9/11, supra* note 771 at 388.
[786] *Margo insurance, supra* note 90 at 327.
[787] Section one, clause (a).
[788] Section one, clause (b).
[789] Section one, clause (d).
[790] Section one, clause (e).
[791] Section one, clause (f).
[792] Section one, paragraph 2.
[793] The United Kingdom, the United States of America, France, the Russian Federation, and the People's Republic of China, Section three, clause (i) (a).
[794] Section three, clause (i) (c).
[795] Section three, clause (i) (d).

radioactive force or matter whether hostile or otherwise.[796] The insured was under the obligation to give immediate notice to the insurer of any material change[797] in the nature or area of his/her operations.[798] This would enable the insurer to assess the degree of alteration of the insured risk and to propose to the insured an appropriate additional premium and changes in the policy terms. If the insured did not inform the insurers of the material change or if the insurers did not accept the change, their liability was discharged and they were not obliged to cover claims arising subsequent to the material change.[799] Furthermore, the LSW 555B policy contained a seven days' notice clause similar to the one found in AVN 51 and AVN 52C.[800] In the event of a conflict, the war risk insurance market has not traditionally provided cover for airlines operating in the war zones, but it provided protection during the conflict's first days when the extent of the combat was uncertain or when the airlines could not changer their schedules.[801]

Where a hull all risks policy which contains the AVN 48B or CWEC war and allied perils exclusion has been effected and a hull war risks policy has been written which covers certain of the war and allied risks excluded by the AVN 48B or CWEC, the hull all risk insurers and the hull war risk insurers may agree in accordance with the 50/50 Provisional Claims Settlement Clause that in case the insured has a valid claim under one or another policy which nevertheless cannot be resolved within 21 days of the occurrence as to which policy is liable, they will advance to the insured 50% of the claim amount mutually agreed between the insurers until such time as final settlement of the claim is agreed.[802]

However, the agreement will be valid if the following four conditions are satisfied: (i). The hull all risks and the hull war risks policy are identically endorsed with the Provisional Claims Settlement Clause; (ii).Within 12 months of the advance payment, all insurers of the agree to refer the matter to arbitration; (iii).Upon the arbitration decision, any payment from one group to another will include interest which will be calculated at prevailing rates at the US Federal Reserve Bank or the at London clearing banks base rate; and (iv). If the hull all risk and hull war risks policies contain different amounts payable, the advance will not exceed the lesser of the amount involved. In the

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[796] Section three, clause (ii).
[797] Material change means any change in the in the operation of the insured which might reasonably be regarded by the insurers as increasing their risk in degree or frequency, or reducing possibilities of recovery or subrogation, Section three, paragraph (2).
[798] Section four, clause 2.
[799] *Ibid.*
[800] Section five.
[801] Norton Rose, "War in the Middle East: aviation insurance implications", online: http://www.nortonrose.com/publications/1461-War%20Risks%20Secure.pdf (last accessed August 4,2003).
[802] *Margo insurance, supra* note 90 at 355, and US Department of Transportation, FAA, "50/50 Provisional claim settlement clause", online http://apo.faa.gov/ins_CRAF/5050NonPrem.pdf (last accessed August 2, 2003).

event of coinsurance or risks involving uninsured proportions, appropriate adjustments will be made.[803] The objective of the Provisional Claims Settlement Clause is to expedite claim payments while the insurers determine their respective liability levels and settle among themselves. It constitutes an agreement between the different groups of insurers and it does not form part of either the all risks or the war risks policies.

*3.3.2.5.1.2. Insurance premiums*

Airlines' insurance premiums fluctuated considerably during the 1990s: hull and liability net premiums started the decade at US$315 million, peaked in 1995 at US$815 million and ended the decade at US$900 million.[804] The average annual claims level was in excess of US$1.300 million during the 1990s, it peaked in 1994 at almost US$2.000 million and it dropped to US$1900 million between 1997 and 1999.[805] Airline hull war risks rates decreased from US$ 180 million in 1995 to US$30 million in 1999, since there were no major losses after the Gulf War in 1990.[806]

The year 2000 saw the arrival of the market hardening after 5 years of premium reductions and increased overall capacity: hull and liability rates increased by an 11% and 8% respectively;[807] net premiums increased from US$900 million in 1999 to US$1.100 million; and losses totaled US$1.9 billion mainly because of the Air France's Concord accident on the 25th of July and the Singapore Airlines' B747 accident on the 31st of October.[808] With respect to the hull war market, it hardened significantly during 2000 as insurers imposed a 20%-25% increase on premium rates.[809]

The first eight months of 2001 premium rates showed a 30% increase, whereas losses were significantly lower than previous years.[810] Airline hull war risks rates continued increasing by 35% when the Liberation Tigers of Tamil Eelam (LTTE) attacked the Colombo International Airport and destroyed several SriLankan Airlines aircraft.[811] As a result of this incident, the net hull war rates increased by 90% in August 2001 and the insurers imposed a number of measures: (a). aggregate limits were restricted; (b). excess aggregate limits were quoted separately; and (c). premium was paid within 60 days as standard.[812] Even under these circumstances the coverage

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[803] *Ibid.* policy, and *Bunker, supra* note 49 at 227-228.
[804] Marsh Specialty Operations Ltd. "Aviation insurance market analysis" April 2002 at 2 [*Marsh 2002*].
[805] *Ibid.*
[806] *Ibid.* at 7.
[807] Aon Limited,Aviation, "Monthly Airline Summaries for 2000" [*Aon aviation*].
[808] *Marsh 2002, supra* note 804 at 3, and *Aon aviation, supra* note 807.
[809] *Aon aviation, supra* note 807.
[810] *Marsh 2002, supra* note 804 at 4.
[811] On July 24, 2001.
[812] *Marsh 2002, supra* note 804 at 7-8.

provided under AVN 52C was available for a minimum additional premium or for no additional premium for the major airlines and war risk insurance was the most understated insurance coverage written for the aviation industry. [813]

*3.3.2.5.2. The situation after 9/11*

*3.3.2.5.2.1. Insurance policies and premiums*

On September 17, 2001, the London aviation insurance market began issuing seven day notices to cancel cover under paragraph 4 of AVN 51 and under paragraph 4(c) of AVN 52C. The notice period expired on September 23, 2001 at 23:59 hours save for a 48 hours extension for US domiciled risks to allow for recorded delivery.[814] The most persuasive reason for the cancellations was the emergence of an unquantifiable exposure in terms of third party bodily injury and property damage.[815] With respect to airlines, AVN 52C was replaced by AVN 52D which imposed a sub-limit not to exceed US$50 million in respect of third party bodily injury and property damage for any one occurrence and in the annual aggregate for any of the perils excluded by AVN 48B.The sub-limit did not apply to baggage, cargo, mail and passengers damaged, injured or killed on board the insured aircraft as a result of war, hijacking or terrorism, but a special premium of US$ 1.25 on a per passenger per flight basis was introduced. [816]

Furthermore, a number of separate endorsements were introduced by the London market: AVN 52E for general aviation operators which limited third party liability to US$10 million; and AVN 52F and AVN 52G for service providers such as freight forwarders and security companies which limited liability to US$50 million or as negotiated.[817]

At the same time, efforts were made to create capacity to cover third party war related liability in excess of the US$50 million. Subsequently, certain commercial insurers offered additional cover in two layers from US$ 50 million to US$ 150 million and from US$ 150 million to US$ 1 billion. This cover was made available for a negotiable special premium of US$1.85 per passenger carried in addition to the US$1.25 charge.[818]

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[813] *Margo 9/11, supra* note 771 at 388.
[814] *BLG, supra* note 779 at 2.
[815] R. Abeyratne "Events of 11 September, 2001, ICAO's response" (December 2002) XXVII/6 Air and Space Law 406 at 414.
[816] *Marsh 2002, supra* note 804 at 4.
[817] *BLG, supra* note 779 at 2.
[818] The exact amount of the charge was based on the risk profile of the airline and the availability of additional coverage, *Margo 9/11, supra* note 771 at 389, footnote 22.

The hull war insurers at the beginning of the week commencing September 17, 2001, instead of issuing notice of cancellation as were entitled under section 4(2) of LSW 555B,[819] required their airlines insured to complete a questionnaire in order to ascertain each airlines exposures and area of operations. Furthermore, a minimum surcharge of 0.05% was imposed on each insured's declared average fleet value as of October 1st, 2001. If the insured failed to fill the questionnaire or to agree to the new rating, a notice of cancellation was formally issued.[820]

With respect to insurance premiums, in October 2001 airlines renewals produced an average premium increase of 80%, in November 2001 an increase of 78% and in December 2001 an increase of 80.2% on top of which airlines had the costs of the AVN 52D surcharge and premiums payable for commercial and governmental excess third party war related insurance cover.[821] In 2001, rates on average increased 50.6% regarding hulls and 46.3% regarding liability.[822] AVN 52F and AVN 52G coverage in excess of US$50 million was available for up to US$100 million in the aggregate and any risk associated with security screening was excluded.[823] Airports saw 300% increases and fixed base operators' increases were in the 75% range.[824] In the case of war and allied perils in 2001 premium rates averaged around 500% excluding surcharges.[825]

Ralf Oelssner[826] described the situation emphatically: "*Insurance costs are out of control. The cost explosion challenges the efficiency and survivability of an entire industry which over the past decade has struggled to break-even financially*".[827] Especially the US$50 million aggregate limitation imposed by the insurers firstly could leave the airlines exposed to significant losses in excess of the limit and secondly could restrict airlines' ability to operate due to minimum liability insurance requirements imposed by governments, airport authorities, air traffic control authorities, as well as aircraft mortgage, leasing agreements and bank credit lines.[828] As a result, airlines,

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[819] The material change clause.
[820] *Marsh 2002, supra* note 804 at 8, and *Margo 9/11, supra* note 771 at 390-391.
[821] Willis Global Aviation Bulletin, Issue 47- October 17th, 2001, Issue 48- November 23, 2001 and Issue 50- January 22, 2002 [*Willis*].
[822] *Marsh 2002, supra* note 804 at 5.
[823] *Willis November edition, supra* note 821.
[824] Aon Limited, "An insurance market overview: In the wake of disaster" October 10,2001.
[825] *Marsh 2002, supra* note 804 at 8.
[826] Director Corporate Insurance, Lufthansa German Airlines.
[827] *Oelssner, supra* note 187.
[828] Several airlines after 9/11 went into default under their aircraft leases and financing agreements for failure to maintain the requisite insurance coverage, including war risk coverage, IATA, "The liability reporter" (February 2003) Vol. 6, online: http://www.iata.org/NR/ContentConnector/CS2000/Siteinterface/pdf/legal/2003_Liability_Reporter.pdf (last accessed August 6, 2003) [*Liability reporter*], *Marsh 2002, supra* note 802 at 4, and Howard Goldberg, "Current status/cost of war risk insurance and government support of risk coverage" (Presentation November 16, 2001) [unpublished].

brokers and insurers began lobbying and negotiating with governments to create capacity in excess of the US$50 million and to limit their liability.[829]

Currently, unlimited per occurrence/per aircraft third party war risk liability is available only for airlines and only up to US$150 million. The highest limit available to most airlines is US$1 billion in the aggregate, but for certain major airlines non-cancelable cover of US$1 billion per occurrence subject to an aggregate of US$2 billion is available. However, airports and other aviation service providers still face the 7 or 30 days cancellation notice.[830]

*3.3.2.5.2.2. US initiatives*

**3.3.2.5.2.2.1. Air Transportation Safety and System Stabilization Act of 2001**

As an immediate response to the attacks of 9/11, the US government enacted a comprehensive airline bailout package encompassing government loans, war risk insurance and a compensation scheme for the victims of the attacks. The legislation was entitled Air Transportation Safety and System Stabilization Act and its purpose was "*to preserve the continued viability of the United States air transportation system*".[831] The Act is divided into six titles which deal with loan guarantees and compensation for direct losses as a result of the attacks;[832] insurance and reimbursement of insurance costs for American aircraft and foreign flag aircraft;[833] tax relief in respect of for airlines with respect to excise taxes;[834] creation of the compensation fund for the victims and limitation of airlines' liability arising out of the hijacking and subsequent crashes of American Airlines flights 11 and 77 and United Airlines flights 93 and 175;[835] and allocation of US$3 million for airline safety and security.[836]

Title I provides several forms of relief for the airline industry to compensate air carriers for past losses and expected losses in revenues incurred as a result of the terrorist attacks: US$5 billion were given immediately to airlines for direct losses incurred as a result of any Federal ground stop order and for incremental losses incurred beginning September 11, 2001 and ending

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[829] On September 14,2001, the New York Times reported: "*As rescue workers continued to search yesterday for survivors in the smoking wreckage of the World Traded Center and the Pentagon, representatives of American Airlines and United Airlines began lobbying Congress to restrict lawsuits seeking compensation*". Joanna Geraghty, "To sue or not to sue: a look at the legal landscape for victims of "September 11" (December 2002) XXVII/6 Air & Space Law 363.

[830] ICAO, "Review group of the special group on aviation war risk insurance" Third meeting, Montreal, April 30 to May 1, 2003, online: http://www.icao.int/icao/en/conf/mt/sgwi/sgwi3_report.pdf (last accessed August 6, 2003) [*Special group III*].

[831] Pub. L. No. 107-42 §401 (2001), 49 USC § 40101.

[832] Title I.

[833] Title II.

[834] Title III.

[835] Title IV.

[836] Title V.

December 31, 2001 as a direct result of the attacks;[837] and US$10 billion were distributed among air carriers in the form of loans via federal credit instruments.[838] The newly established Air Transportation Stabilization Board is responsible for deciding on applications for the federal credit instruments[839] However, the Government, in order to be compensated for the risk assumed by granting the loans, has the right to participate in the gains of the corporation granted the loan through the use of warrants, stock options and common or preferred stocks.[840]

Furthermore, the US$5 billion compensation is payable at a maximum of the ratio of the available seat miles of the air carrier for August 2001 to the total available seat miles of all air carriers for the same month. [841] Therefore, the larger the airline's share of seat mile compared to the remainder of the industry, the larger potential payout available for its losses.[842] In addition, the carrier must enter into a legally binding agreement with the US President that during the period beginning September 11, 2001 and ending September 11,2003 it will not use the subsidy to pay an officer or employee who made over US$300.000 in 2000 compensation in excess of the 2000 amount.[843] This limitation cannot be circumvented by using bonuses, awards of stocks and other financial benefits.[844]

Title II of the Act purports to relieve airlines from the high insurance expenses incurred after 9/11. It provides that the Secretary of Transportation may reimburse an air carrier for increases in premiums on coverage for risks ending before October 1, 2002 in comparison to premiums applicable during the week prior to 9/11.[845] With respect to the limit on air carrier liability, the Act transfers liability for any third party losses in excess of US$100 million aggregate to the Government provided that the Secretary of Transportation certifies that the air carrier was a victim of an act of terrorism committed during the 180-day period following the passage of the Act.[846] Furthermore, the Act denies punitive damages to be awarded for such a future terrorist event.[847]

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[837] Section 101 (a)(2)(a) and(b) .
[838] Section 101(a)(1), For a list of air carriers which were granted the loan or were denied it online: http://www.treas.gov/offices/domestic-finance/atsb/recent-activity.html (last accessed August 7, 2003).
[839] Section 102 (b)-(d).
[840] Section 102 (d).
[841] Section 103 (b)(2)(A).
[842] R. Mariani, "The September 11th victim compensation fund of 2001 and the protection of the airline industry: A bill for the American people" (2002) 67 JALC 141,150.
[843] Section 104 (a)(1) and(2).
[844] Section 104(b).
[845] Section 201 (b) (1).
[846] Section 201(b)(2), It has been amended by the Homeland Security Act of 2002.
[847] *Ibid.*

Title IV establishes a no-fault September 11th Victims' Compensation Fund directed by a Special Master who would determine compensation.[848] The aim of the fund is to "*provide compensation to any individual...who was physically injured or killed as a result of the terrorist-related aircraft crashes of September 11, 2001*".[849] The Act establishes a system, whereby claimants waive the right to file civil actions in any court or continue prosecution of any civil action for damages sustained as a result of 9/11, if they submit a claim under the Act.[850] Claimants who choose to bypass the Fund and bring a cause of action for damages arising out of the hijacking and the subsequent crashes, they will not be able to rely on the Warsaw Convention and on tort remedies for wrongful death, injury and property damages.[851] The Act eliminated these remedies for purposes of the attacks and created an exclusive federal remedy for damages.[852] The substantive law of the States in which the crashes occurred continues to apply but only the federal district court for the southern district of New York has jurisdiction over the matters.[853]

In addition, the Act provides guidance regarding compensation: compensation is allowed for all categories of damage[854] except punitive damages;[855] there is no cap on damage awards; and the amount of compensation will be reduced by the amount of the collateral source compensation[856] the claimant has received or is entitled to receive.[857] Furthermore, the Act limits the exposure of an airline for the aggregate of all lawsuits arising from the terrorist attacks to the limits of the liability coverage maintained by the airline.[858] This provision does not apply only to American Airlines and United Airlines which were involved in the attacks but it covers any carrier which faces claims related to 9/11.

The Aviation and Transportation Security Act (ATSA) expanded the scope of aviation related entities protected from lawsuits by including aircraft manufacturers,[859] airport sponsors[860] and persons with a property interest in the World Trade Center on 9/11.[861] Furthermore, it created another layer of protection by providing that liability for contribution or indemnity will not be in an

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[848] Examination in detail of the provisions regarding the fund is outside the scope of this thesis.
[849] Section 403.
[850] Section 405 (c) (3)(b).
[851] *Liability reporter, supra* note 828.
[852] Section 408 (b)(1).
[853] Section 408 (b)(2) and (3).
[854] Section 402(5) and(7)
[855] Section 405 (b) (5)
[856] It includes life insurance, pension funds, death benefit programs and payments by Federal State or local governments related to the attacks, Section 402 (4).
[857] Section 405(b)(6).
[858] Section 408(a).
[859] The entities that manufactured the aircraft or any parts or components of the aircraft involved in the terrorist attacks, Section 201 (d)(3)(3) of the Aviation and Transportation Security Act.
[860] The owner or operator of an airport, Section (d)(3)(4) of the Aviation and Transportation Security Act.
[861] Section 201(b)(a) of the Aviation and Transportation Security Act.

amount greater than the limits of liability insurance coverage of air carriers, aircraft manufacturers, airport sponsors, or persons with a property interest in the WTC.[862] However, these protective provisions do not apply to companies which are engaged in the business of air transportation security and which thus remain vulnerable to lawsuits.[863]

#### 3.3.2.5.2.2.2. Terrorism Risk Insurance Act of 2002

On November 26, 2002 the Terrorism Risk Insurance Act of 2002 (TRIA) was signed into law.[864] Its purpose was to "*ensure the continued financial capacity of insurers to provide coverage for risks from terrorism*" and came as a response to the concerns raised by financial markets and insurers regarding the availability and cost of insurance coverage for future terrorist attacks.

The Act establishes a three year federal terrorism insurance program,[865] administered by the Department of the Treasury that provides for a transparent system of US$100 billion shared public and private compensation for insured losses resulting from acts of terrorism. Thus, on the one hand the insurance market during this period will be able to stabilize and build capacity to ensure the continued widespread availability and affordability of property and casualty insurance for terrorism risks, and on the other hand State insurance and consumer protection regulations will be preserved.[866]

The Act does not cover any act of terrorism but only those that are certified as such by the Secretary of the Treasury in concurrence with the Secretary of State and the Attorney General.[867] To be covered by the program the act of terrorism must have the following characteristics: it must be dangerous to human life, property, or infrastructure;[868] it must have resulted in damage within the United States or to an air carrier or to a U.S. flag vessel or other vessel based principally in the United States and insured under U.S. regulation, or on the premises of any U.S. mission;[869] it must have been committed by someone acting on behalf of a "*foreign person or foreign interest, as part of an effort to coerce the civilian population of the United States*

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[862] Section 201 (b)(2)(a)(1) of the Aviation and Transportation Security Act.
[863] Section 201(b)(3) of the Aviation and Transportation Security Act.
[864] Pub L. 107-297.
[865] The Terrorism Insurance Program will terminate on December 31, 2005, section 108(a).
[866] United States, Department of the Treasury, "Terrorism risk insurance program", online: http://www.ustreas.gov/offices/domestic-finance/financial-institution/terrorism-insurance (last accessed August 7, 2003).
[867] Section 102(1)(A).
[868] Section 102(1)(A) (ii).
[869] Section 102(1)(A) (iii).

*or to influence the policy or affect the conduct of the U.S. Government by coercion*";[870] and it must produce property and casualty insurance losses in excess of US$5 million.[871]

The scope of TRIA is further restricted by the definition of insured losses: the Act covers losses occurring within USA, as well as losses to domestic air carriers and flag vessels regardless where the loss occurs or at the premises of any United States mission.[872] Based upon these factors, TRIA applies only to foreign acts of terrorism[873] which result in losses occurring in the United States, including losses to US air carriers, flag vessels and United States missions regardless where the loss occurs. However, acts that meet these criteria but occur in the course of a declared war are not covered by TRIA, except with respect to workers' compensation claims.[874]

There is some controversy over whether the provisions of the TRIA apply to non-U.S. airlines. Although the Act refers only to US air carriers, the definitions of terrorist act and insured losses indicate the opposite: act of terrorism for the purposes of TRIA means any act "*to have resulted in damage within the United States, or outside the United States in the case of [a United States air carrier]*";[875] insured loss applies to a loss "*if such loss occurs within the United States; or occurs to a [United States] air carrier ... regardless of where the loss occurs*".[876] Therefore, when an international terrorist event occurs within the United States, TRIA applies to both US and foreign carriers. It is only when losses occur outside the United States, that TRIA's application is restricted to US carriers, vessels and missions.[877]

The insurers that are required to participate in the program include domestic property and casualty insurers;[878] eligible surplus lines insurers listed on the Quarterly Listing of Alien Insurers of the National Association of Insurance Commissioners (NAIC);[879] insurers approved by a Federal agency to provide insurance for maritime, energy, and aviation risks;[880] state residual market entities and state workers' compensation funds.[881] With respect to captive and self-insurance arrangements, they may be covered by TRIA, provided that the Secretary of the

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[870] Section 102(1)(A) (iv).
[871] Section 102(1)(B)(ii).
[872] Section 102(5)(A) and (B).
[873] It does not cover domestic terrorism.
[874] Section 102(1)(B)(i), A terrorist act committed in USA in connection with the hostilities in Iraq would not be excluded from TRIA solely by operation of the "declared war" exclusion, since it was not a formal declaration of war, United States, Department of the Treasury, online: http://www.ustreas.gov/offices/domestic-finance/financial-institution/terrorism-insurance/pdf/tria-letter-oxley-snow.pdf (last accessed August 7, 2003).
[875] Section 102(1)(A)(3).
[876] Section 102(5)(A) and(B).
[877] Katherine Posner, "Terrorism Risk Insurance Act of 2002" (Paper presented to the IATA Airline Insurance Rendezvous 2003) [*Posner*].
[878] Section 102(6)(A)(i).
[879] Section 102(6)(A)(ii).
[880] Section 102(6)(A)(iii).
[881] Section 102(6)(A)(iv).

Treasury issues rules to that effect prior to an act of terrorism resulted in an insured loss covered by such entities.[882] However, for the time being the Treasury has not issued such rules and thus captive insurers, risk retention groups and self-insurance arrangements are not insurers within the meaning of TRIA,[883] unless they fall within the State licensed or admitted category Section 102(6)(A)(i) and receive and report direct earning premiums in accordance with Section 102(6)(B) and Treasury's interim guidance at 67 FR 76206.[884]

TRIA's application to foreign insurers is not explicitly stated in the Act, but Interim Guidance II and III clarify the point. The former provides that "*if property and casualty insurance coverage is provided within the geographic and other statutory parameters of the definition of 'insured loss' in the Act . . . and is provided by an insurer as defined in section 102(6) of the Act (**whether or not the insurer is foreign based or owned**) [emphasis added], then such losses will be covered by the Program*".[885] In addition, Interim Guidance III provides that "*the provisions of the Act apply to entities that meet the definition of "insurer" under Section 102(6) of the Act and with the respect to an "insured loss" covered by the Program*".[886] Therefore, it is apparent that the Act is applicable to non-US insurers.

Besides, foreign insurers, who are identified in certificates of insurance submitted by foreign direct air carriers who operate under permit or other authority in foreign air transportation pursuant to Title 14 CFR Part 205 (Aircraft Accident Liability Insurance), fall within Section 102(6)(A)(iii) of the TRIA. Although the Act does not explicitly cover them, the matter is addressed in Interim Guidance II: "E*xamples of insurers under section 102(6)(A)(iii) are those insurers that do not fall within section 102(6)(A)(i) or (ii) and are approved or accepted by a Federal agency under the following programs and/or statutes:.... **Aircraft Accident Liability Insurance (U.S. Department of Transportation)** [emphasis added]*".[887]

The program begins with the nullification of any terrorism exclusion in contracts for property and casualty insurance to the extent that it excludes losses that would otherwise be insured losses as defined in the TRIA in classes of business encompassed in the Act.[888] The types of insurance falling within TRIA are defined as "*commercial lines of property and casualty insurance, including*

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[882] Section 102(6)(A)(v).
[883] Interim guidance concerning definition of insurers, scope of insurance coverage and disclosures mandated by the Terrorism Risk Insurance Act of 2002.
[884] *Ibid.*
[885] Interim Guidance II
[886] Interim Guidance III
[887] Interim Guidance II
[888] Section 105(a).

*excess insurance, workers' compensation insurance, and surety insurance*".[889] Insurance for medical malpractice, health or life insurance, and reinsurance or retrocessional insurance are explicitly excluded from the Act.[890] However, a terrorism exclusion provision may be reinstated if the insured authorizes it or if after 30 days notice the insured fails or refuses to pay an increased premium for terrorism coverage.[891]

Under the program, the Federal Government reimburses insurers for losses caused by terrorism, paying 90% of covered terrorism losses exceeding a deductible paid by insurance companies.[892] This means that once the deductible amount has been met, insurers then must pay 10% of insured losses exceeding the deductible and the federal government will pay the remaining 90% of the insured losses in excess of the deductible.[893] The deductible is prescribed by section 102(7) and phases in over several years based on the insurance company's direct earned premiums.[894] The insurer deductible for the transition period[895] is 1% of the previous year's direct earned premium, and thereafter 7% for program year 1,[896] 10% for program year 2,[897] and 15% for program year 3.[898]

In order to obtain the assistance of the Federal Government, insurers are required to provide "*clear and conspicuous*" disclosure to policyholders of the premium charged for terrorism insurance.[899] Furthermore, the insurer must process the claim for the insured loss in accordance with "*appropriate business practices*" and any "*reasonable procedure*" dictated by the Secretary of the Treasury.[900]

Federal funds paid out under the program are capped at US$100 billion for each program year.[901] If the aggregate insured losses exceed the cap, the Secretary of the Treasury will make any payments towards its 90% portion of insured losses, the insurers that have met their deductible will not be liable for their 10% portion of insured losses exceeding the $100 billion aggregate.[902] In

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[889] Section 102 (12)(A) .
[890] Section 102(12)(B).
[891] Section 105 (c).
[892] Section (e)(1)(A)
[893] *Posner, supra* note 877.
[894] Direct earned premium means a direct earned premium for property and casualty insurance issued by any insurer for insurance against losses which fall within the Act, Section 102 (4).
[895] It begins on the date of enactment of TRIA and ends on December 31,2002, Section 102 (11)(A).
[896] It begins on January 1, 2003 and ends on December 31, 2003, Section 102 (11)(B).
[897] It begins on January1, 2004 and ends on December 31,2004, Section 102(11)(C).
[898] It begins on January 1,2005 and ends on December 31,2005, Section 102(11)(D).
[899] Section 103(b)(2), For policies issued or renewed more than 90 days after the date of the enactment of TRIA, the disclosure must be provided on a separate line item in the policy, Section 103(b)(2)(c).
[900] Section 103(3).
[901] Section 103(e)(2)(A).
[902] Section 103(e)(2)(A)(i) and (ii).

that case, the Secretary of the Treasure will notify the Congress which in turn will determine the procedures and source of payments for any insured losses exceeding the $100 billion cap.[903]

TRIA provides for the Federal Government to recover a portion of any payments it makes under the program in two phases. A mandatory recoupment will be made based on the difference between a specified dollar amount referred to as the "*insurance marketplace aggregate retention amount*" and the total paid out in certified terrorism losses by insurers, i.e. the percentage of earned premium deductibles plus the 10% insurer participation.[904] In practical terms, when the total of insurer deductibles and percentage participation does not equal the aggregate retention amount,[905] insurers will have to pay the difference back to the Federal government.[906] In the event that the insurer deductibles and percentage participation amounts, equals or exceeds the aggregate retention amount, there will be no mandatory recoupment.[907] However, the Secretary reserves the right to recoup additional amounts based on a number of considerations which include the cost of the Federal program to taxpayers; the capitalization, profitability and investment return of the insurance industry; and the affordability of commercial insurance for small- and medium-sized businesses.[908] The recoupment will be achieved through the imposition of terrorism loss risk-spreading premiums on policyholders which will not exceed 3% of the premium charged for property and casualty insurance coverage under the policy and are to be collected by the insurers and remitted to the federal government.[909]

TRIA also creates an exclusive federal cause of action for property damage, personal injury, or death arising from an act of terrorism certified by the Secretary of the Treasury as such.[910] It prohibits claimants to pursue claims in State courts and provides for the designation of a district court or if necessary, multiple district courts to be vested with exclusive jurisdiction over all actions for any claim arising out of the act of terrorism.[911] State law would substantively govern these actions, but any awards for punitive damages will not count as insured losses for the purposes of TRIA.[912]

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[903] Section 103(e)(3).
[904] Section 103(e) (7)(A).
[905] $10 billion in transition period and program 1, $12.5 billion in program 2, and $15 billion in program 3, Section 103(6)(A).
[906] International risk management institute, "The Terrorism Risk Insurance Act of 2002", online: http://www.irmi.com/insights/articles/woodward008.asp (last accessed August 8, 2003).
[907] Section 103(e) (7)(B).
[908] Section 103(e) (7)(D).
[909] Section 103 (e) (8) (A),(B)and(C).
[910] Section 107 (a)(1).
[911] Section 107(a)(4).
[912] Section 107(a) (3) and (5).

Finally, Title II of TRIA enables victims who have obtained judgments against terrorists to satisfy these judgments from the blocked assets of the terrorist parties.[913]

#### 3.3.2.5.2.2.3. Homeland Security Act of 2002

On November 25, 2002, the Homeland Security Act (HSA) was signed into law and incorporates the airlines war risk insurance legislation, which makes significant amendments to the war risk liability insurance program of the FAA.

On September 23, 2001, President Bush by virtue of the authority vested in him by 49 USC 44302 approved provision by the Secretary of Transportation of third-party war risk liability insurance coverage to US-flag air carriers to preserve the interest of air commerce, national security and the needs of the domestic U.S. airline industry.[914] The FAA program offered third party war risk liability insurance to US carriers with coverage limits beyond US$50 million up to US$4 billion per occurrence.[915] The airlines were required to buy coverage for the first US$50 million from the private sector and were paying US$ 7.50 per aircraft departure to FAA.[916]

The HSA amended the FAA war risk insurance program in the following respects:

- It provides war risk coverage to US air carriers not only for third party liability but also for losses or injuries to aircraft hulls, passengers, as well as crew.[917]
- It expands the coverage to include the first US$50 million of any covered losses that is incurred.[918] However, the total premium paid by the carrier for these expanded policies cannot be more than twice the premium paid by an air carrier to the FAA for its third-party policy as of June 19, 2002;[919] and
- The FAA will have to provide war-risk insurance through Aug. 31, 2003 and it has the power to further extend the termination dates through December 31, 2003.[920]

Furthermore, the HSA amended the Air Transportation Safety and System Stabilization Act by reinstating the US$ 100 million limitation on the liability of U.S. air carriers to third parties for any action arising from an act of terrorism from September 22, 2001 through December 31, 2003.[921] In

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[913] The examination of Title II is outside the scope of this thesis.
[914] Determination Order No. 01-29, 66 Fed. Reg. 49075 (Sept. 23, 2001).
[915] Condon & Forsyth, Newsletter, "Homeland Security Act of 2002 – Airline War Risk Insurance Legislation" (January 2002), online: http://www.condonlaw.com/nl_jan2003.htm (last accessed August 8,2003).
[916] US DOT and FAA, "Report of the Secretary of Transportation to the United States Congress pursuant to Section 1204, Homeland Security Act of 2002" March 2003, online: http://apo.faa.gov/Insurance/1204RpttoCongress.pdf (last accessed August 8,2003) [*FAA report on war risk*].
[917] Section 1202.
[918] Section 1202.
[919] Section 1202.
[920] Section 1202.
[921] Section 1201.

addition, the HSA included in the definition of air carrier in the Stabilization Act persons engaged in the business of providing air transportation security for the carrier.[922] For the purposes of the Act, security persons include persons that have a contract directly with the Federal Aviation Administration on or after February 17, 2002 to provide security and have not been debarred for any period within 6 months from that date.[923]

*3.3.2.5.2.3. Global initiatives*

In the aftermath of 9/11, both ICAO and IATA took immediate action and tried to transfer, mitigate and reduce the new aviation risks. On September 20, 2003, IATA raised concerns over the impact of the cancellation of AVN 52C and argued that airlines will not be able to comply with financing agreements, States' minimum insurance requirements, as well as airport operating agreements.[924] Furthermore, IATA briefed the ICAO Council President, Dr. Assad Kotaite, and met with a number of ICAO Council members to outline the concern of the aviation industry. Shortly thereafter, a State letter was issued to all ICAO Contracting States urging governments to assist the industry by committing themselves to cover any risks to which airlines and other parties involved may become exposed by the cancellation of the coverage.[925]

The 33rd Session of ICAO Assembly held from September 25,2001 to October 5,2001, adopted Resolution A33-20 which urged Contracting States " *to work together to develop a more enduring and coordinated approach to the important problem of providing assistance to airline operators and other service providers in the field of aviation war risk insurance*".[926] In addition, the Resolution directed ICAO Council "*to urgently establish a Special Group to consider the issues [concerning aviation war risk insurance] and to report back to the Council with recommendations as soon as possible*".[927] On September 28, 2001, IATA convened a meeting of airlines, financiers, national governments, freight forwarders, insurers and proposed to the participants to encourage States to use model or uniform text for the provision of indemnities or guarantees which should be for a period of 90 days.[928]

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[922] Section 890.
[923] *Ibid.*
[924] Howard Goldberg, "Seeking a global solution to a global problem: Dealing with third part war risk liability cover" (Presentation Septemebr 11, 2002) [unpublished].
[925] State Letter EC 2/6-01 (September 21, 2001).
[926] Resolution A33-20, "Coordinated approach in providing assistance in the field of war risk insurance" Paragraph 1, online: http://www.icao.int/icao/en/res/a33_20.htm (last accessed August 10, 2003).
[927] *Ibid.* paragraph 2.
[928] *Abeyratne crisis management, supra* note 758 at 607.

Pursuant to the State letter, the Resolution and the IATA meeting, several States took measures to provide excess insurance coverage to airlines:

- In United Kingdom, the Marine and Aviation Insurance (War Risk) Act 1952 empowers the Secretary of State for Transport to insure British aircraft against war risks if it appears to him that reasonable and adequate facilities for the insurance of such aircraft against such risks are not available.[929] In light of this provision, the captive insurance company Troika was established[930] and provided coverage of US$150 million to US$1 billion for a premium of 50c per passenger carried. If the airline required coverage above US$500 million up to US$1 billion an additional premium of 20c per passenger carried was charged;[931]
- The Japanese Ministry of Land, Infrastructure and Transport guaranteed third party insurance up to US$2 billion which will be terminated when access to US$2 billion is available on a reasonable basis;[932]
- The Singaporean government provided third party war risk liability coverage to Singapore Airlines, Silk Air, SIA Cargo and the Civil Aviation Authority of Singapore;[933]
- The Spanish government implemented the ECOFIN accord in which Insurance Compensation Consortium (ICC) will pay insurance premiums for the airlines' risks against war and terrorism for a period of one month;[934]
- The German government offered an indemnity for third party war risk liabilities in excess of US$50 million; and
- The European Commission (EC) in accordance with the European Union's State aid rules and the so-called "market economy investor" principle[935] ruled out any possibility that it might accept measures which would create distortion between States and between airlines.[936] However, it recognized the thorny insurance situation, following the notice of cancellation and came up with a compromise package which was based on Article 87(2)(b) of the EC Treaty, as being "*aid to make good the damage caused by*

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[929] Section 2(1).
[930] Troika was established by the Treasury and led by Global Aerospace.
[931] *Margo 9/11, supra* note 771 at 393 note 37.
[932] *Abeyratne crisis management, supra* note 758 at 605.
[933] *Ibid.*
[934] *Ibid.* at 607.
[935] According to this principle, State aid is considered as a normal financial transaction when a private investor would have acted accordingly, i.e. when he would have injected funds in airline, confident in its investment, P. Fruhling, "The Dissuasive One Time, Last Time Principle Applied to European Airlines State Aid Control" (2002) 27 Air and Space Law 135, 135-136.
[936] European Commission, Press release IP/01/1306, September 24, 2001.

*natural disasters or exceptional occurrences*".[937] The Commission will look favourably on State measures designed to compensate airlines for losses resulting from the closure of the US airspace between 11 and 14 September, provided financial assistance is paid in a non-discriminatory manner to all airlines in a Member State and it is calculated on the basis of revenue loss during these days. Furthermore, it agreed to Member States continuing to provide or underwrite the costs of war risks third party insurance, provided that it applies without restriction to all airlines in a State; it does not place the airlines in a more favourable situation than before 9/11; and it is based on a rolling 30 days basis, but effectively up to the end of 2001.[938] Furthermore, all Member States apart from Luxembourg, Denmark and Sweden extended their national guarantee schemes until October 31, 2002.[939]

On October 22, 2001, in response to Resolution A33-20, the ICAO Council established the Special Group on war risk insurance (SGWI) with a mandate to "*review the problem of aviation war risk insurance in light of [ the cancellation of coverage and the increase of premiums]*",[940] and to "*develop recommendations for coordinated and appropriate assistance mechanism for airline operators and other affected parties with respect to aviation war risk insurance, to be operated if and when necessary to the extent the insurance markets are unable to provide coverage*".[941] In this meeting both ICAO and IATA stressed the role to be played by governments in the third party war risks regime. IATA claimed that the governments' role in third party war risk should be fully defined and that necessary coverage must be widely available, stable and affordable. Furthermore, IATA argued that in a new international regime governments should act as multilateral guarantors covering terrorist actions against airlines in any part of the world.[942] The key outcomes of the SGWI's first meeting were:

- In the short term, ICAO should issue another State letter urging States to continue support;

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[937] John Balfour, "EC policy on state aid to airlines following 11 September 2001" (December 2002) XXVII/ 6 Air and Space Law 398, at 399.
[938] *Ibid.* at 399, and *BLG, supra* note 779 at 3.
[939]EU, Commission Services Progress Report on Expert Group Issues for Chicago CEO Conference, 7-8 November 2002, online: http://europa.eu.int/comm/enterprise/enterprise_policy/business_dialogues/tabd/2002_f1656.pdf (last accessed August 10, 2003).
[940] ICAO, Special group on aviation war risk insurance, First meeting, Montreal 6 to 7 December 2001, online: http://www.icao.int/icao/en/conf/mt/sgwi/sgwi1_report.pdf (last accessed August 10, 2003) [*Special group I*].
[941] *Ibid.*
[942] *Abeyratne crisis management, supra* note 758 at 609.

- In the medium term, an international mechanism should be developed whereby aviation war risk coverage would be provided by the aviation insurance industries with multilateral government backing for 3-5 years; and
- In the long term, an international convention to limit or exclude third party war risk liability should be considered.[943]

The second meeting of the SGWI was held in Montreal from 28 to 30 January 2002. The London Market Brokers Committee (LMBC) took leadership role and in conjunction with Airports Council International (ACI), IATA and International Coordinating Council of Aerospace Industries Association (ICCAIA) developed a medium term international mechanism whereby aviation war risk coverage will be provided by a non-profit company with multilateral government backing. The proposed company would commence once the ICAO contribution rates of the participating States add up to at least 51% and it will offer third party war risks liability coverage in excess of US$50 million up to US$15 billion[944] for scheduled, non-scheduled and cargo air carriers operating domestically and internationally, general and business aviation, airports, ground handlers, refuellers, ATC providers, RFFS providers, security screeners and other aviation services providers, as well as equipment lessors, financiers and manufacturers of any ICAO Contracting State that voluntarily joins the mechanism.[945] The cover will be non-cancellable and apply for any one insured, any one occurrence and any one aircraft. However, premiums can be adjusted with 30 days notice to meet required claims reserves.

The Board of Directors of the company will include representatives of the participating aviation and insurance industries and representatives of ICAO and participating States which will have a controlling interest via the statutes in decisions relating to primary/excess limits, borrowings, reinsurance and repayment arrangements to States. Premiums will be collected from each insured party to build a pool to meet claims under the policies. The total amount of premiums to be collected in the first year is targeted at US$850 million which is the equivalent to 50 cents per passenger segment based on 1.7 billion passenger segment. The company will meet any claims on it through funds accumulated from premiums, reinsurance and other private financing arrangements. Participating States are not required to make any payment but they act as

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[943] *Special group I*, supra note 940.
[944] If 100% of ICAO Contracting States participate, the loss threshold amount will be US$15 billion, but if the amount of participation is less that 100% , then the amount of US$15 billion will be proportionately reduced.
[945] ICAO, Special group on aviation war risk insurance, Second meeting, Montreal 28 to 30 January 2002, online: http://www.icao.int/icao/en/conf/mt/sgwi/sgwi2_report.pdf (last accessed August 10, 2003).

guarantors and they will be called upon as a last resort when the company does not have funds in the pool to pay a claim. In that case, their contributions will be pro-rated based on ICAO funding percentages. Furthermore, the SGWI requested the ICAO Council to send to the Legal Bureau a request that a new draft convention on third party liability be prepared a soon as possible.

The third party war risk scheme proposed by SGWI was reviewed by the ICAO Council on March 4, 2002. On May 27, 2002, the Council approved in principle the establishment of the global aviation war risk insurance scheme (Globaltime), including a draft participation agreement to be signed by participating States.[946] The President of the Council informed Contracting States by State letters dated June 6, 2002,[947] July 12, 2002[948] and November 6, 2002[949] and requested them to express an intent of participation to Globaltime to be received by February 14, 2003.[950]

In the meantime, regional mechanisms were being developed:

- In the US, the Air Transport Association (ATA) and individual member airlines in conjunction with Marsh, Inc. evaluated a risk-retention group (RRG) called Equitime which was conditionally licensed to operate by the Vermont Department of Banking, Insurance, Securities and Health Care Administration on June 6,2002 subject to obtaining adequate capitalization and acceptable reinsurance.[951] Equitime would offer up to US$1.5 billion in combined limits for both passenger and third party war risk liability, retaining some of the risk and reinsuring the balance with the US government.[952] It would obtain US$50 million initial capitalization from banks and participating airlines. However, Equitime did not become operational because the FAA provides war-risk insurance through Aug. 31, 2003 and it has the power to further extend the termination dates through December 31, 2003. In January 2003, ATA informed DOT that there was no longer agreement between its members to implement Equitime.[953]
- The Association of European Airlines (AEA) with the support of the biggest air transport industry stakeholders in Europe established a regional mutual fund called Eurotime. Governments would fund it using the premiums they have collected from airlines for the

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[946] ICAO, News Release, " ICAO Council approves global aviation war risk insurance scheme" (June 14, 2002), online: http://www.icao.int/icao/en/nr/pio200208.htm (last accessed August 10, 2003) and *ICAO Report 2002*, *supra* note 177.
[947] LE 4/64-02/55.
[948] LE 4/64-02/72.
[949] LE 4/64-02/100, online: http://www1.iata.org/WHIP/_Files/Wgld_0109/LE_4_64_02_100.pdf (last accessed August 10, 2003).
[950] *Ibid.*
[951] *FAA report on war risk , supra* note 916.
[952] *Margo 9/11, supra* note 771 at 393.
[953] *FAA report on war risk, supra* note 916.

insurance cover they have supplied since 9/11 and would provide guarantees for at least three years when it was expected that Eurotime will be absorbed by Globaltime. The limit of the scheme for third party liability would be $1 billion per incident, but its retention would only be US $150 million in the first year if the currently proposed premium level of US $0.50 is retained.[954] Under Eurotime, governments would play the role of reinsurers and they will not be lenders of last resort. Therefore, in Eurotime "*some of the premium paid in by airlines and by others would be used to pay a re-insurance premium. This would have the effect of reducing the amount of available cash to pay out on any claims and prolong the period of governmental involvement*".[955] Currently, Eurotime has been overtaken by Globaltime "*due to the total withdrawal of even moral support from European Governments - in a flurry of administrative indecision and a failure to accept their responsibility for terrorism*".[956]

With respect to Globaltime, as of April 30,2003, 45.95% of the ICAO 2003 contribution rate or 62 Contracting States have expressed intention to participate in Globaltime, but 35.02% of this amount or 23 Contracting States have imposed conditions upon their participation:[957] USA and Japan should also participate in the scheme; Globaltime should not unnecessarily restrict the commercial insurance market; and there must be a clear exit strategy.[958]

Japan considers the quantum of its guarantee share (14.58%) as far too high and not reflecting its risk exposure, whereas the official position of USA is that "*under existing law, DOT does not have the authority to provide the guarantees that would be required of Nations participating in Globaltime or the authority to provide insurance for entities other than airlines and airline service providers as originally contemplated by ICAO. Existing law requires the DOT to collect premiums in advance that are... to the extent practical....based on consideration of the risk involved..*"[959]

In light of this deadlock, the third meeting of the SWGI was held in Montreal from April 30 to May 1, 2003 and the following recommendations were made:

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[954] EU, Commission, "Communication from the Commission to the European Parliament pursuant to the second subparagraph of Article 251 (2) of the EC Treaty concerning the common position of the Council on the adoption of a Regulation of the European Parliament and of the Council on rail transport statistics" http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&lg=en&type_doc=COMfinal&an_doc=2002&nu_doc=320 (last accessed August 10, 2003).

[955] Airports Council International, "Insuring against the unthinkable again: Eurotime or Globaltime?", online: http://www.aci-europe.org/upload/1050109102002aci_october_2002.pdf (last accessed August 10, 2003).

[956] *Oelssner, supra* note 187.

[957] Marsh, Inc, Aviation News, April 2003, online: http://www.marsh.se/files/April_03.pdf (last accessed August 10, 2003) [*Marsh Aviation News*].

[958] Ken Coomber, "Globaltime update" (Paper presented to the IATA Airline Insurance Rendezvous, 2003).

[959] *FAA report on war risk, supra* note 916.

- Globaltime should operate on a contingency basis only if there is further failure of the commercial insurance market as determined by the ICAO Council;
- The establishment of Globaltime should be on a basis that would make it viable and supportable by the industry;
- The Council should take note of the FAA's wart risk management program;
- The drafting of an international convention to limit liability should proceed as speedily as possible;
- The Council should consider the need for harmonization and standardization of the minimum insurance requirements of States; and
- The Council should consider sending a further State letter setting out the revisions made to Globaltime and the draft participation agreement.[960]

Furthermore, SWGI in order to satisfy Japan considered the proposal to cap its share to 10%, but in the end the Group did not make a recommendation on the cap and left it for further consideration on ICAO's Council.[961]

The Council in its 169th Session on June 9, 2003 noted that the number of Contracting States which expressed their intention to participate in or support Globaltime has increased to 64 corresponding to 46.07% of ICAO contribution rates, but it also stressed that 22 Contracting States corresponding to 35.08% of the ICAO contribution rates still put conditions on their acceptance of the scheme. Furthermore, the Council approved in principle all the aforementioned recommendations of the SWGI and requested the Secretary General to report back to the Council during its 170th Session. In addition, it pointed out that contacts will continue with all States and especially with the major contributors to ICAO's Programme Budget regarding their participation in Globaltime.[962]

*3.3.2.5.2.4. Conclusion*

The events of 9/11 have had a profound effect on the aviation industry, the aviation insurance market and the governments. Airlines and insurers had to re-evaluate the availability of capacity and the nature of the risks that the industry must assess, whereas governments had to step in and protect both the aviation industry and the insurance market.

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[960] *Special group III, supra* note 830.
[961] *Marsh Aviation News, supra* note 957.
[962] ICAO Council, 169th Session, C-DEC 169/11, June 9,2003, online: http://www.iata.org/WHIP/_Files/Wgld_0205/C.169.DEC.11.EN.PDF.pdf?SUBMIT=Go# (last accessed August 10, 2003).

Although objections were raised, especially in USA, regarding the legislative reform in the aftermath of 9/11,[963] the increased State involvement in aviation insurance market was an indispensable initiative for the survival of the industry which for the first time in its history faced unavailability of insurance coverage. "*Airlines cannot [and should not] replace governments in protecting people and property from the costs of a terror attack*", [964] especially when the security system is the responsibility of the State.[965]

However, "*the notion of government involvement in the provision of insurance facilities is not one which generates much enthusiasm on the part of the insurance market, the airlines, or indeed the governments themselves*".[966] Hopefully, following the transition period every actor will retain their traditional role: the insurance market will provide adequate coverage at affordable rates; airlines will reduce costs utilizing recognized risk management techniques; and the States will implement an instrument of international law which will install a level of stability and predictability.

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[963] Maria Schiavo, Speech before the National Air Disaster Alliance and Foundation 2001 Autumn Annual Meeting, Washington, D.C., September 29, 2001, online: http://www.baumhedlundlaw.com/aviation/New_Sept11_Laws/Mary-NADAFspeech.htm (last accessed August 10, 2003).
[964] Giovanni Bisignani, online: http://www.iata.org/911/insurance.htm (last accessed August 10, 2003).
[965] A characteristic example constitutes the PanAm 103 (Lockerbie) bombing for which the airline had no actual responsibility since the security checks were the responsibility of the States involved. However, in the subsequent litigation PanAm was found guilty of wilful misconduct and the punitive damages awarded was one of the main reason for its bankruptcy.
[966] *Margo 9/11, supra* note 771 at 397.

## 4. CONCLUSION

Predicting the future may be a game for fools, but it is clear that the structure and composition of the aviation industry will change significantly in the next few years. The aviation landscape is already in the process of being reshaped and adjusting to the realities of the global market place. This transition period however requires particular attention. Opportunities and risks are inextricably linked and demand a balanced and disciplined approach in order to ensure the safe, economic and orderly expansion of international air transport.

In this framework risk management constitutes an indispensable tool. Risk management is not restricted to insurance, but it involves a number of techniques and procedures that have the potential not only to minimize risk but where correctly managed to create opportunity and value. In an environment where merger, acquisitions, hostile takeovers and consolidation are commonplace, risk management will enable airlines to manage their internal operations efficiently and to expand their businesses. Airlines should not consider risk management as "*an impediment to progress and realization of value [but as] the safety net that allows a company's people to take the kind of risks that can lead to new markets, new products and new services*".[967]

[967] Blake Hanna & Mark Smith & Craig Mindrum, "Managing Operational Risk" (2003) 70 No.3 Canadian Underwriter 44, at 46.

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