"SOME LEGAL PROBLEMS IN INTERNATIONAL LAW ON AERIAL COLLISIONS"

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To my family . . . . . the motive power

To the Philippines Air Force . . . . . the vehicle

To the Institute of Air & Space Law,
McGill University . . . . . the navigator

who all inspired

in the flight

to produce this study.

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INTRODUCTION

Just like in surface vehicular travel, the inevitability of collisions between aircraft, and the growth of the incidence thereof[i], is equally accepted in air transportation.

The necessity of regulating the legal obligations resulting from such incidents, in a convention level, in order to obviate the application of the various domestic laws on the matter which do not contain standard liability provisions, among other things, was long felt[ii]. Such need stems from the economic policy obtaining in international air law to define, regulate and limit an aircraft operator's liability from catastrophic losses that usually

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i. - Knauth, in "Air Carrier's Liability in Comparative Law", Vol. 7, A.L.R. (1936), p. 259, 289-290, stated that the establishment of secondary air lanes due to the fast congestion of the air traffic lanes will cause an increased hemming in of the free areas and make more hazardous the crossing of traffic lanes from one uncontrolled area to another. In the "Report of Aviation Facilities Study Group to the Budget Bureau (U.S.)", December 31, 1935, Vol. 22, J.A.L.C. (1935), p. 475, it was revealed that the increase in civil and military air traffic outpace "the capabilities of outmoded traffic control facilities". This statement is still true.

ii. - For a historical background on the efforts of the CITEJA and the Legal Committee, ICAO, to draft a convention on aerial collisions, see ICAO Doc. No. 7601-LC/138, Legal Committee, 10th Session, Montreal, 7-24 September 1954, Vol. 2 (Documents), p. 3.

results from a single aviation accident, and extend reasonable protection to the rights of end-users, including innocent third parties, who may have suffered injury or sustained damage as a result of aircraft operations.

Jurisprudence shows that in a single aerial collision incident different liability judgments were entered and various amounts of damages awarded in accordance with the law of the forum[iii].

This study therefore attempts to delve into some of the problem areas in international air law as pertains aerial collisions. There are other legal problem areas that were not covered by the discussions herein presented in view of the academic requirements imposed on studies of this nature.

The propositions to be presented herein were aligned towards: (1) obviating or minimizing the possibility of

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iii. - In Cook, et al. vs. U.S.A., 274 F (2d) 689, 1960 US&CAvR 423 (U.S.C.A., 1960), 6 Avi. 17,818, there was a mid-air collision between two aircraft over the District of Columbia. Both were being controlled for landing by the tower operator at Virginia. The U.S. was held liable pursuant to the death act of the State of Virginia and the operator of the aircraft involved was held liable under the death act of the District of Columbia. The limit of liability under the death act of Virginia is $15,000, while in the District of Columbia there is no limit on death liability.

conflict with existing international air law conventions like the Warsaw Convention of 1929, as amended by The Hague Protocol of 1955, and the Rome Convention of 1952; (2) the adoption of certain legal precepts which have been deeply imbedded in the general rules of negligence in tort law since the basis of liability stemming from air collision incidents is basically delictual; and, (3) the assimilation of those maritime and highway collision principles which are generally accepted in the law of nations and which may find equal application in aviation.

Problems in the formulation of aviation law which are political in nature are only presented and discussed herein but no solution thereto is offered.

In the main, it is hoped that the legal problems herein presented and discussed and where solutions are proposed might, to a certain degree, be of help in the formulation of an international convention on aerial collisions, which, to this writer, has become a necessity in air law[iv].

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iv. - There is both fascination and challenge in the statement of Knauth, supra, at p. 259, thus: "A world in which a rapidly flitting aircraft, crossing unseen political boundaries by day, by night, in clouds or fog, subjects its responsible owners, pilots and operators to a maze of locally changing conditions of legal liability, challenges our faculty for organization and system."

CHAPTER I

CONCEPT OF AERIAL COLLISIONS

In General. - The rationale of international air law is to unify rules prescribing and regulating an aircraft operator's liability. This was felt as a necessary economic measure, a matter of common international concern, in order to provide a cushion to aviation industry from catastrophic losses that usually results from a single airplane accident and, at the same time, afford sufficient protection to the interests of society which it serves.

As a rule, the regime of conventions on air law should be clearly defined. This is the predominant concept in private international law. The Warsaw Convention of 1929, as amended by The Hague Protocol of 1955, designed for "the unification of certain rules relating to international carriage by air", provides that the liability rules prescribed therein operates only in such cases where the injury or damage takes place on board the aircraft "or in the course of any of the operations of embarking or disembarking"[1]. Similarly, the Rome Convention of 1952, regarding "damages caused by foreign aircraft to third parties on the surface",

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1. - Art. 17

limits its application to such damages caused by an aircraft "in flight", as said term is defined therein. The concept of an aerial collisions convention, intended to complete the "trilogy" in international air law to regulate and limit the liability of an air carrier, should equally satisfy such requirement.

In the effort to unify the legal rules relating to aerial collisions, the initial inquiries are: "What is an aerial collision?", and, "To what situation or situations in aircraft operations should the law on aerial collisions apply?".

The term "aerial collision" was often described, rather than defined, and has been freely used, quite loosely, to refer to any physical contact between two or more aircraft[2]; or between a moving aircraft on the surface or in flight and a surface vehicle, on land or on water, whether the latter is in movement or not[3]; or by an airplane in

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2. - This follows the generally accepted concept of collisions from Admiralty and highway traffic experience.

3. - In N.Y. Airways vs. Eastern Air Lines, 1959 US&CAvR 177, an arriving helicopter was held to have "collided" with a truck on the airport apron; also, in Schneider, Ex'x. vs. U.S., 1961 US&CAvR 11, the plaintiff, who was then operating a motor vehicle was held to have "collided with a U.S. Air Force cargo plane which, due to engine failure, attempted to alight in the Parkway, skidded along the roadway and went through the underpass, where the "violent

flight and a stationary or fixed object on the surface[4]. Even airplane crashes have sometimes been referred to as surface collisions[5]. In view of this intemperate use of the said term, the need of giving it a precise legal shade and meaning and circumscribing its application within a definite legal regime becomes obvious.

Generally accepted as included within the purview of the term are the so-called "constructive collisions" or interferences, like those caused by, or resulting from, aircraft turbulence[6], or sudden and unexpected aircraft manoe-

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collision" took place. Cf. Read vs. N.M. City Airport, Inc., et al., 259 N.Y.S. 245, 1933 USAvR 31.

4. - In the case of Adler's Quality Bakery, Inc., et al. vs. Gaseteria, Inc., 6 Avi. 17,953, 1960 US&CAvR 1, an aircraft was held to have "collided" with a TV tower. In the report to ICAO of aviation accident cases, aircraft YS-09C, of Salvador was reported to have "collided with a tree and crashed", on 5 March 1959 (ICAO Circular 62-AN/57, p. 99). Also, Shawcross & Beaumont, "Air Law", 2d Ed. (1951), p. 243.

5. - So many accidents of this nature which were reported to ICAO have been referred to as "collisions". For example: In the accident involving Piper PA-24 Comanche, D-ELAC, off Sydney Airport, Nova Scotia, Canada, on 16 January 1959, it was stated that ".... the aircraft collided with the ground...." (ICAO Circular 62-AN/57, p. 65); also the accident re Viacao Aerea Sao Paolo, Scandia, was reportedas having "finally collided with the ground and caught fire....", on September 23, 1959 (ICAO Circular 62-AN/57, p. 181).

6. - In Johnson, et al. vs. U.S.A., 183 F Supp. 489,

vres to avoid physical or actual collision, called "evasive actions"[7].

Basically, it may be stated that the concept of an aerial collision or interference and the scope of the convention thereon should exclusively relate to aircraft operations, or to certain segments thereof, and to activities reasonably connected therewith.

Aircraft operations. - There are several stages involved in aircraft operations. In a general sense, it may be considered to cover the entire period from the beginning of the operations of departure up to the end of the operations of arrival[8]. Or, to invest the phrase "opera-

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1960 US&CAvR 269, 6 Avi. 18,111, a Cessna aircraft crashed on final approach as a result of loss of control in the turbulent wake of a USAF B-47 bomber. Turbulence is ".... a system of trailing vortices generated by the movement of heavy aircraft...." (at US&CAvR, p. 272).

7. - In Hough vs. Rapidair, Inc., 295 SW 378, 1957 US&CAvR 296, where the plaintiff took evasive action to avoid an imminent collision. Also, in a newspaper report, 26 passengers of a Pan-American Boeing 707 were injured when the airliner made a sudden dive, while descending over eastern Holland, in order to avoid a Dutch Air Force de Haviland Beaver (Manila Times, Philippines, July 27, 1962, datelined Amsterdam, July 26, 1962).

8. - This is in line with the early concept expressed by the American delegation to the CITEJA at the Committee's 11th Plenary Session, Berne, Switzerland, September, 1936 (1937 USAvR 296).

tions of departure and arrival" with some degree of definiteness, it should be construed to embrace the whole period from the moment the aircraft moves out from the parking ramp for the purpose of undertaking flight operations up to the time it returns to the parking apron at the terminal area after the completion of such flights.

By way of presenting the problem in its most simplified form, through the simple expedient of removing the chaff from the grain so to speak, the following principles may be admitted: (1) that when there is an actual physical collision between aircraft while they are stationary on the surface, either due to sudden gusts of wind or some other external factors, such incident is properly within the domain of national law as the aircraft involved are not within the phase of aircraft operations; (2) that a collision between an aircraft in flight and another which is stationary on the surface and not undergoing any of the operations connected with flight should be governed by the Rome Convention; and, (3) that a collision or interference between aircraft in flight obviously falls within the scope of an aerial collisions convention. Understandably, there may be certain objections, not necessarily basic, to these hypotheses.

The real and quite perplexing issue arises in those

aircraft collision or interference cases where both aircraft involved are in motion on the surface while in the course of flight operations, and, when such incident happens where only one aircraft is in flight and the other is in motion on the surface while in the course of flight operations. Should such situations be included within the purview of an aerial collisions convention?

Two schools of thought predominate in the discussions on this question. One supports the theory of limiting the concept of an aerial collision convention to the "in flight" phase, while the other argues in favor of giving the said convention a much wider coverage by extending its provisions to the "in motion" stage.

"In flight". - Under the provisions of the Rome Convention[9], "....an aircraft is considered to be in flight from the moment when power is applied for the purpose of actual take-off until the moment when the actual landing run ends". This definition has been adopted in various domestic laws on collision of airplanes.

The theory of limiting the application of an aerial collisions convention only when the aircraft is "in flight" posture was predicated primarily on the following conside-

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9. - Par. 2, Art. 1.

rations. Firstly, it may be argued that this concept will obviate the possibility of conflict in the application of the provisions of an aerial collisions convention on the one hand and that of the Rome Convention of 1952 on the other; Secondly, since it does not necessarily encroach on the lex loci delicti, the convention will find a much more ready acceptance from the different States; and, Thirdly[10], an aircraft might be considered to have entered a sphere peculiar only to aviation when it is "in flight" so that there is more justification in the exclusion of the application of existing laws on surface collisions involving other transport machines.

The present concept of the Legal Committee of the ICAO is to restrict the scope of aerial collisions to "in flight" and applied the definition of the Rome Convention to this term[11].

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10. - Arguments of the delegates from France and Argentina during the 10th Session of the Legal Committee, ICAO, at Montreal, Canada, in September 1954. ICAO Doc. No. 7601-LC/138, Vol. I, (Minutes), pp. 19, 20.

11. - Draft Convention on Aerial Collisions, by the subcommittee, Legal Committee, ICAO, which met in Paris from 14 to 24 March 1961, provides in Art. 1 (1), that the Convention applies when damage "results from a collision or intefference between two or more aircraft in flight". LC/SC/Aerial Collisions No. 71, 27/3/61.

Domestic laws of some countries also provide "in flight" as the sphere of the application of its concept of aerial collisions[12].

"In motion". - There are equally valid arguments supporting the thesis that the scope of an aerial collisions convention should be extended to include all cases of collision or interference between airplanes "in motion".

However, the proponents of this concept themselves cannot seem to present a common interpretation as to when an airplane can be considered as "in motion" for the purpose of applying the convention. There is the proposition that as long as an aircraft is in movement, irrespective of whether the same is connected with flight or not, the convention should apply[13]. Others submit that "in motion" should mean that both aircraft are moving on the surface

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12. - Art. 159 of the Aviation Code of Argentina of 1954, provides: "By mid-air collision shall be understood any collision between two or more aircraft in flight....even when there is no collision". Art. 35 of the Code of Civil and Commercial Aviation of France of 1935, states: "In the case of damage caused by an aircraft in flight to another aircraft in flight....".

13. - Notes on the different articles of the Montreal Draft Convention on Aerial Collisions prepared by the Secretariat, ICAO Legal Committee. ICAO Doc. No. 7601-LC/138, Legal Committee, 10th Session, Montreal, 7-24 September 1954, Vol. I, (Minutes), p. xxix.

under its own power[14]; or where both aircraft are in controlled movement, including movement caused by externally applied power[15], although, in these instances, the movement is not connected with a flight. An opinion was also expressed that the said concept should cover from the period of taxiing, immediately prior to and for the purpose of taking off, actual flight, landing and taxiing immediately after landing until the mooring or terminal parking area is reached[16]. Another idea is to apply the "in motion" concept from the moment when all the doors and hatches of the aircraft are closed for the purpose of take-off until the moment when any of the doors and hatches is

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14. - Opinion of the Scandinavian states. ICAO Doc. No. 6027-LC/124, 4th Session, Montreal, June 1949, p. 242. The same proposition was made by the Rapporteur of the sub-committee, Legal Committee, ICAO, at its 7th session, Mexico City, January 1951. ICAO Doc. 7157-LC/130, 7th Session, Mexico City, January 1951, pp. 307-308. Also the explanation of the term "in movement" in the draft convention on Aerial Collisions at the 10th session, Legal Committee, ICAO. ICAO Doc. 7601-LC/138, Legal Committee, 10th Session, Montreal, September 1954, Vol. I, (Minutes), p. 45.

15. - Proposition submitted by Mexico and the U.S. ICAO Doc. 6027-LC/124, 4th Session, Legal Committee, Montreal, June 1949, p. 242.

16. - View of the sub-committee, Legal Committee, ICAO, in connection with the proposed draft of an aerial collisions convention, in the questionnaire sent out in 1948. Ibid, p. 242.

opened for the purpose of disembarkation[17].

Before discussing which of the foregoing movements of aircraft should be the appropriate legal intendment to be given to the concept of "in motion", the arguments in support of said concept should first be appreciated.

Actually, the basic philosophy underlying this proposed concept is to give the convention on aerial collisions a much broader scope than where it will be limited to the "in flight" phase only. Several reasons are submitted to support this argument. Firstly, in order that such convention may find ready acceptance from the various States, its scope should be made to extend to the greatest possible number of aircraft collision incidents to be governed by the principles to be established therein; Secondly, statistics show that something like 60 to 70 percent of collision cases involving airplanes would be excluded if the scope of the convention is limited to "in flight", so that one of the objectives of the convention to obtain a limitation of liability for the aircraft operator for all or for as many fact-situations as possible will not be achieved if the scope thereof is restricted; and, Thirdly,

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17. - Comment of Japan on the same issue. ICAO Doc. 8137-LC/147-2, 13th Session, Montreal, September 1960, Vol. II, (Documents), p. 72.

the extention of the scope of the convention is necessary in order to give due application to an international rule as pertains a phenomenon that is especially international in character like aviation.

The term "in motion" is also found in the domestic air laws of some countries, regarding collisions of airplanes[18], and in the several drafts of a convention prepared by the CITEJA and the Legal Committee, ICAO[19].

Conclusions. - The concept of an aerial collision and the regime of the rules and regulations to be prescribed in a convention therefor should be in accordance with the economic philosophy underlying international air law to protect aviation from calamitous aerial risks. However, said protection is not intended to be extended to the en-

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18. - Art. 37 of the Brazilian Code of the Air of 1938, provides that "a mid-air collision shall be deemed any collision between two or more aircraft in motion". The Taiwan Civil Aeronautics Act of 1953, includes the period of taxiing after touchdown within its definition of "flight".

19. - CITEJA drafts of convention on aerial collisions: Doc. No. 208-bis, Feb. 1934 (5 J.A.L. pp. 478-484); Berlin Draft at its 9th Session, Sept. 1934 (6 J.A.L. 265-267); Doc. No. 257, Oct. 1935 (7 J.A.L. (1936) pp. 121-124); Doc. No. 320, Oct. 1936 (8 J.A.L. (1937) pp. 72-75),1937 USAvR 341-346.

ICAO draft: at 10th Session, Montreal (ICAO Doc. 7601-LC/138, Legal Committee, September 1954, Vol. I, (Minutes), pp. xvii-xxii).

tire gamut connected with aviation industry. Beyond the area of the attachment of "aerial risks" the rights and obligations appurtenant to aviation are no longer within the domain of air law. They fall within the exclusive preserve of the lex fora. Aeronautics becomes a distinctive phenomenon, a matter of international concern, and undertakes aerial risks, only when it is in flight posture. The same principle may be noted in the Warsaw and Rome Conventions.

Aerial risks may therefore be properly said to have attached when an aircraft is in the course of "flight operations". This term logically covers the entire period from the moment an airplane leaves the parking area, whether under its own power or not, for the purpose of undertaking a flight, up to the moment when it returns to the terminal apron after the end of such flight.

Consistent with the rationale of air law conventions, it is proposed that the application of a convention on aerial collisions should cover such accidents as have occurred during the course of flight operations. Its purview will not thus be restricted to cases where the airplanes are already "in flight", nor loosely extended to all such situations where the aircraft involved are just "in motion". The term "in motion", unless qualified, is inexact and does

not provide a definite area of application because, obviously, it is actually impossible for a collision or interference situation to happen unless the aircraft are, in one way or another, "in motion" or "in movement".

The following considerations support the foregoing proposition:

First. - The economic objective of international air law is to limit the liability of an aircraft operator in order to protect him from catastrophic aviation hazards. Such legal protective mantle may be effectively extended only when the airplane enters that phase which is exclusively the particular realm of aviation. An aircraft is legally within its own peculiar domain when it is undertaking flight operations. It would therefore infuse life and meaning to an aerial collisions convention if its scope is made to extend to all collision or interference cases while an aircraft is in the course of flight operations, or, when it has already assumed aerial risks. To extend the scope of the convention beyond the said stage or to limit its application to only certain particular segments of flight operations will be either unreasonably unwieldy for legal interpretation and implementation, or so unjustifiably restrictive and will not satisfy the rationale of such a convention.

Second. - There will be a wider distribution and absorption of liability losses or damages resulting from aerial collision or interference. The reasonable expansion of the limited liability area of an air operator for such accidents will expose such carrier to a much reduced number of unlimited liability suits, thus providing him, among others, a more definite and appreciable insurance coverage, as flight operations costs and liability risks that will be assumed can more or less be anticipated and provided for. It will also promote fiscal planning and programming and enhance the stringent requirements of flight operations - all to the ultimate benefit of the end-users of aviation enterprise.

Third. - It will provide a broader coverage in its application. A majority of cases arising out of aerial collision or interference will not be covered by the convention if its concept is limited to instances when the airplanes are already "in flight". With such expansion of the purview of the convention, it will embrace almost all collision and interference cases which occur during flight operations and furnish sufficient economic and political incentives for its immediate acceptance and ratification by States.

Fourth. - While undertaking flight operations, there

is no reasonable justification to apply different set of rules, particularly on liability, where two moving aircraft collide while undertaking flight operations, or, when the collision involves aircraft in flight, or, in cases where one of the colliding aircraft is in flight and the other is merely in motion for flight purposes. These situations are, actually and legally, aircraft collisions and should be covered by a single set of rules. Otherwise, there will result, among others, in the confusion of substantive rights of the parties involved, uncertainty in liability limits, instability in insurance coverage, dilemma on the question of the forum, etc.

Several possible objections to the foregoing propositions may be raised. It may be alleged that the same will overlap and conflict with the provisions of the Rome Convention regarding third party damages on the surface, and disturb the regime of liability provided in the Warsaw Convention. It may also be claimed that this will encroach on the domain of the lex fori and, as a possible result, encounter serious objections from the different States.

Although the Rome Convention has not yet gained the necessary number of adherence as to render the provisions thereof legally operative, this discussion must, perforce, assume that this Convention is in force.

The philosophy of the Rome Convention is to protect innocent third parties on the surface from damages caused by an aircraft "in flight", as this term is defined therein, "or by any person or thing falling therefrom...."[20].

There is no overlapping between the provisions of the Rome Convention and the proposed concept of an aerial collisions convention where the damage results in the collision or interference between aircraft in flight, or in cases involving two or more aircraft in motion on the surface. These situations are not covered by the provisions of the Rome Convention.

The conflict may be said to develop in cases when one of the colliding or interfering airplanes is "in flight" and the other is merely in motion on the surface while undertaking flight operations.

For example: An aircraft, during its take-off run, collides with another airplane which was then taxiing towards the terminal area to disembark its passengers. It may be claimed that this incident should be covered by the provisions of the Rome Convention.

To make the foregoing situation fall within the ambit of the Rome Convention may not be legally and economically

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20. - Art. 1 (1).

acceptable. From the legal standpoint, such a view will not conform to the principles of negligence or the notion of fault in tort law. It holds the operator of the plane taking off absolutely liable to the operator, crew, passengers and cargo owners of the taxiing aircraft, unless the former can prove that the accident was due to the negligence of the latter. On the other hand, the operator of the other airplane may only be held liable either subjectively or upon proof of fault.

There appears no valid argument to thus cause an imbalance in the application of liability principles in the foregoing instant. Both operators are undertaking flight operations at the time of the incident so that they are equally within that sphere of aviation where "aerial risks" are involved.

The taxiing aircraft, in the said example, cannot be considered as an "innocent third party on the surface" and thus extend to it the protection provided in the Rome Convention. Therefore, to make the said situation fall within the purview of the Rome Convention, and remove the same from the operation of aircraft collision rules and regulations will cause a serious disturbance of the equilibrium of the legal rights and duties, and the extent of liability, of aircraft operators who are both within the same par-

ticular dimension of aviation operations. It will distort, beyond inidentifiable proportions, the concept, distribution, and assimilation of air risks incidental to air transport.

In the above situation, it would therefore appear to be more logical and rational, in establishing the concept of an aerial collisions convention, to support the principle that the damages suffered by, and in, both colliding aircraft, as pertains the liability of one against the other, should fall within the scope of the liability principles prescribed in aerial collisions rule. In other words, a collision or interference accident between an aircraft in flight and one in motion while performing flight operations, should fall within the regime of an aerial collisions convention.

The issues in the above situation do not become the more complicated when third parties, or those not connected in one way or another with the colliding aircraft, are also injured or suffered damaged as a result of the said accident. Like third parties on the surface. In this instance, the provisions of the Rome Convention applies. This situation does not fit within the proposed legal framework of flight operations posture underscored as the operative legal regime in aircraft collision or interference cases.

There can be no possible conflict between the Warsaw Convention and the proposed law on airplane collisions. The former establishes the liability of the air carrier in favor of his passengers and cargo owners. The latter seeks to create the liability relationship between the operator, crew, passengers and cargo owners of one of the colliding aircraft on the one hand, against the operator of the other aircraft, including recourse actions between both operators.

In the event of a collision involving an aircraft that is taxiing towards the parking apron after having completed actual flight and another that is moving towards the take-off area, what law shall be made to apply? Will such an incident fall within the jurisdiction of national delictual law, or, under the provisions of an aerial collisions convention?

As a general proposition, it is recognized that surface collisions, whether involving motor vehicles or not, are within the cognizance of domestic laws. Valid arguments may be submitted in support of applying the lex loci delicti to such accidents. For one, it may be stated that the law of the forum satisfies the requirements of the jurisdictional "center of gravity" theory. Another is that as long as an aircraft is not yet in flight or airborne,

it has the basic nature and characteristics of any other surface vehicle, that it has not yet entered the sphere peculiar only to aeronautics, and there will be no reasonable justification to extend to such instrumentality different rights and obligations than what govern the operation of other surface vehicles.

It cannot be gainsaid that while airplanes are in motion on the surface, as in the foregoing example, they may be subject to domestic laws. However, the problem, in this particular instance, is not merely the consideration of whether incidents of such nature may, or may not, be subjected to the law of the place of occurrence, but, considering the philosophy underlying international air law, should the above collision incident be made to fall within the scope of the lex fori?

It has been established that an aircraft, while in the stage of undertaking flight operations, as the term "flight operations" has been explained, should be considered as engaged in an undertaking which, by mutual international recognition, has undeniably become the concern of all nations. As such therefore, there appears sufficient justification, in more ways than one, to enwrap this particular area of aviation enterprise within the folds of international law so that its development and increased contribu-

tion to the benefit of mankind may not be unnecessarily stunted by different, and in some cases possibly antiquated, set of local rules.

It is admitted that the provisions of a law on aerial collisions, in a convention level, will encroach in the domain of national or domestic law on delict. Most, if not all, of existing international law conventions do. Necessarily they must. One of the main purposes of private international law is to unify, or at least standardize, diverse domestic laws as pertains such undertakings or enterprises as are of international concern. Thus, reducing to a considerable degree the possibility of conflict of laws. This must particularly be so in the law on aviation, since this industry has basically lost its identity as a domestic enterprise and assumed the proportions of an international undertaking, while in the sphere of flight operations, and should be governed by special rules transcending the geographical boundaries of its register.

Concept. - The terms "aerial collision" and "aircraft collision", which have the same legal connotation, may be used interchangeably. In the formulation of the concept thereof, its generally accepted meaning, analogously considered with maritime and highway jurisprudence which were

evolved through centuries of experience and enriched by a multitude of case laws, may be adopted as guidelines. Also, as aviation occupies a field peculiarly its own, in connection with the medium wherein it operates including the manner of its operation, those several instances which have crept, and have grown to be recognized, in air law precedents should be incorporated in the concept of the convention on aerial collisions.

"Aerial collision" therefore, as a concept in private international air law, should refer to the collision or interference between two or more aircraft, while in the course of flight operations, which produce damage.

CHAPTER II

STATE AIRCRAFT AND AIR TRAFFIC CONTROL SERVICES

In General. - An aircraft collision or interference incident may involve State aircraft or may be due to the negligence or inattention of the aerodrome air traffic controller. So many such cases have been officially reported and the subject of judicial action. Therefore, the study of the legal problems involved in aerial collisions, in connection with the drafting of rules and regulations therefor in a convention level, will leave a big void if State aircraft and ground control services are not included, at least academically, in such consideration.

State aircraft. - In international air law, aircraft used in military, customs and police services, not engaged in the carriage of passengers, cargo or mail for remuneration or hire, are considered to be State aircraft[21]. This

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21. - Art. 16(3), 1961 ICAO Paris Draft Convention on Aerial Collisions, LC/SC/Aerial Collisions No. 71, 27/3/61. Also, Fitzgerald, "Liability Aspects of Aerial Collisions", Lecture given in Rome on April 15, 1960, which appeared in "Centro per lo Sviluppo Probleme Giuridici, at p. 4, citing the Munich draft convention on Offeses and Certain Other Acts on Board Aircraft (1955).

definition is generally accepted.

Two basic issues, diametrically in contrast with each other, confront the problem as to whether or not they should be included within the ambit of aerial collisions rules and regulations in an international level. One stems as a matter of economic necessity while the other arises from political precepts.

It has been pointed out that one of the aims in drafting out rules and regulations governing collision or interference of airplanes is to make it applicable into as many fact-situations as possible. This is the ideal of laws.

Statistics show that out of the total number of reported cases regarding airplane collisions[22], about forty-one percent (41%) involved State aircraft[23]. In view of this quite high incidence of involvement of State aircraft in collision accidents, the clamor to bring them within the purview of the convention on aerial collisions appears justified. This goes without saying that the economic

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22. - 19 collision cases were reported in ICAO Aircraft Accident Digests; 32 appeared as litigated cases (reported in Aviation Reports); and 1 was published in Aviation Week & Space Technology.

23. - About 4% represents collisions between military aircraft; around 17.5% relates to military and private airplane incidents; and about 19.5% involves collision between military and commercial aircraft.

posture of an air carrier regarding his liability as a result of such incidents with State aircraft can more or less be given a higher degree of certainty and definiteness. Rather than have the obligations resulting therefrom governed by the various domestic laws which are indeterminate and oftentimes do not afford protection by way of limitation of liability.

The primary concern in this respect however, is that the inclusion of State aircraft within the purview of an aerial collisions convention will be an infringement of the principle of sovereignty of States[24]. Not only will such inclusion be violative of the principle of immunity of States from suits for damages but it will be highly difficult, and almost legally impossible, to hale a State in a delictual action in a foreign court.

In view of the foregoing conflict between the economic and political aspects on the legal problems involved in aircraft operations, a view has been submitted to include State aircraft within the realm of the convention on ae-

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24. - Justice Holmes, in Keifer & Keifer vs. Reconstruction Finance Corporation, 306 U.S. 381, stated that this sovereign immunity from suits by private parties may have been adopted from the juristic theory that there can be no legal right as against the authority that makes the law on which the right depends.

rial collisions only in so far as it will pertain to damages caused to, and not by, State aircraft[25]. Thus, where a suit is filed by a State for damages arising out of a collision involving its aircraft, the operator of the other aircraft (other than State) can enjoy the limitation of liability concept, among others, which has permeated international air law. However, if domestic laws authorize an action to be filed against the State for damages caused by its aircraft in a collision accident, then the basis and extent of such liability will be the law of the forum. It may be alleged that this solution will obviate any objection regarding the infringement of the sovereign rights of States.

The above proposal was assailed on the ground that since a collision of airplanes most often results in the damage on both sides, it would be irrational to apply different liability rules in such cases: i.e., limited in so far as the claim in favor of the State aircraft is concerned, and without any prescribed limit in so far as pertains the claim against the State. It would also create legal difficulties in applying the concept of concurrent negligence

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25. - Proposition of the delegate from U.K. during the 10th session of the Legal Committee, ICAO. ICAO Doc. No. 7601-LC/138, Legal Committee, 10th Session, Montreal, September 1954, Vol. I, (Minutes), pp. 213-214.

and the principle of apportionment of liability if such a legal regime will be established[26].

The concept, which was adopted by the Legal Committee, ICAO[27], was to provide for a reservation on the part of contracting States as to whether they would desire to include their respective State aircraft, or only certain types thereof, within the scope of the Convention. They may also reserve the jurisdiction to which they may be amenable[28].

Observations. - The need for fitting State aircraft within the framework of aerial collision rules is obvious. On the other hand, the political exigencies entailed in complying with such a need is equally apparent. This study does not attempt to propose a solution to this impassé as the issue involved basic political considerations. However, in the discussions made hereon on some of the legal problems involved in aircraft collision or interference,

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26. - Comments of the delegate from Denmark during the 10th session of the Legal Committee, ICAO. Ibid, at p. 214.

27. - Art. 16, 1961 ICAO Paris Draft Convention on Aerial Collisions, supra.

28. - Proposition of the delegate from Netherlands, during the 10th session of the Legal Committee, ICAO, supra, p. 215.

they are premised on the assumption that State aircraft are included within the purview of the rules and regulations on aerial collisions. This is with the hope that States, realizing the almost imperative necessity of including their aircraft within the ambit of international air law, will find a "happy solution" that will satisfy both economic and political expedients that inherently attaches to aviation. Thus, this fast and rapidly developing industry, which is an important and potent factor in the progress of nations, may not be unnecessarily retarded in the course of its natural growth.

Air Traffic Control Services. - Unlike other types of transport vehicles, airplanes cannot stop and remain stationary in the air where such manoevre is necessary for traffic safety. Neither can they travel in reverse movement in order to avoid a traffic hazard. They can only move forward and with an average minimum speed of about 120 m.p.h. to remain airborne. Even at take-off they acquire tremendous speed, much faster than any surface vehicle, in order to play up the dynamic forces of the air and cause it to travel in its own peculiar dimension. While in flight they encounter various kinds of weather conditions, forecasted and unforecasted, so that most often navigational operation is conducted solely with the aid of

its panel instruments.

In view of the technical complexities involved in the operation of an aircraft and the existing density of traffic particularly around the terminal areas, which will be correspondingly magnified with the expected increase in the number of aircraft, the establishment of navigational aid facilities, mostly by the State or any of its instrumentalities, situate on the ground and in aerodromes, to advise, direct and control movement and flight of air vehicles and other aviation facility requirements, was found necessary.

Air traffic services have the following objectives:[29]

"1) Prevent collisions between aircraft;

2) Prevent collisions between aircraft on the manoevering area and obstructions on that area;

3) Expedite and maintain an orderly flow of air traffic;

4) Provide advice and information useful for the safe and efficient conduct of flights;

5) Notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required."

During "flight operations", it is generally accepted

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29. - Par. 2.2, Chapter 2, AIR TRAFFIC SERVICES, Air Traffic Control Service, Flight Information Service, Alerting Service, Annex 11 to the Convention on International Civil Aviation, 4th Ed. May 1960, p. 9.

that the captain or pilot of an aircraft is ultimately responsible for its safety. However, in the discharge of this responsibility he must often rely, and by sanction is required to rely, on those who provide or operate air navigation facilities in the terminal areas or in aerodromes for the operation and control of his aircraft. When the airplane is already within the control zone or area of the ground control facilities, the physical direction of such vehicle is taken away from the pilot and assumed directly and actively by the air traffic controller. The pilot simply automates, most often blindly, the controls of the aircraft pursuant to instructions from the control tower. Particularly where the aircraft is navigating under instrument flight rules (IFR), or, solely with the aid of instruments on board in case, for one, of limited visibility. If a collision or interference incident occurs while one or both of the aircraft involved are under such direction and control of the air traffic controller, as indeed it has happened in so many previous cases, may such agency be held liable for damages resulting from its negligence or fault or inattention?

Although the rendering of air traffic control services has been considered as purely gratuitous as a government undertaking yet, when there is a transfer of "control"

of the aircraft from its pilot to the ground controller, it has been held that negligence rules in tort law applies against such agency[30]. It is not exempt from the duty of exercising reasonable care in giving instructions, permissions or advice as may be necessary to promote the safety of the aircraft within their area of responsibility and which the person to whom they are given is legally bound to obey or obtain[31].

The problem of immunity of a State from suit has been expressly waived in some jurisdictions. In the United States, the Federal Tort Claims Act of 1946 provided for such waiver from suits regarding the tortious acts of its agents, except where such government employee is perform-

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30. - Marino vs. U.S., 84 F Supp 721, 1949 USAvR 308, 2 Avi. 957, where the court held the ground controller liable for the injuries suffered by a workman when an army aircraft which was taxiing out for take-off struck the tractor where he was working. The court did not overlook the fact that the control tower was a busy place, ".... but the repairs to the surface of the runway were important enough to the Air Service to call for the exercise of reasonable care to guard against such accident as took place, and it is my considered view that such reasonable care was not exercised....". Also: U.S.A. vs. Douglas Aircraft Co., Inc., et al., 1948 USAvR 466; Georger, Adm'x vs. U.S., 2 Avi. 14,859, 1949 USAvR 153; Air Transport Associates, Inc. vs. U.S., 4 Avi. 17,613, 1955 US&CAvR 98; Eastern Airlines, Inc. vs. Union Trust Co., et al., supra.

31. - Shawcross and Beaumont, "Air Law", at pp. 529-530.

ing a discretionary function with due care[32]. With the passage of the Crown Proceedings Act, 1947, in England, the Crown was subjected, as if it were a private person, to liability for certain classes of wrongs. In the Philippines, the State, while in the exercise of its governmental functions, as distinguished from its proprietary interests, may not be sued without its consent, which consent may be evidenced either by special law covering a special subject matter or by a general law expressing the terms on which such consent is given[33].

Writers in air law also support the idea that where damage or injury results from the negligence or fault of the air traffic controller, including those arising from aircraft collision or interference cases, they should be

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32. - Sec. 2680 of Title 28 of the U.S. Code provides:
"The provisions of this chapter and Sec. 1346(b) of this title shall not apply to -
(a) Any claim based upon an act or omission of an employee of the Government, exercising due care, in the execution of a statute or regulation, whether or not such statute or regulation be valid, or based upon the exercise or performance or failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the Government, whether or not the discretion involved be abused."

33. - Tañada and Tolentino, "Constitution of the Philippines", Vol. II, 4th Ed., pp. 1064-1071.

held liable therefor[34].

As a result of the present, and impending, development of airplanes, in relation to speed, among others, the responsibility of air traffic controllers have now reached beyond national boundaries, so that the necessity of its being encompassed by international rules is accepted. This includes the liability incidental thereto. Even now, "a jet aircraft bound for Zurich would commence its letdown around Luxemburg. An aircraft approaching Buenos Aieres would probably come under air traffic control somewhere over Uruguay or even Brazil."[35] The advent of supersonic aircraft will further magnify this situation to almost unimaginable proportions. Consequently, among other things, this will result not only in conflict of jurisdiction but also a diversity of damages that may be awarded[36]. As far as appreciating the degrees of responsibility is concerned, there appears to be no rational nor

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34. - Eastman, "Liability of Ground Control Operator for Negligence", 17 J.A.L.C. (1950), 170, 178; also Shawcross & Beaumont, supra.

35. - Comment of the delegate from Switzerland during the 13th Session of the Legal Committee, ICAO. ICAO Doc. No. 8137-LC/147-1, 13th Session, Montreal, September 1960, Vol. I, (Minutes), p. 171.

36. - Cook, et al. vs. U.S.A., supra.

legal basis for making a distinction of liability, particularly in the limitation thereof, between a case where negligent directions were given by the control tower and where the pilot or operator negligently disobeyed such instructions, which resulted in the collision incident.

Observations. - Again, the inclusion of air traffic control agencies within the purview of a convention on aerial collisions presents the same political problem as that involving State aircraft. However, this is not only the reason that may be presented against such inclusion. Although said agencies play an almost dominant role in air accidents involving collision or interference, yet its responsibility extends not only to incidents of such nature. They have dominated almost all aspects of aircraft operations, from whence liability may equally flow.

There is ample justification to the concept that although their liability is recognized in air collision cases, where their fault or neglect has been shown, they should not be included within the context of a convention thereon. Private international air law basically seeks to extend economic protection to an air carrier. Air traffic services do not fall within such concept. However, the liability rules that should govern air traffic services, in order to develop to a considerable degree aviation

jurisprudence, should be contained in a specific convention particularly relating to the rights and liabilities of the said agency. Such study should be given high priority by the Legal Committee, ICAO before the legal problems involved become more complicated.

This study has also included air traffic control services and the legal problems attaching thereto.

CHAPTER III

PRINCIPLES OF LIABILITY

In General. - Aircraft liability flows from the operation of aircraft or aerial navigation. There were two theories advanced during the early discussions in international air law on the matter[37]. First, the application of the common law rule that there must be proof of fault or negligence in order to hold an aircraft operator liable. He is relieved from such liability if damages resulted from an accident or force majeure. Second, the adoption of the principle of objective responsibility or absolute liability, based on the theory of risk, in which case the owner or operator of an aircraft is obliged to compensate damages resulting from air mishaps, except if the person injured was himself at fault.

The rationale of liability principles in air law

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37. - These propositions were discussed in the international air law conference in Verona in 1910. Almost all countries followed the objective liability principle, like the German law of 1922, the Swiss law of 1920, the British law of 1919, and others (Hungarian, Danish, Finnish, Norwegian, Czech, Russian, etc.). Digest by Fiebiger of "Basic Principles of Aircraft Liability", by Ambrosini (which appeared in "Il Diritto Aeronautico", June 1928-October 1930), Vol. 3, J.A.L.C. (1932), p. 150, at pp. 150-151.

stems primarily from economic considerations. One of the objectives is to give the greatest possible protection to persons using the aircraft and to others who may be injured as a result of air operations. It was also desired not to impede the development of aviation industry by imposing severe standards of liability[38].

The effort to satisfy the foregoing considerations gave birth to the adoption of another principle - a presumption of fault - following the concept of res ipsa loquitur which is applied in the law of torts and, as a quid pro quo, with a limitation of liability.

There are at present three systems of legal liability, which may be applied either singly or collectively, in an aviation accident.

1. - Liability based solely on fault. - To render a person liable for injury or damage, evidence of his negligence or fault which caused said injury or damage must be established. This is the general rule on liability in tort law, which has not yet found official application in international air law.

The objection to this principle is that it will be highly difficult for a claimant to prove the negligence

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38. -,Ibid.

of the pilot or aircraft operator which caused the injury or damage[39]. Aircraft accidents are most often fatal. Therefore, there are seldom, if at all, living witnesses from the aircraft who can testify as to how, much less why, the accident happened[40]. In non-fatal acci-

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39. - The difficulty of proving negligence of the operator in cases of air accidents was discussed in Adler's Quality Bakery, Inc., et al. vs. Gaseteria, Inc., et al., supra.

Sweeney, "Is Special Liability Legislation Essential", Vol. 20, J.A.L.C., 166, 171, observes the following difficulties as confronting the plaintiff in aircraft negligence suit:

1) The operator has control of all records and physical equipment and properties involved. A plaintiff has to resort to the legal processes of discovery to determine whether he has a cause of action and to organize his case;

2) It takes time, understandably, before a plaintiff can organize his suit and, in the meantime, essential physical evidence is handled or moved so as to be difficult and expensive for the plaintiff to examine;

3) Air accidents are usually fatal and therefore there are few "inside" witnesses;

4) "Outside" witnesses areascarce as the airlanes are not watched by as many pairs of eyes as the highways;

5) Aircraft operation is highly technical;

6) Usually physical evidence of the accident is destroyed; and

7) Track followed by an aircraft cannot be reconstructed as easily as the course in a highway.

40. - " .... it is a tragic characteristics of airplane crashes that the accident itself frquently destroys all evidence of the cause and kills the witnesses who might have knowledge of the event". Minnesota, J.C., in Lange, et al. vs. Nelson-

dents, the testimony of the pilot and the other members of the crew are not immediately available to the plaintiff, while the surviving passengers will not know the cause of the accident as they are cocooned away from the cockpit. Also, the evidence which is legally competent to establish the suit is highly technical in nature and usually beyond the ken of lay witnesses.

The argument of paucity of evidence in the application of this principle is alleged to be no longer binding. Today, aviation is possibly the only industry where there is kept an almost complete record[41]. When an acci-

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Ryan Flight Service, Inc., 7 Avi. 17,226, 17,227. Comparative statistics show that where are more fatalities resulting from an aircraft collision than from other air accidents. Also, Sweeney, supra.

41. - Orr, "Fault as the Basis of Liability", Vol. 21, J.A.L.C. (1954), p. 399, 412.

There are records about its flight operation, maintenance of aircraft and the appurtenances thereto, including a daily round-the-clock atmospheric data. There are records about passengers and cargo. Log books are kept on engine performance, including all its mechanical and electronic devices, while the plane is in flight. The instructions that a pilot receive from the ground air controller, from the moment the aircraft is cleared for flight, while on flight, and upon landing, are all recorded and preserved in tape. Records are also kept on the scheduled life-time of engines and its spare parts, and on periodic and routine flight maintenance checks.

dent happens, the same is subject to a rigid and thorough investigation by government experts and airline representatives who are highly trained and skilled technicians along the different technological aspects of aircraft behaviour, motor and metal stresses, weather conditions, and such other factors as may be reasonably expected to affect flight.

With the records kept in aviation and the accident inquiries conducted, which are all available to interested parties, the cause of such accident can now be determined[42], more or less, with some degree of exactitude,

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42. - Simpson, "Use of Aircraft Accident Investigation Information in Actions for Damages", Vol. 17, J.A.L.C. (1950), 283, 286, stated that the possible reason why a CAB investigation inquiry in an aviation accident should be excluded in an action for damages is that the findings of the Board regarding the probable cause of the accident will most likely influence the average juror, thereby indirectly making the Board ".... usurp the function of judge and jury and decide civil liabilities".

It was held in Universal Air Lines vs. Eastern Air Lines, 188 F (2d) 993; 1951 USAvR 20, that ".... where the CAB investigator is the sole source of evidence reasonably available to the parties with regard to the precise position and condition of the aircraft after a disaster", it is incumbent upon the Civil Aeronautics Authority to make his testimony available by deposition or in person. In Lobel vs. American Airlines, 192 F (2d) 217, a CAB investigator's report was admitted by the court in conjunction with his direct testimony in a deposition. Said report contained no opinions or conclusions as to the possible cause of the acci-

and the presence or absence of negligence can be established[43]. The adversary parties therefore, may be thus provided with so much information about the accident with less investment, cost-wise and time-wise[44].

It was also claimed that this liability concept will discourage claims without merit and those that are excessive can be better controlled[45].

However, it may be argued that private resources may not withstand the tedious and extensive investigation which

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dent or the defendant's negligence.

Also, from the "Report to the President of the National Association of State Aviation Officials (NASAO), from the Special Study Committee", Vol. 9, J.A.L. (1938), 679, 681, it was shown that accident investigation boards "have worked out a very clear and reasonable hypothesis as to why the accident happened."

43. - Universal Airlines, supra, at USAvR, pp. 25-26; United Air Lines, Inc. vs. U.S.A., 186 F. Supp. 824, 1961 US&CAvR 149, 153; Lobel, supra. Also Simpson, supra, at pp. 287-288; and "Disclosure of Accident Investigation Information", CAB, Procedural Regulations, Part 311, September 15, 1950, 1952 USAvR 126, 130.

44. - Accident investigation by the government agency concerned is now attended by lawyers with adverse interests and thus such investigation "... consistently provides so much information ... at the small cost of purchasing the record, the price of duplicate exhibits, and the investment in time spent at the proceeding to hear what witnesses have to say and to observe their demeanor while testifying." Billyou, "Air Law" (1963), p. 378.

45. - Orr, supra, p. 418.

is necessary to determine the cause of the accident[46]. Also, since the reconstruction of the accident is not made thru the direct testimony of witnesses thereto but as a result of a subsequent investigation by highly technical men in the technical art of aviation, courts, who have always tried to guard zealously and sensitively their prerogatives of judicial discretion, may not be prone to readily accept opinions and conclusions of such investigators.

2. - Absolute liability. - Absolute liability or objective responsibility is based on the principle of risk[47] which an air carrier assumes, and holds him liable for damages and injuries caused in the operation of such carriage regardless of whether or not he is at fault[48].

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46. - Billyou, supra, at p. 377, citing Miller, "Government Records and Reports in Civil Litigation", (1961) Insurance Counsel Journal, 442, 452-455.

47. - In the Code of Air Law drafted by the Comité Juridique International de l'Aviation at Prague in 1922, the general principle applied is that liability is based on risk. Prof. Ripert "seems to indicate that these risks may arise from 'fautes' of the crew or damages to the aircraft which are not preventable...." and even classifies an aircraft collision as a "risk of the air". Cha, "The Air Carrier's Liability to Passengers in International Law", Vol. 7, A.L.R., 26.

48. - This principle operates on the "mere proof of the fact that damage exists and that it was caused by

This principle is in line with the current social trend, similar to the philosophy of the workmen's compensation laws[49]. Special protection was meant to be extended to innocent victims of aeronautical activity. The requirement that the operator should pay damages is not to convict him of guilt but simply to make him compensate an injury[50] which he caused.

In the Adler's Quality Bakery case[51], the problems attendant to the proof of fault were cited as the justification for absolute liability. It was stated that proof of negligence, for many different reasons, is difficult to obtain and that even if such proof is obtainable, the expenses involved is frequently very high.

The criticism to this principle stems from the legal and economic viewpoints. Since this is primarily based on the theory of risk, it is claimed that, at least as far as the aircraft passengers and cargo owners are concerned,

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the aircraft". Ambrosini, "Liability for Damages Caused by an Aircraft on the Ground: A Proposed International Code", Vol. 3, A.L.R., p. 3. Also, Cha, supra, at p. 26.

49. - Sweeney, supra, at p. 183.

50. - Digest by Fiebiger, supra, at p. 150.

51. - Supra, at Avi., p. 17,956.

they have equally assumed the risk attendant to flight[52], and therefore should equally share in the liability burden resulting therefrom. Air risks should not be imposed solely upon the operator but also upon those who have chosen air travel.

It was also pointed out that by holding the operator absolutely liable, he will be at the mercy of the claimants, thus promoting litigation and inviting the presentation of false and imaginary claims. And, as a matter of experience, since the issue involved in a suit for damages is necessarily one of fact, the claim is referred

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52. - Wilson and Anderson, "Liability of Air Carriers", Vol. 19 J.A.L.C. (1942), 281, 294-295, citing Allison, Adm'r. vs. Standard Air Lines, Inc., (1930 USAvR 292, 1933 USAvR 92), and Wilson vs. Colonial Air Transport (278 Mass. 420, 180 NE 212), where it was held that an airplane passenger may be considered to have assumed all the ordinary and usual perils incident to this mode of transportation, except risks resulting from improper, careless or negligent operation (Law vs. Transcontinental Air Transport Inc., 1931 USAvR 205; Stoll, Adm. vs. Curtiss Flying Service, Inc., 1930 USAvR 148, 1932 USAvR 163); nor to patent defects in aircraft construction (State of Maryland ex rel Beall vs. McLeod, 1932 USAvR 94); and Cohn vs. United Air Lines Transport Corp. (17 F. Supp. 865), where the court, inter alia, stated that ".... it is quite evident that those who choose air-ways for transportation must in many instances be held to have themselves assume the risk." Also, in Hope vs. United Air Lines, Inc., 1937 USAvR 179, it was held that passengers assume the risk of rough air.

to a jury who are "often unmindful of awarding, by way of damages, other people's money"[53]. The effort towards an amicable or extra-judicial settlement of such claims will be discouraged, thereby increasing airline operations costs.

Apprehension was even expressed that the burdens imposed on aviation industry may be so great and severe as to seriously impede its development[54]. Thus, as a quid pro quo, when this principle finds application in air law, the liability of the operator is limited.

The only defense available to the operator is where the injured party was himself at fault.[55]

This is the principle embodied in the Rome Convention of 1952 as pertains the liability of an aircraft operator for damages to third parties on the surface.

3. - Presumed liability. - In view of the technical advancement of aviation industry, airplanes are no longer considered as an inherently dangerous instrumentality[56]

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53. - Orr, supra, p. 419

54. - Digest by Fiebiger, supra, p. 152.

55. - Ibid.

56. - In Larmica & Wood vs. United Air Lines (223 N.Y.S. (2d) 692, 1961 US&CAvR 571), Cone, J., stated, inter alia, after discussing the previous theory that flying was an extra-hazardous activity as held

It is generally felt that aviation accidents will not happen in the absence of fault, whether in the operation or maintenance of the aircraft[57]. Since these particular aspects of aviation are within the exclusive control of the operator, then it is but just and reasonable to hold him negligent, and therefore liable, for injuries resulting therefrom. However, this presumption is not conclusive.

The principle of presumed liability in international air law follows the same concepts of the doctrine of res ipsa loquitur. This is a rule of evidence which allows an inference of negligence where the instrumentality which caused the injury is in the exclusive possession and control of the person charged and that the accident does not

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in Grille vs. Swan (1928 USAvR 53) and other subsequent cases, that:

> "...., in the light of the technical progress achieved in the design, construction, operation and maintenance of aircraft generally, that flying should no longer be deemed to be an ultra-hazardous activity, requiring the imposition of absolute liability....".

57. - The Larmica & Wood case, supra, also cited Boyd vs. White (1954 USAvR 429, 128 Cal. App. (2d) 641, 276 P (2d) 92), where it was held that current trends in court decisions show that a plane is not an inherently dangerous instrument if properly handled by a competent pilot exercising reasonable care.

ordinarily occur without negligence[58]. The reason, inter alia, for the application of the res ipsa rule in aviation cases is the technical nature of aircraft operation, including the play of weather forces on the plane and the physical stresses that a pilot undergoes while on flight "baffle the average lay ground witnesses and render him incapable of establishing fact proof with any appreciable degree of certainty or exactness"[59].

For res ipsa to apply in a particular case, the following conditions must concur[60]: (1) that the instrumentality causing the damage or injury was under the management and control of the defendant; and, (2) that the accident is such as in the ordinary course of things does not happen if those who have management use proper care.

The doctrine of res ipsa loquitur is also applied in

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58. - Schneider Ex'r. vs. U.S., 1961 US&CAvR 112; Shawcross & Beaumont, supra, pp. 320-321.

59. - Osterhout, "The Doctrine of Res Ipsa Loquitur as Applied to Aviation", Vol. 2, A.L.R., (1931) 9, 10-11.

60. - U.S. vs. Johnson, 1961 US&CAvR 268, 270, citing inter alia, Prosser, on Torts, 2d E., 211; also Salmond on Torts, 13th Ed. (1961), by Henston, at p. 453, citing Scott vs. London & St. Katherine Docks Co., /1865/ 3 H. & C. 596, 601; Capital Airlines, Inc., vs. Berger, Adm'x, 6 Avi. 18,147, also citing the Scott case, supra.

admiralty and highway accidents[61].

On the other hand, courts have equally held that in an aviation accident, it may be presumed that the pilot of the aircraft involved acted with diligence and due care "because of human instinct of self-preservation and the disposition of man to avoid a personal harm", and which presumption "rises to the dignity of evidence"[62].

This theory removes the burden of proving fault from the plaintiff and shifts to the defendant the onus of proof of absence of neglect. The existence of fault may be successfully disputed by the operator by showing that he has taken necessary measures[63] to avoid the accident.

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61. - Roberts & Gibb, "The Law of Collision on Land", 2d Ed. (1929), at p. 12; Marsden, "Collision at Sea", 10th Ed. at p. 444, citing the Scott case, supra, and Byrne vs. Boadle /1864/ 2 H. & C. 722.

62. - Eastern Airlines, Inc. vs. Union Trust Co., et al. (U.S.C.A. - DC, 1955) and its companion case, U.S. (C.A.A.) vs. Union Trust Co., Ex'r of Miller, 1955 US&CAvR 1, 35; citing Atchison, T. & S. F. Ry. vs. Toops, 281 U.S. 351, 356 (1930); Looney vs. Metropolitan R.R., 200 U.S. 480, 488 (1906); Campbell vs. District of Columbia, 64 App. D.C. 375, 78 F (2d) 729 (1935); Baltimore & P. R. R. vs. Canington, 3 App. D. C. 101 /1894/; Bratt vs. Western Airlines, 1948 USAvR 500, 169 F (2d) 214, 216; Northern Pac. R.R. vs. Spike, 121 F 44, 47; and U.S. vs. Fotopulos, 180 F (2d 631, 637.

63. - Cha, supra, pp. 42-43, cited Prof. Ripert's opinion that a carrier has taken the "necessary measures" if he "has verified the conditions of na-

As in the objective liability principle, the extent of liability of the operator is also limited.

It has been argued that presumed liability will result in much higher claims cost than where liability is based solely on fault. This will mean that suits will be instituted even in cases without merit in the hope that a symphatetic jury or court will make an award anyway, or, for the nuisance value of the suit with the expectation of an unmerited settlement from the air carrier[64].

This is the principle applied under the Warsaw Convention of 1929[65].

Liability Principles in Aircraft Collision. - The claims which may be instituted as a result of an aircraft collision may be the subject of the application of differ-

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vigability of an aircraft", and "has chosen a pilot and crew who are provided with regulatory certificates evidencing their competency."

This is the defense provided for the air carrier in Art. 20 of the Warsaw Convention. Numerous Warsaw cases have been decided along this line, as in American Smelting & Refining Co., et al., vs. Philippine Air Lines Inc., of Manila, 1954 USAvR 221-228, 4 Avi. 17,413; Rugani vs. K.L.M. 1954 USAvR 74-77, 4 Avi. 17,257; Palleroni vs. S.A. de Navigazione Aerea (Italy), Revue Générale de Droit Aerien, 1937, 310-317; among other cases. See also, Goedhuis, "National Legislations and the Warsaw Convention", (1937), at pp. 219-221.

64. - Orr, supra, at p. 418.

65. - Arts. 17 thru 19 of the Warsaw Convention.

ent liability principles.

During the early studies on a draft convention on aerial collisions undertaken by the CITEJA and the ICAO Legal Committee, it was proposed that liability should be based on proof of fault of the operator or by that of his servants or agents whether or not they were acting within the scope of their authority.

Unlike other airplane accidents, liability in case of collision of aircraft involves more than one operator and in several instances another agency removed from the airplane, and so many suits of various categories may be instituted by persons whose relationship to the aircraft involved are equally diverse and different.

(1) Action by the passengers and cargo owners against the operator, his servants or agents, of the other aircraft. - Several propositions may be made regarding the liability principles to be applied in a suit of this nature.

It may be claimed that the plaintiff must be required to prove the negligence of the defendant before he can be entitled to an award for damages, since the cause of action is delictual. This concept may be supported further by the argument that since the claimant has chosen to travel by air it may be presumed that he has also accepted

the risks incident thereto and he need not be placed in a more advantageous position than the operator in the determination of his suit, following the general rules of negligence in tort law.

On the other hand, the claimant may insist in the application of the theory of absolute liability or objective responsibility on the ground that he is not in any manner whatsoever connected with the defendant's operations so that, to all legal intents and purposes, he may be classified as an "innocent third party" who suffered injury as a result of the defendant's operations.

Both assertions are tenuously arguable. However, it appears to be more in consonance with existing and recognized principles in international air law to apply the doctrine of presumed liability in suits of this type. And the concept of res ipsa observed. If at all, the defendant is obviously in a much better position to know and explain the cause of the accident because the instrumentality involved is under his exclusive possession and control. Or, he has, at least the burden of proving that the aircraft was under the direction of another agency as the air traffic controller, or that the collision or interference was due to the fault of the other aircraft.

All the factors involved in the consideration of

this particular issue fits into the requirements on the application of the doctrine of res ipsa loquitur, or the shifting of the burden of proof. To a certain degree, in observing the philosophy of international air law, it may also be stated that where liability should be based on proof of fault in the instant case, there would appear to be no quid pro quo basis for limiting the liability of the defendant operator.

(2) Action by the passengers and cargo owners jointly and severally against his aircraft operator and the operator of the other aircraft, including their servants or agents. - As a rule, the claim for damages, in case of an aviation accident, filed by the passenger and cargo owners against the operator and/or his servants or agents of his aircraft is governed either by the provisions of the Warsaw Convention, where the flight is "international" according to the provisions thereof, or by the lex fori, in cases of "domestic" flights. However, it is not uncommon that the suit, in an action for damages resulting from a collision or interference, is filed jointly and severally against both operators, including their servants or agents of the planes involved in the accident[66].

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66. - It is a recognized rule that where the accident may

The procedure of impleading both carriers finds justification in both procedural and substantive laws. It joins and consolidates into one proceedings all parties-defendant to the transaction, and simplifies the dispositive portion of the judgment to be rendered thereon, at least in so far as rationalizing and stabilizing the award of damages according to their respective degrees of fault, as established by the evidence presented. As a matter of practical expediency in pleadings in favor of the interests of the plaintiff, it is always the better course of action to join both operators in the suit as joint and several defendants, as this often results in each one of them proving that the damage resulting from the accident was due to the other's fault. Also, the recovery in case of a favorable judgment may be made against either one or both defendants, with their respective solvency as the criterion.

Although technically the basis of the cause of action against the plaintiff's carrier is contractual, and delict-

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be attributable to the negligence of two persons, the plaintiff may recover from either or both of them. Kendrick etc., et al. vs. Piper Aircraft Corp., 6 Avi. 17,352, 17,357, citing Chadwick vs. Popadick, 390 Pa. 511, 515-516, 136 A 2d 87, 90 (1957); Brown vs. Ambridge Yellow Cab Co., 374 Pa. 208, 212-213, 97 A 2d 377, 379 (1953); Kelly vs. Locke, 186 Ga. 620, 198 SE 754, 760-761 (1938); Harrison vs. League, 93 G. App. 718, 93 SE 595, 598-599 (1956).

ual as pertains the suit against the operator of the other aircraft, it may be reasonably assumed, or it may be expressly charged on the face of the complaint, that the collision or interference was brought about by the fault or negligence of either or both operators.

The above considerations will lead to the conclusion that the principle of presumed liability and the res ipsa doctrine should also apply in this case, and along the same lines as in the preceding sub-paragraph.

(3) Action by the operator and flight personnel against the operator and/or the servants or agents of the other aircraft. - It is readily obvious that the concept of presumption of negligence in favor of the plaintiff cannot apply in this instance. There can equally be no valid reason to hold the defendant absolutely liable for the resulting damages.

Both planes have "active" participation in the collision incident. They, more particularly than anybody else, know, or can be reasonably charged with knowledge of, the cause of the accident. It cannot be assumed, for want of factual or legal basis, that the incident was due to the lack of care or duty on the part of one or the other. Therefore, a presumption of negligence cannot be established in favor, or against, either one of them.

In filing the suit by one operator against the other, of the aircraft involved, it may be assumed that by virtue of an ascertainment of the facts prior to the filing of the charge, the plaintiff has already made an assessment regarding the fault of the defendant which resulted in the collision or interference and caused him damages. The onus of proving such negligence should be on the plaintiff.

In suits of this nature, the principle of liability based solely on proof of fault should apply. However, in the course of the litigation, more often than not, the blameworthy conduct which caused the accident may be attributed to both, or all, parties involved, in comparative degrees[67], so that liability papers proportionately.

The same principle should apply where the suit includes, or pertains to, recourse actions.

(4) Action against the air traffic control agency. - It is admitted that an interesting legal problem is presented regarding the principle of liability to be applied where the action for damages resulting from aircraft collision or interference may be charged against the fault or negligence of the ground air traffic controller. This

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67. - Comparative negligence is discussed infra.

is brought about, at first blush, by the following reasonably rational assumptions: (a) that where the action is instituted by passengers or cargo owners of the planes involved in the accident, the principle of presumed liability should be applied because the plaintiffs in the action are in no way connected with the handling of the instrument and facilities utilized in discharging the duty of traffic control of the aircraft involved; and, (b) that where the action is instituted by either or both of the operators of the planes which collided or interfered with each other, the principle of liability based solely on proof of fault should be applied because both parties know, or may reasonably be charged with knowledge, whether or not the tower instructions were negligently given, or that it was the negligent compliance to such instructions that brought about the incident.

In the formulation of a legal regime regarding the liability of air traffic control agencies in connection with aerial collision or interference, it appears to be highly objectionable, and may justifiably cause non-adherence from States when such rules are translated in a convention level, if the said agency is subjected to different systems of liability principles.

Regarding this problem, it is proposed that the prin-

ciple of liability based solely on proof of fault should be applied in suits for damages against the air traffic control agency. As discussed above, this proposition finds sufficient justification in actions filed by the operators of the aircraft involved in the accident. The problem area is therefore localized in connection with suits filed by those other than the said operators and in which cases the principle of presumed liability may justifiably be claimed.

One of the reasons underlying the principle of presumed liability, and the application of the doctrine of res ipsa loquitur for that matter, is the inaccessibility of proof of negligence to the plaintiff. Or, that the defendant, who is in control of a certain instrumentality is better situated to explain, and is thus called upon to do so, how and why a certain accident involving said instrumentality happened. However, in aviation, particularly in discharging the duties of air traffic control, such evidence of presence or absence of neglect on the part of such agency is both complete and easily accessible to the parties. All information received by the control tower from the aircraft within the span of its control area and each and every instruction or direction it issues out, whether advisory or obligatory, to the pilots of such aircraft are all recorded and even preserved in tape. In other words,

the factual bases in determining whether the accident was due to the neglect or fault of the air traffic controller are immediately available, whether directly or through the process of a writ. Therefore, the rationale in the application of the presumption of liability principle or the doctrine of res ipsa loquitur in the instant case is thereby rendered ineffectual.

It is likewise submitted that where the principle of liability based solely on proof of fault is applied to air traffic control agencies, the private international air law on the matter, inter alia, may be more readily acceptable to the contracting States.

(5) Action by or against a State aircraft. - The same principles as pertains aircraft, which were discussed above, should apply. It is reiterated that this proposition is predicated on the assumption that State aircraft are already within the scope of an aerial collisions convention.

(6) Action by a stowaway. - A stowaway is legally considered as a trespasser in his aircraft and cannot recover damages[68] against his operator in case he suffers

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68. - ".... A stowaway on a vehicle is one to whom no duty can be owed because is not known to be on it". He is deemed to be a trespasser and cannot recover damages in case of accident. Charlesworth on Neg-

injury or damage as such in an aircraft accident. However, from the point of view of the other aircraft involved in the collision or interference, a stowaway is not such a trespasser in law. There is no privity nor relationship between him and the operator of the other aircraft which collided with the plane wherein he was a trespasser.

Where a stowaway suffers injury or damage as a result of an aircraft collision or interference, he should be made to enjoy the same rights, as far as compensation for the damage he has thus received is concerned, as a regular passenger or any other person, regarding the action that he may institute in connection therewith against the operator of the other aircraft. Delictual actions do not require the same privity or relationship demanded in contractual, or even quasi-contractual, suits.

In case an action is filed against the operator of the other aircraft, the principle of presumed liability should be applied in favor of the stowaway-plaintiff.

The foregoing propositions do not include actions instituted by third parties on the surface who suffered damages as a result of a collision or interference of air-

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ligence, 3rd Ed. p. 115, citing Railway Grand Trunk Ry. of Canada vs. Barnett /1911/ A.C. 361.

craft. They should be considered exceptions to the provisions of the law on aerial collision or interference, and should fall within the purview of the principle of absolute liability underlying the Rome Convention. Although arising from an aircraft collision or interference, an action for damages instituted solely against his own carrier should be governed by the provisions of the Warsaw Convention, as amended by The Hague Protocol of 1955.

It may not be unlikely that the aircraft manufacturer may be included as a party defendant in aircraft collision cases. However, it is highly doubtful whether such suit will be successful. An aircraft collision or interference essentially results from causes which are alien and dissociated from manufacturing defects. Assuming, for example, that such an accident may be traced to faulty calibration of a certain electronic gadget on board the airplane or due to the malfunctioning of a mechanical appurtenance, the action against the manufacturer of said parts, if at all, may be instituted by the operator of the aircraft where such deficient instrument or mechanism existed in accordance with the law of the forum.

CHAPTER IV

BASIS OF LIABILITY

In General. - The general principle that liability is based on fault or negligance is recognized in both the civil[69] and common law[70] jurisdiction[71].

When aircraft collide, whether in the air or on the surface, or interfere with each other, thereby causing damages or injuries, the liability arising from such incidents are usually measured in terms of negligence[72]. The ordinary rules of negligence and due care, which are the rules of law applicable to torts, have been applied in the interpretation of fault or neglect in aircraft opera-

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69. - Art. 1382, French Civil Code; Art. 923, German Civil Code; Art. 1053, Quebec Civil Code; Art. 134, Polish Code of Obligations, 1933; Art. 2176 Philippines Civil Code. In almost all the Latin-American countries, this principle is also recognized. Grant, "Air Carrier's Liability in Comparative Law - Latin America", Vol. 7, A.L.R. (1936) 292, 296-297; Gardner, "Comparative Air Law", Vol. 20, (1953-1954), J.A.L.C., p. 49.

70. - Gardner, supra, at p. 40.

71. - Orr, supra, at p. 402.

72. - Shawcross & Beaumont, supra, par. [4577], p. 423; Nokes & Bridges, "The Law of Aviation", (1930), at p. 104.

tion[73].

Courts have consistently applied this standard in the reported cases on aircraft collision and interference in order to determine liability and measure the damages to be awarded.

Negligence. - This term may be defined as an act or omission which a reasonably prudent man[74] would do, or would not do, under a particular situation[75].

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73. - Shatturk & Chesson, d/b/a/ Prince Aviation Co. vs. Mullen, 1960 US&CAvR 96, 115 So. (2d) 597, 6 Avi. 17,713, citing Peavey vs. City of Miami, 146 Fla. 629, 1 So. (2d) 614, 1 Avi. 955; 6 Am. Jur. 16, Aviation Sec. 23; also Parker vs. Granger, Inc., 4 Cal. (2d) 668, 52 P (2d) 226, 1 Avi. 590.

74. - Salmond on Torts, 13th Ed. (1961), by Henston, at p. 429, citing Lord McMillan in Glasgow Corp. vs. Muir, /1943/ A. C. 448, 457, who said:

> ".... the standard of foresight of a reasonable man, eliminates the personal equation and is independent of the idiosyncracies of the particular person whose conduct is in question. Some persons are by nature unduly timorous and imagine every path beset by lions; others, of more robust temperament, fail to foresee or nonchalantly disregard even the most obvious dangers. The reasonable man is presumed to be free both from over-apprehension and over-confidence....".

75. - So many definitions have been made of negligence. However, the definition made by Baron Alderson, J., in Blyth vs. Birmingham Waterworks Co. /1856/, 11 Ex. 784, which is:

> ".... the omission to do something which a

It connotes a breach of a pre-existing obligation[76] involving a failure to exercise a legal duty to take care[77], with the exercise of reasonable foresight and vi-

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> 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."

has been quoted by the different writers in tort law and in the decisions of courts in delictual actions.

76. - Planiol, Civil Law Treatise (An English Translation by the Louisiana State Law Institute (1939) Vol. 2, part i, (11th Ed.), at p. 464. It is not enough that the defendant is careless, it must be shown that such carelessness was in breach of a legal duty. Salmond, supra, at pp. 406-407, citing Jones vs. Vauxhall Motors [1953], 1 Lloyd's Rep. 152, 153. Where failure to perform a duty is alleged, it is necessary to show the existence of such statute or regulation, which may not be enlarged by custom or practice. McClenny, et al. vs. United Airlines, 1959 USS&CAvR 221, 223.

77. - Salmond, supra, at p. 422, citing Palsgraf vs. Long Island Railroad Co. [1928] 284 N.Y. 339, 162 N.E. 99.

> ".... The ideas of negligence and duty are strictly correlative....; negligence is simply neglect of some care which we are bound by law to exercise towards somebody.." Charlesworth, supra, at p. 6, citing Thomas vs. Quartermaine [1887] 18 Q.B.D. 685, 694.

The old concept of classifying "care" into different categories as "ordinary" or "slight degree" and "high degree" is no longer observed in most jurisprudence. The standard now is "ordinary care" which may be a high degree of care under some circumstances and slight degree of care under other circumstances.

gilance[78], which causes injury or damage to another[79].

Greunke vs. North American Airways, 1930 S.C. Wis. 201 Wis. 565, 230 NW 618.

> "... Ordinary care in cases where the result of a slip will be slight and unimportant is not sufficient care to fulfill the requirements of ordinary care where the result of a failure to exercise it will be dangerous or destructive of human life." Maynard v. Stinson, 1940 USAvR 7, 72.

78. - Greunke vs. North American Airways, supra. The accident need not be foreseen, reasonable foreseeability of the same is sufficient. U.S. v. Schultetus, et al and U.S. v. Aero Enterprises, Inc., et al., 277 F (2d) 322, 1960 US&CAvR, 246-247, citing International Derrick & Equipment Co. vs. Croix, 241 F (2d) 216, 221, cert. den 254 U.S. 910. It is not much what one actually though or perceived but "what would have been perceived by a man of ordinary sense who did think....". Pollock's Law of Torts, 15th Ed. (1951), at p. 337.

Green, in "The Causal Relation Issue in Negligence Law", Vol. 60, No. 5, Michigan Law Review (March 1962), at p. 543, requires two determinative factors of negligence: "(1) should the defendant as an ordinarily prudent person, under all the circumstances of his conduct, have reasonably foreseen some hurt to the victim of the same general nature as he suffered, and (2) did the defendant fail to exercise reasonable care to avoid the hurt?...." (at pp. 570-571). Also, Salmond, supra, at p. 413.

In Admiralty it is the want of attention and vigilance which is due to the security of other vessels. Per Lord Stowell in The Dundee, /1823/ 1 Hag. Ad. 109, 120, cited in Marsden, supra, at p. 4.

79. - Charlesworth, supra, at p. 10; Halsbury, "Laws of England", 3rd Ed., Vol. 37, p. 120; per Stockyard Com., in Atcheson vs. Braniff International Airways, et al., 6 Avi. 17,567; Planiol, supra, pp. 470-471; Prosser on Torts, 2d Ed., 218; Marsden, supra, at p. 18, citing Brett, L.J., in The Margaret

The determination of the existence of negligence in flight operations is generally factual[80], although the existence of such facts may be inferred from the circumstances surrounding the case.

Aircraft accidents were attributed before to climatic conditions, as the existence of air pockets, or sudden gusts of wind[81]. Except in cases where visibility is adversely affected, the foregoing atmospheric disturbance are not now considered material factors contributing to air accidents, particularly in cases of aerial collisions, in view of the technical progress made in weather forecasting.

Some air accidents are also due to motor defect of the aircraft[82].

Just like any other physical instrumentality requiring structural supports, the existence of blind spots from

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/1881/ 6 P.D. 76, 79, Lindley, L.J., in The Bernina /1887/ 12 P.D. 58, 88.

80. - U.S. vs. Douglas Aircraft, et al., 169 F (2d) 755, 1948 USAvR 466, citing Brinegar vs. Green, et ux, 117 F (2d) 316, 319. Salmond, supra, p. 475.

81. - Sweeney, "Is Special Aviation Liability Legislation Essential", 20 J.A.L.C. (1952), p. 166.

82. - Bird vs. Louer, 272 Ill. App. 522, 1934 USAvR 188. See comments on this case by Arnold, Vol. 5, J.A.L.C., (1934), p. 501.

the cockpit of an airplane, resulting in visual deficiency, is almost inevitable[83]. There are also so-called "blind angle ranges"[84], that failure to maintain a "proper look-out"[85], may lead to a collision or interference incident with other aircraft, whether in a congested traffic area or not.

Breach of prescribed air traffic regulations or "rules of the road", designed to prevent the risk of collision as well as the collision itself[86], are often behind air collision or interference accidents. Like the violation of the "right-of-way" rule[87], or deviation from a prescribed land-

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83. - The duty of undertaking the necessary care and precaution should be taken by the pilot. Kuhn vs. CAB, 3 Avi. 17,237, 1950 USAvR 358.

84. - Huntington, "Adequate Visibility for Planes", 18 Aero Dig. 52 (June 1931).

85. - Buehl vs. U.S., 3 Avi. 17,726, 1952 USAvR 17; Ronspáez vs. Chambers and Brown, 226 P (2d) 388, 1951 USAvR 113; Kuhn vs. CAB, supra; Brouse vs. U.S. & Townsand vs. U.S., 1949 USAvR 218, 83 F Supp 373; Union Trust Co. vs. Eastern Airlines, supra.

86. - Brouse vs. U.S. & Townsend vs. U.S., supra.

87. - Like for instance the right-of-way between an aircraft that is landing and one that is taking off. Athabaska Airways, Ltd. vs. Saskatchewan Govt. Airways & Hodgins, 1958 US&CAvR 453; that a heavier aircraft has a right-of-way over a lighter aircraft, especially when the former is travelling in a "predictable path". Johnson, et al., vs. U.S., 183 F. Supp. 489, 1960 US&CAvR 269, 6 Avi.

ing pattern[88], or flying below the minimum altitude flying requirement[89].

The general rule that violation of a statute or regulation, thereby resulting in an accident[90], constitutes negligence[91], similarly applies in air law[92]. However, it does not necessarily follow that compliance with law or regulation which are prescribed to promote safety in aircraft operations is always due care[93]. The pilot is not thereby relieved from the exercise of due care and diligence to observe and avoid other aircraft[94], or undertake such manoe-

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18,111; on the rules regarding converging aircraft, U.S. v. Compania Cubana de Aviacion, 1955 US&CAvR 361. As a matter of fact, aviation safety rules and regulations of all countries contain provisions on "right-of-way".

88. - Union Trust Co. vs. Eastern Airlines, supra.

89. - Johnson, et al. vs. U.S., supra.

90. - Herrick and Olson, et al. vs. Curtiss Flying Service, et al., 1932 USAvR 110, 121.

91. - Schneider, Exec. vs. U.S., 1961 US&CAvR 112, citing Prosser, supra, at pp. 163-164.

92. - Where applicable, breaches of air traffic rules are considered as prima facie evidence of negligence, Nokes & Bridges, supra, at p. 105. Also, Read vs. N.Y. City Airport Inc., et al., 145 Misc. 294, 259 N.Y.S. 245, 1933 USAvR 31.

93. - Schneider, Exec. vs. U.S., supra.

94. - In Tiedt vs. Gibbons, 1940 USAvR 63, 65 (Ill-C.C.,

vres as the situation requires[95], in the navigation of his airplane in order to avoid or avert an accident.

As reported in the cases involving aerial collisions in the United States, the most common cause of such incidents is inattention or failure to exercise the required degree of attention in the navigation of his aircraft or in the observance of local flying safety rules.

Aircraft collision incident may also happen during ideal weather conditinns and in an uncontrolled airspace,

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1937) the court cited the Illinois Aeronautic Commission which provides that "a landing plane has the right-of-way over planes moving on the ground or taking off, but this shall not excuse the pilot of either or both such aircraft from the exercise of due aare and diligence." Also, Finfera vs. Thomas, et al., 119 F (2d) 28, 1941 USAvR 1.

95. - Rainger, et al. vs. American Airlines, Inc., supra, at p. 140, where the court held that although the defendant had a right-of-way over the Army plane with whom it collided, it was not released from the duty of exercising due care and diligence, as may be required, for the safety of its passengers, employees or agents.

McGuire, J., in his instructions in Union Trust v. Eastern Airlines, supra, at p. 144, said that "the pilot is the ultimate authority and no rule relieves him of responsibility of taking such action as would best aid avoid a collision."

Also, in U.S. vs. Schultetus, et al., supra, it was held that the primary responsibility to avoid flight collisions, when the aircraft is being operated under VFR, is with the pilot, although in the vicinity of an airport.

like the "Grand Canyon"[96] incident. However, incidents like this can happen only once in a decade according to an aviation technical analyst[97].

Statistical survey shows that the incidence of airplane collision and interference is more frequent around

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96. - A collision over the Grand Canyon, Arizona, U.S., on June 30, 1956, between a Trans-World Airways Super Constellation and a United Air Lines DC-7. Both aircraft took off from Los Angeles International Airport, with a 3-minute interval. TWA was bound for Kansas City, Missouri, with a cruising altitude of 19,000. United's destination was Chicago, Illinois and with 21,000 cruising altitude. The collision happened after about an hour and a half flying time of both aircraft. ICAO Cir. 54-AN/49, Aircraft Accident Digest No. 8, (1958), p. 95. Also Calkins, "Grand Canyon, Warsaw and The Hague Protocol", 23 J.A.L.C. (1956), 253, where he pointed out the basic legal difficulties involved in this incident.

    Only a few cases were filed in court as a result of the "Grand Canyon" incident. One case involved a claim against the U.S. after a settlement with the airlines involved. Claim denied. Maitland, Ext'x vs. U.S.A., et al., 285 F (2d) 752, 1961 US&CAvR 67. Another was a claim from a TWA employee whose wife and two infant daughters, travelling on a gratuitous pass from TWA, died in the said incident. Braughton vs. United Air Lines, Inc., et al. 189 F. Supp. 137, 1961 US&CAvR 471. Other cases pertain to "proper parties" to the suit (Rosenblatt Ex'r v. United Air Lines, Inc. et al., 1957 US&CAvR 442, 21 F.R.D. 110), and to the question of venue (Cressman, Adm'r vs. United Airlines, Inc., et al., 158 F. Supp. 407, 1958 US&CAvR 61).

97. - Klass, "Test for Anti-Collision Systems Developed", Aviation Week & Space Technology, June 25, 1962, at p. 50.

terminal areas where air traffic is dense. The reason is obvious as the exposure to such type of accident in aviation becomes more pronounced in those areas.

By and large, collision of aircraft may therefore be traced to negligence, or the absence of that degree of duty and care, either due to inattention or pilot error, which may be either "error in judgment" or "poor technique", and violations of air regulations.

However, in the assessment as to whether a particular act or a sequence of acts, which caused an aviation accident, is negligent or not should be made judiciously. Error should not be confused with fault or neglect. It will be well to abide with maritime precedents that if a decision of a pilot, translated through the manoevres he made, "though wrong, judged by its result, was one which a competent navigator might reasonably make under the circumstances; if it was a fair exercise of discretion under the conditions confronting him, he will not be held liable", as "the law requires care and skill, not infallibility"[98].

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98. - Griffin on Collision ("The American Law on Collision", by John Wheeler Griffin (1949), p. 485. It was also stated that ".... the after-wisdom which points out what might have been done, but which the ordinary rules of human conduct do not expect to be done, is no criterion for judging culpability .... the question is not whether the order given was the best when viewed in the light of subsequent events,

Contributory negligence. - It is not infrequent that the cause of a collision involving two moving vehicles may be traced to the fault or neglect of both operators. In an aircraft collision or interference however, as previously pointed out, the blameworthy conduct may not be wholly attributable to the aircraft operators or pilots. In numerous instances, the ground air traffic controller has been included as a party-defendant in damage suits, and has been thus held liable by judicial decisions, based on the fact that practically all flight movements and manoeuvres of an airplane are under its control and direction, especially in the "controlled airspace"[99].

In tort law, different terms are used in referring to such joint faults. Common law calls it "contributory negligence". The term "comparative negligence" is now used in admiralty, while the phrase "concurrent negligence" is

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but whether under the circumstances in which he was placed it was that of a prudent and skillful commander....", and that ".... to enter upon intricate calculations of what could or could not be done in 40 seconds ... to require that the decision of a seaman, confronted with a sudden emergency and obliged to act on the instant, shall be judged by such calculations ... would be a travesty.", at p. 480.

99. - As defined in "Rules of the Air and Air Traffic Services", ICAO Doc. 4444-RAC/501/7, Seventh Ed., 1960 1-2, it is "an airspace of defined dimensions within which air traffic control service is provided to IFR flights".

seeking recognition in international air law. However, all these terms have the same legal connotation.

Contributory negligence is that fault which materially contributes to, or causes, the injury[100]; or those contemporaneously concurrent neglects which caused the damage[101].

The standard of care and reasonable foreseeability that is required in contributory negligence is the same as that in ordinary negligence[102].

The original rule in the law of negligence is that where there is blame on both sides causing the accident, both parties assume their respective losses notwithstanding the varied degrees of fault[103]. This sets up contributory negligence as a defense in a damage suit in some jurisdiction, and obtains in English law prior to the Law Reform (Contributory Negligence) Act, 1945[104].

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100. - Charlesworth, supra, p. 507, citing Lord Porter in Caswell vs. Powell Duffryn Associated Collieries, Ltd. /1940/ A.C. 152, 186.

101. - Halsbury, supra, p. 136.

102. - Charlesworth, supra, p. 517, citing Denning, L.J., in Jones vs. Livox Quarries, Ltd. /1952/ 2 Q.B., 608, 615.

103. - Salmond, Supra, p. 456, citing Lord Blackburn, in Cayzer, Irving & Co. vs. Canon Co. /1884/ 9 App. Cas. 873, 881.

104. - Shawcross & Beaumont, supra, pp. 324-325.

In Davies vs. Mann[105], the doctrine of "last opportunity" or "last clear chance" was introduced, which is to the effect that where the accident happened through the combined negligence of two persons, or results from two concurrent acts, he alone is liable to the other who had the last opportunity of avoiding the accident.

However, the theory of "last clear chance" appears to be well on its way towards becoming merely of legal historical interest. The current concept of contributory negligence was expressed by Lord Simon in 1948, in Boy Andrew (Owners) vs. St. Roguvald (Owners)[106] in that actually, the basis of all questions of liability for a tortious act is "not who had the last opportunity of avoiding the mischief, but whose act caused the wrong". In other words, the basis of liability in such cases is effectiveness and not merely contribution[107], or, as expressed by Lord Wright[108],

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105. - [1842] 10 M & W 546, cited by Salmond, supra, at pp. 458-459.

106. - [1948] A.C. at pp. 148-149, cited by Salmond, supra, at pp. 461-462.

107. - ".... that his own negligence may have contributed to the accident is really quite irrelevant, since it is not who contributed to the accident, but who effectively caused it, that is of importance....". Roberts & Gibb, supra, pp. 16-17.

108. - 13 M.L.R. at 3, cited by Salmond, supra, p. 483.

"Potency, not chronology, is the test".

The determination of the presence or absence of contributory negligence, as in ordinary negligence cases, is a question of fact and the inquiry as to which of the joint fault is the operative neglect which caused the injury does not usually emerge with clarity and is often so blurred as to be barely distinguishable from the surrounding mass[109]. This finds emphasis in aviation accidents, particularly in collision cases. However, the effort is to find, if possible, "a sufficient separation of time, place or circumstance" to enable "a clear line to be drawn"[110] between the faults committed so that those acts which are too remote may be discarded.

In weighing the operative faults or the effective neglects which caused the accident, the guide is common sense rather than rigorous logic. The mere fact that the acts of negligence were consecutive and not concurrent cannot be a positive determining factor. "Time and knowledge are important - perhaps even decisive - factors, but their significance will fall to be determined in the light of the cir-

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109. - Salmond, supra, p. 479, citing Marvin Sigurdson's case [1953] A.C. 291, 304.

110. - Salmond, supra, at p. 478, citing Lord Birkenhead in The Volute [1922] 1 A.C. 129.

cumstances of the particular case and not of any inflexible rule of law"[111].

Various jurisprudence in admiralty and highway collisions have admitted the difficulty of determining the operative or causative fault in cases of concurrent negligence. This problem of weighing and determining the degrees of fault becomes obviously several hundred-fold times more difficult in aircraft collision incidents, considering the vast difference in the speed of an airplane as compared with other vehicles, and the usual aftermath of an air or even surface collision. A sweeping statement was even made[112] that the proximate causes of aircraft collision do not lend themselves to comparative measurements.

Cognizant of this problem, ICAO proposed a general principle that where the collision or interference of aircraft is due to concurrent negligence, the liability shall be in proportion to the degree of fault; that if the proportion cannot be determined or if the degrees of negligence appear to be equal, then the liability should be shared in equal parts[113]. However, the problem remained

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111. - Per Lord Wright, supra.

112. - Sweeney, supra, at pp. 327-328.

113. - ICAO Doc. No. 6027-LC/124, 4th Session, Montreal June 1949.

for the courts to delve into and compare the relative degrees of several concurrent or contemporaneous and seemingly blameworthy conducts in order to reach the decision on liability for damages.

Proximate cause. - The general principle in tort law that only neglects which cause damage are actionable, also applies in air law.

To establish liability in negligence cases, the initial point of inquiry is to identify the defendant and connect his fault or negligence with the complainant's injury[114]. However, the determination as to whether the neglect of the defendant is the operative and efficient cause of the damage is mainly a matter of fact which should be particularly weighed and considered by the courts according to the circumstances surrounding each particular case. No single "magic formula" may be adopted in the solution to the problem of causality between neglect and injury.

Theoretically, where the damage may be attributed to several causes, distinctions should be made between such circumstances, either according to their proximity, special characteristics, effectiveness, degree of participa-

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114. - Green, "The Causal Relation Issue in Negligence Law", Vol. 60, No. 5, Michigan Law Review (March 1962), 543, 546.

tion, etc.[115]. Where the damage is the indirect result of the blameworthy conduct, or a consequence which reasonably could not have been foreseen, or too remote or removed from the alleged negligent act, the causality relationship may not be said to exist[116], and the defendant may not thereby be held liable.

However, the fact of causation - that the defendant's negligence caused the injury - need not be established with absolute certainty, as long as reasonable men may infer such causality relationship from the evidence introduced[117].

In an aircraft collision accident, proximate cause has been interpreted as that which in the "natural and continuous sequence, unbroken by an efficient, intervening cause, produces the injury and without which the injury would not have occurred. It is the efficient cause, the one that necessarily sets in operation the factors that accomplish the injury[118]. Likewise, the inquiry as to which

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115. - Planiol, supra, p. 474.

116. - Charlesworth, supra, p. 603, citing Metropolitan Ry. vs. Jackson /1877/ 3 App. Cas. 193; Sharp vs. Powell /1872/ L.R. 7. C.P. 253.

117. - Prosser, supra, p. 218.

118. - Per McGuire, D.J. to jury, in Union Trust Co. vs. Eastern Airlines, 1953 US&CAvR 135, 140.

of the concurrent or contemporaneous neglects, or even consecutive faults, is the proximate cause of the injury complained of, dppends essentially on the facts and circumstances of each particular case and cannot be subjected to an inflexible rule or a rigorous standard.

Defenses. - The various defenses available in actions for damages resulting from surface collisions and in ordinary tort cases are not all applicable in liability suits arising from collision or interference of aircraft. The speed of airplanes, that they operate in three dimensions, and, in most cases, under the control of persons other than their respective pilots and who are far removed physically from the aircraft involved, places aviation in a somewhat different category from the general principles obtaining in ordinary negligence incidents.[119]

In aircraft collision or interference cases, where there are two principles of liability involved - a presumption of liability and where liability is based solely on proof of fault - there are common defenses to both liability concepts.

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119. - Hotchkiss, "A Treatise on Aviation Law", (1938), p. 41.

Common Defenses -

(1) Statutory defenses. - These refer to prescription of actions and limitation of liability which should be provided in the law on aircraft collision or interferences.

(2) Fault of the victim or the complainant. - Although this defense strongly applies in cases where the principle involved is liability based solely on proof of fault, it remains, for all practical purposes, only a legal theory in presumed liability suits arising out of air accidents. In the latter case, the complainant cannot be charged with any actual fault or neglect which may have caused, or even contributed to, the damage. The plaintiff does not have anything to do with the operation of flight of the aircraft. The moment the passengers and cargo are on board, such passengers are completely isolated, unaware even of speed, altitude and direction of their vehicle. Much less can be said of the cargo owners. At most, complainant is only concerned with the time of departure and the expected time of arrival. And learn to while away the time in between.

Other defenses apply separately according to the principle of liability involved.

Defense where liability is presumed. - In ordinary air accident cases where liability is presumed, the recognized defense in international air law[120] is that the defendant has taken the "necessary measures" regarding the flight to be undertaken. In this instant, these consist in the verification regarding the conditions of navigability of the aircraft and that the pilot and crew chosen to manage the plane are properly licensed as to their competency by the proper government agency concerned with such undertaking[121].

The foregoing requirements are not sufficient considerations to support the defense of having taken the "necessary measures" in a collision or interference case. Airworthiness of the aircraft and certified competency of the pilot and crew are not exclusively efficient factors to remove the presumption of negligence. Where the accident happened beyond the active control of the terminal areas, it must also be shown that the aircraft was flying in its assigned altitude, at the "cleared speed", and under a vigilant "lookout". If the collision occurs within the vicinity of an airport with air traffic service faci-

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120. - Art. 20, Warsaw Convention of 1929.

121. - Cha, "The Air Carrier's Liability to Passengers in International Law", Vol. 7, A.L.R. (1936) pp. 42-43.

lities, evidence must be presented showing that the plane was following instructions from the ground controller regarding take-off and landing operations, or in preparation thereto.

Further, and which appears to be the most vital, it must be shown that the defendant was devoid of any blameworthy act which caused or contributed to the accident. This can be prosecuted with telling effect if it can be proven that the collision or interference was due to the fault or negligence of some other person other than the defendant, i.e., proof of fault of the operator of the other aircraft, or the air traffic controller, or both.

Defenses where liability is based on proof of fault. - In case liability is based on proof of fault, several defenses are available.

(1) Inevitable accident. - In current aviation law, an inevitable or unavoidable accident does not mean that it was not possible for such an accident to be avoided. It may simply denote that the occurrence was not proximately caused by negligence[122].

Some cases hold that aircraft crashes due to unfore-

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122. - Rainger, et al. vs. American Airlines, Inc., 1943 USAvR 122.

seen or unforecasted adverse atmospheric conditions are inevitable and the operator is released from liability for damages resulting therefrom[123].

Can the defense of difficult weather conditions be equally recognized in the case of an aircraft collision or interference?

Admittedly, where visibility is impaired, due to clouds or fog or other elemental causes, flight operation is relatively affected. If the collision or interference occurs in an "uncontrolled area" or beyond the active direction of the ground control services, and it is shown that the same was due to atmospheric disturbance not previously known or anticipated, the defense of "inevitable accident" may possibly be sustained. However, it is highly doubtful whether the same may be true if the collision or interference occurs while both aircraft involved are under the control and direction of the air traffic controller in the vicinity of the terminal area. In this partilar instance, although the operator of both airplanes may be relieved of liability because they do not have the

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123. - Arrow Aviation, Inc. vs. Moore, et al., 6 Avi. 17,387, citing Cudney vs. Braniff Airways, Inc., 300 S.W. 2d 412, 5 Avi. 17,282, and Small vs. Transcontinental & Western Air, 96 Cal. App. 2d 408, 216 P 2d 36.

active control of their aircraft at the time of the accident, the fault which caused such incident may be shifted to the ground controller.

The defense of inevitable accident due to weather conditions will not be available to the ground air traffic controller who was monitoring both aircraft at the time of the collision or interference. The said facility is aware, or can be reasonably charged with knowledge, of weather conditions in his vicinity. The existence of air traffic therein, under its active control, admits that such weather situation is not a sufficient deterrent factor to safe aircraft navigation. Also, it is equipped with all mechanical and electronic gadgets and other highly technical and complicated instruments which are designed to keep track and provide vertical, horizontal and lateral separation of air traffic within its controlled zone, irrespective of weather conditions.

The speed of modern jet aircraft, not to mention the advent of the super-sonics, is another factor that should be considered in analyzing the defense of "inevitable accident" in aircraft collision or interference. Once two high-speed jets on a collision course get to within a mile of each other, it is already considered that a crash is inevitable: at 600 m.p.h. they will close the one mile gap

in three seconds[124]. Can this situation be considered as an "inevitable accident" and, therefore, a defense in a liability suit for damages? In this connection, it should be pointed out, although it is quite obvious, that the situation above presented will only happen in an uncontrolled airspace.

A "flight clearance" given to an aircraft by the air traffic service facilities at the terminal area where it is taking off includes only weather information, take-off time, the assigned airway, altitude, cruising speed, and a similar information on incoming and other outgoing flight as may be relevant to its flight operations. The moment the airplane reaches the "free" area, its primary concern is the maintenance of its speed and altitude, maintain a keen lookout, and listen to advisory warnings from ground controllers along its way. Most often it does not receive information on other aircraft movements coming from the opposite direction. The moment it sees the oncoming other airplane, assuming that such other aircraft is still beyond a mile away, it is not aware of the other's altitude, speed and direction. It will therefore be a question only of seconds before the aircraft will know whether they are in a

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124. - Time Magazine, August 31, 1962, p. 17.

collision course with each other and thus take the necessary action to avoid the risk of a collision. Under such a situation, if a collision occurs between said planes, can it be considered that the accident was due to the negligence of one or the other? The collision was evidently unavoidable and without the fault of either pilot of the aircraft involved. The accident may be properly attributable to the nascent stage of a systematized and coordinated monitoring of advisory information by air traffic services. This argument finds stronger support where both aircraft were operating under limited visibility conditions.

(2) Agony of collision or "in extremis".- This defense, which finds origin and abundant jurisprudence in maritime law, exempts a person from liability who did, or omitted to do, something which may contribute to the collision, at a moment of difficulty or stress caused by the negligence of the complainant or another person[125].

As a general statement, it can be said that this de-

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125. - Marsden's Collisions at Sea, 10th Ed. p. 8, citing The Sisters /1876/ 1 P.D. 117; The Marpesia /1872/ L.R. 4 P.C. 212; Vennall vs. Garver /1830/ 1 Cr. & M. 21; The City of Antwerp and The Friedrich /1868/ L.R. 2 P.C. 25; The Bretagne /1921/ 7 Ll.L. Rep. 127; The Illrikka /1922/ 12 Ll.L. Rep. 429.

fense can also be applied in an aircraft collision incident. It is admitted that the problem of securing evidence to establish the defense of "in extremis" is tremendous in case of physical impact between two fast moving airplanes, occurring in an uncontrolled area about 50,000 feet above the earth's surface, and completely destroying the aircraft and killing all the persons on board. In cases of this nature, which are highly uncommon, the difficulty is in the gathering of facts to support the defense and not that the defense is not applicable.

However, in cases of constructive collisions or interferences, where one aircraft takes a sudden "evasive" action in order to avoid the risk of a collision which was caused by the negligent manoevres of another plane, as a result of which damages were sustained, the defense of "agony" or "in extremis" is immediately applicable. It may similarly be applied in accidents resulting from the "turbulent wake" of another aircraft which was being operated negligently or in violation of air traffic rules or against tower control instructions.

Legally construed and applied, this defense does not actually erase liability but simply shifts the same from the defendant to another person who placed him "in extremis".

(3) Volenti non fit injuria. - In general, one who has full knowledge of the nature and extent of the risk and is entirely free to avoid it, but nevertheless voluntarily goes on and is injured, cannot recover[126]. This defense is also called voluntary assumption of risk.

Although it has been stated that a collision or interference are risks connected with the use of the aircraft and the operator and other persons concerned can be expected to have been aware of that risk[127], this does not mean that in using the aircraft as a means of transportation it necessarily follows that there was a voluntary assumption of the risk of collision, and that such mere fact of use alone thus exempts the operator or other persons from liability in such accidents. It is admitted that when a person chooses air transport as a means of conveyance he is aware that such contrivance he has chosen is exposed to risks of collision. However, the basic issue is whether, being thus aware of the danger or peril, he was free to avoid the same. As pertains the passengers and

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126. - Salmond, supra, p. 426, citing Harvett vs. Bond /1924/ 1 Q.B. 319; London Graving Dock Co., Ltd. vs. Horton /1951/ A.C. 737.

127. - ICAO Doc. No. 7601-LC/138, 10th Session, Montreal, 7-24 September 1954, Vol I, (Minutes), p. xxv.

cargo owners in an aircraft involved in such an incident, it has already been stressed that they are completely bereft of any power to avoid the accident, short of not embarking at all in the airplane. But such is not the interpretation of the concept of freedom to avoid the risk. However, in a suit between the operators of the aircraft involved, the question of assumption of risk will not be an issue at all, assuming that this defense applies to aircraft operators, but that whose fault or neglect was the proximate and effective cause of the accident.

In private air law, the defense of voluntary assumption of risk was considered by the court as a matter for the jury to decide in a collision accident involving airplanes flying in formation[128].

Generally, in air accidents, including collision cases, the defense that the aircraft was being operated under the control and direction of the ground air traffic control tower has often been sustained by the courts. However, it is reiterated that the pilot is ultimately responsible for the safe operation of his aircraft even when he is under air traffic control. For example, while under

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128. - Heitman, Adm'x vs. Luhrs, Admr', 40 N.W. (2d) 526, 1950 USAvR 58, citing Landrum vs. Roddy, 143 Neb. 934, 12 N.W. (2d) 82, 149 A.L.R. 1041, among other cases.

Visual Flight Rules (VFR), if he can see, or even deduce, that in complying with the directions of the tower he will likely come into a collision or interference with another airplane, he is duty bound to disregard said instructions and take such steps as would best insure the safety of his aircraft and the passengers, personnel and cargo on board.

CHAPTER V

APPORTIONMENT OF DAMAGES AND LIMITATIONS OF LIABILITY

Damages -

In General. - Damage may only be a possible, but not a necessary, consequence of negligence, and if fault does not produce damage, then it is not actionable in law[129]. The philosophy underlying the assessment of damages is to provide compensation for an injury inflicted and not as a punishment for a wrong caused[130], in order that the party who has thus been injured may be placed, in so far as practicable, in the same condition as if the damage had not been suffered[131].

As a rule, only the damage that is the direct result of the negligence, or a consequence which ought to have been reasonably foreseen, are considered as not too remote,

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129. - Planiol, supra, p. 470.

130. - Charlesworth, supra, p. 566, citing Philipps vs. L & S.W. Ry. [1879] 5 Q.B.D. 78, 87, per James, L.J.; The Mediana [1900] A.C. 113, 119; Liesboch (The) vs. The Edison [1933] A.C. 449, per Lord Wright; Admiralty Convairs vs. S.S. Susquehauna [1926] A.C. 661.

131. - Marsden, supra, p. 104, citing Dr. Lushington in The Clarence [1850] 3 W. Robb. 283.

and therefore compensable[132].

Admittedly, the question of responsibility due to fault, which allegedly produced the damage, in the demonstration of the relationship between cause and effect, or the fault committed and the prejudice suffered, presented great practical difficulties[133].

In aviation law, particularly in an aircraft collision where the accident is often the result of concurrent faults, not only of the operator of each of the aircraft involved but also by another agency, the air traffic controller who, although physically removed from the plane is nonetheless actually the one directing its flight operations, the difficulty of determining "causality" becomes much more pronounced.

The statement that the question of remoteness of damage is one of law[134] appears not to be accurate. It would seem that the determination as to whether a particular neglect, or which of the concurrent faults or consecutive acts

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132. - Charlesworth, supra, p. 603, citing Metropolitan Ry. vs. Jackson [1877] 3 App. Cas. 193; Sharp vs. Powell [1872] L.R. 7. C.P. 253.

133. - Planiol, supra, p. 473.

134. - Charlesworth, supra, p. 600, citing The Argentine [1889] 14 App. Cas. 519; Robbs vs. L. & S.W. Ry. [1875] L.R. 10 Q.B. 121, 122; Cork vs. Kirby McLean, Ltd. [1952] 2 All E.R. 402, 407.

of negligence caused the injury, or whether such joint or successive culpa all effectively contributed to the damage, is still a matter for the jury to decide. The legal consequences of said actions are determined only after the causality relationship has thus been established in fact.

Damages recoverable. - Irrespective of the type of aircraft collision, whether it is one resulting from actual physical impact or merely one of interference, the damage that may be recovered as a result thereof may be divided into two general categories. First, those suffered by the operator of each of the aircraft involved and, Second, damages suffered by other persons than said operators.

(1) Damages to an operator. - Statistics show, as previously observed, that the consequences of an airplane collision are most often fatal and disastrous. Among others, it directly results in the total or partial destruction of the aircraft which collided, including their equipment and accessories[135]. By virtue of such destruction or damage to the aircraft there is consequently produced the corresponding loss of the use of such aircraft for the purpose for which it was intended or in the busi-

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135. - The terms "equipment and accessories" in air law has obviously the same connotation as the words "ship's appurtenances" used in maritime law.

ness it was engaged at the time of the accident. Although the nature of this injury is not actual but merely contingent or expected, the damage sustained is nevertheless real and immediately traceable to the accident.

If at the time of the accident the operator of an aircraft involved was under an obligation to perform a particular service or was in the process of carrying out a specific contract of employment, the loss of the use of his airplane will naturally disable him from compliance with such undertaking. This is another damage resulting directly from the accident and the operator who was thus prevented from the performance of such obligation is entitled to compensation therefor. However, such undertaking, whether transitory or casual in character, must have been existing at the time of the accident.

The problem of assessment of damage as a result of the loss of an aircraft involved in a collision or interference incident is when such vehicle is not yet "in the market". For example, if such airplane is merely a prototype or just fresh from the "drawing board" and was in the process of being flight tested when the accident happened, what is the amount of damage that should be assessed for the loss or destruction of said plane? The hundreds of millions of dollars spent on researches and experiments to produce

such prototype cannot certainly be the basis of computing its value. Neither can the actual cost spent on the materials and manhours to produce that particular prototype be an equitable basis. This same problem is true with respect to military aircraft which do not have the same prototype in commercial aviation. Since this problem relates more to a technical aspect of aviation industry, the answer to the question will hinge primarily on the evidence presented and appreciated in connection therewith. Suffice it to state that although an aircraft involved in an aviation accident has no recognized market value, whether such type is actually in the market or not, it does not alter the legal principle that the operator thereof should be compensated for its value, whatever evidence thereon will subsequently show.

(2) Damages to persons and to property other than that of the operator's in the other aircraft. - The injuries suffered by passengers and cargo on board the colliding aircraft are likewise direct consequences of the accident. Generally, the basis for determining the amount of damages in case of death is the prospective earning capacity of the decedent based on his actual income at the time of death including reasonably expected increases in such income which is cumulated during the entire computed

earning period based on his life expectancy[136]. Other damages as solatium, mental and moral anguish suffered by the family, etc., are sometimes also included, depending on the lex fori.

So many factors are considered in determining the amount of compensation to be made for personal injuries. Included are, among others: "....the bodily injury sustained; the pain undergone; the effect on the health of the sufferer, according to its degree and probable duration as likely to be temporary or permanent; the expenses incidental to attempts to effect a cure, or to lessen the amount of injury; the pecuniary loss sustained through inability to attend to a profession or business...."[137]. Likewise, where, as a result of such an accident, a passenger was prevented or delayed in the performance of a contract for services or any other similar obligation thereby resulting in the loss of earnings or brought about a liability for breach of contract, such an injury suffered should be considered as a

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136. - National Airlines, Inc. vs. Stiles (USCA, Fifth Circuit, 1959), 268 F 2d 400, cert.denied, 361 U. S. 885 (1959); K.L.M. vs. Tuller (USCA, DC, 1961) 292 F 2d 775, cert. denied, 368 U.S. 921 (1961), 7 Avi. 17,544, 1961 US&CAvR 181.

137. - Charlesworth, supra, p. 567, citing James, L. J., in Philipps vs. L. & S.W. Ry., supra.

direct result of the accident.

By and large, it is generally impossible to apply a mathematical formula in the assessment of damages, in terms of money, resulting from the death or physical injuries sustained. The only general principles that can be observed is that the damages awarded must be fair and reasonable, that a just proportion be followed between damages awarded for the less serious and those awarded for the more serious injuries, and that an attempt be made to observe "the general rule of assessments made over the years in comparable cases."[138]

Loss or damage of the property on board except those belonging to the operator, like personal effects of the passengers and the consigned cargo are also direct results of the accident. The standard in determining the extent of such loss or damage should be their declared or consigned value, respectively.

Actions in recourse. - A collision incident subjects each of the operator of the aircraft involved therein to different liability obligations under various legal regimes.

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138. - Charlesworth, supra, p. 570, citing Rushton vs. National Coal Board /1953/ 1 Q.B. 495, 500, per Singleton, L.J.; Bird vs. Cocking & Sons, Ltd., /1951/ T.L.R. 1260.

He may have been held liable under: 1) the Warsaw Convention of 1929, as amended by The Hague Protocol of 1955, regarding the liability of an air carrier to his passengers and cargo owners for injury or damages arising from an aviation accident; 2) the Rome Convention of 1952, providing for compensation for injuries to persons and damages to property on the surface under those situations falling thereunder; and, 3) the domestic law or the law of the forum.

Undoubtedly, those payments are losses which the operator of the aircraft involved suffered as a result of such accident and which, if the fault is traced to the operator of the other aircraft, he should also be indemnified.

The action proceeding from this form of obligation is termed as an action in recourse. This follows the same rationale as contribution in admiralty law.

All the foregoing damages[139] may properly be consi-

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139. - Art. 4 of the Draft Convention on Aerial Collision (LC/SC/Aerial Collision No. 71, 27/3/61/, Appendix A, p. 8), Legal Committee, ICAO, 1961, provides that the damages that the operator of each of the aircraft involved in the accident may suffer and which may be recovered from the other operator are: 1) loss or damage of the aircraft, including the equipment and accessories thereof; 2) loss of the use of the aircraft; 3) loss, damage or delay of any other property belonging to the operator of that aircraft; and 4) any amount which the ope-

dered as direct causes of the collision accident, and the payment of compensation therefor by the operator at fault follows the concept of restitutio in integrum which underlies the delictual liability concept.

Apportionment of damages. - Adopting a similar analysis made by Sir William Scott in 1815[140], there are four possibilities wherein an aircraft collision may occur, which may be the basis of apportioning and distributing the loss and damage occasioned thereby. First, the collision may happen without blame or fault from any party, as where the same was due to an inevitable accident, etc.[141]; Second, the accident may have been the result of the negligence of both aircraft operators; Third, it may happen by the misconduct of the operator of the aircraft which suffered damages; and, Fourth, where the damages suffered by one of the aircraft involved in a collision or interference is due to the fault or neglect of the other aircraft.

In those cases where an aircraft collision occurs without the fault or negligence of either of the operator

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rator may have paid under a legal obligation as compensation for damage caused by the collision or interference.

140. - In The Woodrop Sims /1815/ 2 Dodson, 83, 85, which was quoted in Marsden, supra, pp. 150-151.

141. - Vide discussions on defenses, supra.

of each of the aircraft involved in the accident, then neither can recover against the other and each one of them should bear his own loss. In this instant, the principles of liability do not come into play because of the absence of negligence which is the essence of liability in tort law.

No problem of distribution of damages will be encountered in cases where fault or negligence which effectively caused the accident is imputable to only one of the operators involved. If such negligent operator suffers the damage, then he alone bears the same including all liabilities that may arise as a result thereof. On the other hand, if the damage suffered by the operator of one of the colliding airplanes was due to the fault of the operator of the other aircraft, then the latter operator who is blameworthy is solely responsible and liable for the damage or injury which he has thus caused.

The problem area, in which authors and judges have quite unanimously agreed, is the distribution of liability for loss or damage where the collision was caused by the negligent acts of both operators of each of the aircraft which collided or interfered with each other. This can be further confused if the air traffic controller also committed some blameworthy conduct which likewise contributed to the cause of the accident.

Since aviation is a relatively new medium in the field of transportation and the jurisprudence on aviation collision incidents may be considered, comparatively, as still in its primitive stage, a glance at maritime rules and the common law on the matter may help in the development of jurisprudence on the matter. Prior to the Maritime Convention Acts of 1911, the admiralty rules[142] provide that where damages result from a collision of vessels due to the negligence or want of skill on both sides, the loss is apportioned equally, i.e., each vessel pays one-half of the loss of the other. The Maritime Conventions Act, 1911, now provides that the liability to make good the damage and loss in cases of collisions of vessels shall be in proportion to the degrees in which each vessel is at fault, provided that, under the circumstances of each case, if it is not possible to establish the degrees of fault, then liability is apportioned equally.

On the other hand, common law recognizes the possibility of only one cause of loss - the negligence of either the plaintiff or that of the defendant, and where there is blameworthy conduct on both sides, however small the blame

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142. - Judicature Act, 1873, which was repealed by the Maritime Conventions Act, 1911.

might be on one side, the loss was made to fall "where it lies"[143].

Attempts have been made to introduce the above rule in maritime law in the effort to draft a convention on aerial collisions[144]. But in cases of collisions in aviation, this rule is very much easier said than applied. In admiralty, a collision of vessels develops slowly and the

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143. - Marsden, supra, pp. 21-22, 24, quoting Lord Blackburn in Cayser vs. Carron Co. /1894/ 9 App. Cas. 873, 881.

144. - M. Ambrosini, as CITEJA Rapporteur sought to introduce this rule in his proposed draft convention on aerial collisions (Doc. No. 208-bis), in February 1934 (5 J.A.L., pp. 478-484). The subsequent drafts prepared by CITEJA, like the Berlin draft, of September 1934; The Hague draft of October, 1935; and the Berne draft of October 3, 1936.

Art. 7 of the current draft Convention on Aerial Collisions of ICAO (1961), published as Appendix A, in ICAO Doc. LC/SC/Aerial Collisions No. 71, 27/3/61, p. 9, following similar rules, provides:

"1. If damage has resulted from a collision or interference caused by the fault of the operators of two or more aircraft, each of the operators shall be liable to the other operators in proportion to the degrees of fault respectively committed, and if the respective degrees of fault cannot be ascertained then the total damage shall be shared equally between the operators involved.

"2. Unless one of the operators involved has been at fault, they shall bear equally all compensation which has been paid by any of them under a legal obligation for any damage caused by the collision or interference."

log books of the ships involved, which show in detail the various movements and manoevres of the ships up to the precise moment of the collision and thus reveal how and why the accident happened, are invariably preserved intact and available. Compared to the speed of modern airplanes, the movement of a vessel is almost imperceptible. An aircraft collision develops suddenly and unexpectedly in most cases. It is possible that the manoevres of the planes when approximating the collision or interference point may not have been recorded due to lack of appreciable time to do so. But even if they were so recorded, considering the catastrophic consequences of the majority of such accidents, it is very seldom that those records will survive the crash. And the reconstruction of such incidents, made so many days after it happened, can only be made by examining and investigating pre-flight data, like the flight plan, weather conditions, etc., and post-flight deductions based on the fallen debris, etc., which are usually affected by the explosion, fire and crash. The findings on how the accident happened are thus often based on technically logical deductions which may not actually be the real truth of what happened.

The foregoing problems are mentioned not as a criticism to the general rule that is offered in distributing

liabilities in an aircraft collision accident. The philosophy in the apportionment of liability in maritime law, that it is not essentially intended to distribute moral blame but only seeks to establish a comparative degree in the appreciation of the degrees of the respective faults which contributed to the result[145], may find similar application in the distribution of liabilities in collision or interference in aviation law. It is simply stressed that errors may understandably be committed in the effort ".... of adding up sins and assessing culpability by a kind of arithmetical process, saying that one side has done three things wrong and the other side only did one thing wrong...."[146].

However, certain economic considerations which underly the efforts in the formulation of aviation law in this area strikes a somewhat discordant note in the application of the foregoing rule. This is illustrated by the fact that in a collision or interference incident a light aircraft can cause as much damage as a heavy commercial air-

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145. - Marsden, supra, p. 162, citing Scott, L. L., in The Buccinum [1936] 55 Ll. L. Rep. 205, 218.

146. - Ibid, quoting Langton, J., in The Oropesa [1940] 68 Ll. L. Rep. 21, 27.

liner[147]. In this regard, apprehension was aptly expressed that such a system of distribution of liability may discourage, if not altogether eliminate, the effort to develop the light aircraft industry and stifle the growth of private aviation, because it may not be able, and with good reason, to share the tremendous burden arising out of an aircraft collision, among other things. The only faint

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147. - Like for instance: the collision on October 27, 1942, at Palm Springs, California, between an American Airlines and a U.S. military aircraft, where both were flying along the same airway in broad daylight (Rainger, et al. vs. American Airlines, Inc., 1943 USAvR 122); the mid-air collision between a navy training plane and a DC-3 airliner off Wrightson, Maryland (Eastern Airlines, Inc. vs. U.S.A., 1952 US&CAvR 212); the mid-air collision between an Eastern Airline DC-4 and a P-38 on November 1, 1949, off the Washington National Airport (Union Trust Co. vs. Eastern Airlines, 1953 US&CAvR 135, and other companion cases); the converging collision between a DC-4 of Compania Cubana de Aviacion and a U.S. Navy training plane on April 25, 1951 (U.S. vs. Compania Cubana de Aviacion, 1955 US&CAvR 361); the collision on April 8, 1954, at Moose Jaw, Saskatchewan, Canada, between a TCA Canadair C4-1 and an R.C.A.F. Harvard MKII (ICAO Aircraft Accident Digest No. 6, p. 93); the mid-air collision on April 21, 1958, off Las Vegas, Nevada, between a United Air Lines and a U.S.A.F. jet airliner (ICAO Aircraft Accident Digest No. 10); the collision on October 22, 1958 between a Viscount 701 and an Air Force F-86-E, over Nettuno, Italy (ICAO Aircraft Accident Digest No. 10); and the reported mid-air collision between a Brazilian air liner and a light private plane on November 26, 1962, off Sao Paulo, Brazil (New report in The Manila Times (Philippines), November 28, 1962, datelined Sao Paulo, Brazil, Nov. 27, 1962.

argument that may be raised against this fear of wiping out such industry are the trickling official reports that there are also cases involving collision or interference of heavy and light airplanes where damages are suffered only by the latter[148], which is not even a tolerably convincing, much less a consoling, factor. The stronger and more reasonable argument is that such industry and/or avocation, being cognizant of collision or interference risks, among others, irretrievably connected with such an undertaking, should have anticipated the same by distributing and shifting, by way of insurance coverage, the liability incident to losses resulting therefrom.

The real difficulty will be encountered in the actual

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148. - Like the mid-air collision on November 27, 1951, at Ocala, Florida, between an Eastern Air Lines DC-3 and Air Force Civil Patrol L4-J (ICAO Aircraft Accident Digest No. 4); the collision on June 27, 1954, off Port Columbus, Ohio, between an American Airlines Convair 240 and a U.S. Navy Beechcraft SNB (ICAO Aircraft Accident Digest No. 6); the collision on August 29, 1955 at the Lea County Airport, Hobbs, New Mexico, between a Continental Airlines Inc., DC-3, and a Piper PA-22 (ICAO Aircraft Accident Digest No. 7); the crash of a Hycon Aerial Surveys P-38L, on August 23, 1957, off Pittsburgh Airport, Pittsburgh, Pennsylvania, due to the turbulence caused by a TWA Constellation Airliner (ICAO Aircraft Accident Digest No. 9); and the crash of a Cessna on final approach at the Omaha Municipal Airport due to loss of control in the turbulent wake of a U.S.A.F. B-47 bomber (Johnson et al. vs. U.S.A., 1960 US&CAvR 269).

implementation of the foregoing rule on apportionment of damages. For example: If the operator of the other airplane, who was sued for personal injuries or for loss of damage to property,was able to prove that the accident was due to the combined or concurrent negligence of his and the other operator's aircraft. Should the court at this instance determine the degree of negligence of the defendant operator and award to the complainant only the proportionate amount corresponding to the defendant's degree of fault? Or, notwithstanding such evidence of concurrent neglects, should the court, in accordance with the common law concept that damage or injury is indivisible, require the defendant to make a full compensation for the injury complained of and let him recover from the other operator at fault a proportionate contribution in accordance with their respective degrees of participation?

In aircraft collision cases, courts in the United States, in line with the common law, have applied the term "joint tortfeasors" not only to the operators of the airplanes involved in a collision resulting from their concurrent negligence but also to other persons, like the ground controller, who may have contributed some fault which caused the accident[149]. Common law forbids the al-

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149. - Cook et al. vs. U.S.A., 274 F (2d) 689, 1960

location or division of damages among joint tortfeasors. In other words, a joint tortfeasor is jointly and severally liable for the damage caused. This concept is similarly applied in admiralty. Under the Maritime Convention Acts of 1911, the loss of life or personal injuries to persons on board a vessel involved in a collision accident renders the owners of both such vessels jointly and severally liable therefor, with a right of contribution in case both are negligent.

Although the above rule is now being seriously reexamined towards a trend to hold every wrongdoer only liable to pay for all the injury caused by his tortious conduct and for no more, in line with the philosophy of effecting a wider distribution of losses and to provide a method of rapid and effective manner of compensation to the persons injured[150], it nevertheless offers a less complicated method of apportioning and meting out liability in aerial collision or interference cases.

In the foregoing example, if the court is required to

US&CAvR 423, 6 Avi. 17,818; Maitland, Ext'x. vs. U.S.A., et al., 285 F (2d) 752, 1961 US&CAvR 67.

150. - In this connection, see: "Adjusting Losses Among Joint Tortfeasors in Vehicular Collision Cases" (Review of Shapiro vs. Gulf M. & O.R.R., 256 F 2d 193), 69 Yale Law Journal (1959 April-July), p. 964. Also, Prosser, supra, pp. 243-244.

determine only the degree of fault of the operator of the other aircraft against whom the action was brought and adjudge only so much amount in proportion to the degree of participation in the faults which caused the accident, such procedure will promote multiplicity of actions and may result, in all probability, in a diversity in the amount of damages awarded as there may not be any legal impediment for the plaintiff to bring the sequel suit in the jurisdiction of another court. Further, it will much prolong the proceedings, contrary to the current drift in delictual actions to make a speedy and expeditious disposition thereof.

Limitation of Liability -

In General.- The huge financial investment involved in the airline industry, from the draft design up to the time an aircraft is made commercially operational, including maintenance and manning requirements, among other things, has caused the government to extend to it some form of special protection so that the evolution of this new and wonderful medium of travel, which is decidedly a boon to present society, may be encouraged and fully developed. Guided by political, social and economic considerations, governments have thus directly or indirectly subsi-

dized their flag-carriers. A direct subsidy or partial ownership of its commercial airlines is practiced in almost all countries of the world except in the United States where its air carriers are, instead, extended its mail revenues[151].

Just like in any form of vehicular transportation, accidents are no strangers to aviation. However, unlike in the other modes of travel, the liability of an aircraft operator arising from a single aviation incident usually results in tremendous, and oftentimes catastrophic, losses. Even during the early stages of its development, it was justifiably felt that if aviation were made to shoulder alone such losses, it will readily bankrupt its entrepreneurs and completely discourage, if not destroy, all initiative towards its development.

The liability problems involved in the field of public transportation is not new. Fortunately for aviation, the rich jurisprudence in admiralty show that shipping also suffered similar tremendous liability risks and, through various stages, evolved a system of protection to the in-

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151. - In the Philippines, 51% of the capital stock of its flag-carrier, the Philippine Air Lines, Inc., is owned by the government. In addition, it enjoys all domestic air mail revenues and is exempted from landing and parking fees.

dustry without causing undue prejudice to its users. As early as the 17th century, the principle of limiting a shipowner's liability for accidents at sea was already in vogue in the shipping nations of continental Europe. This protective mantle was likewise subsequently extended by England and the United States, primarily in order to afford to its bottoms a chance in the keenly competitive maritime traffic with vessels of other nations[152]. From these experiences therefor, aviation was able to draw analogous rules.

Considerations involved. - Several theories were considered in the resolution of the problems of liability resulting from accidents in aviation. Except in certain specific cases, it was believed that the idea of holding an aircraft operator fully liable for losses resulting in

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152. - The French Ordonnance de la Marine of 1681 limited the liability of French ship owners stake in each venture. Prior to 1734, England had, like land carriage, unlimited liability for shipowners. The development of limitation of liability in England was by increments: starting from where the accident was caused by the treachery of the master and crew; as a result of fire and theft generally; collision with other vessels; and finally, the general limitation as it now appears in English maritime rules. Knauth, "Limitation of Aircraft Owner's Liability", Vol. w, A.L.R. April 1932, No. 2, p. 135.

aviation accidents will render "all commercial aviation impossible"[153], and will be an awesome burden which the industry cannot hope to shoulder alone if it has to survive at all. On the other hand, total exemption from such liabilities is equally not favored as it will not be fair to the passengers and other users, to society in general, if they are made to bear such burden where fault for said accident lies in some measure to another. Although undoubtedly beneficial to the carrier, the individual harmed may be equally or even more unable to bear the loss[154]. Therefore, the solution appears to be in how to draft a formula limiting or reducing airline liability in such a manner as will be both fair to the public and beneficial to the air carrier.

The proposition to limit an aircraft operator's liability arising out of air collisions is not new[155]. The

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153. - Drion, "Limitation of Liabilities in International Law" (1954), p. 16.

154. - Rittenberg, "Liability of Airlines: Passenger Liability", 6 J.A.L. (1935), p. 365.

155. - In 1925, Ambrosini, CITEJA Rapporteur, proposed the limitation of liability of the aircraft operator for the benefit of aviation. Also, the Fourth Congress of the CITEJA in 1927, at Rome, resolved".... that there should be adopted a system of limited liability as will reconcile the opposing interests (protection which should be

early CITEJA drafts of a convention on aerial collisions contain provisions limiting an aircraft operator's liability. After the constitution of ICAO at the close of World War II, the same lines were pursued by its Legal Committee in the effort to prepare a draft convention on aerial collision. The present ICAO draft thus provides a similar limitation of liability[156]. The concept of limiting an aircraft operator's liability in cases of air accidents was not only found necessary in collision incidents. Similar provisions, with different limits provided thereunder, are also found in the present conventions on international air law like in the Warsaw Convention, as amended, and in the Rome Convention.

The principle of liability limitation in air law did not, however, escape criticism. It was strongly argued that in the United States where no such limits exist in favor of an air carrier, commercial aviation has nevertheless far developed ahead of other countries, notwithstanding the fact that the damages awarded in that jurisdiction, in aviation accident cases, are much higher than

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accorded to victims of air accidents) without creating obstacles to the development of air transport."

156. - Art. 10 of the draft. LC/SC/Aerial Collisions No. 71, 27/3/64, Appendix A, pp. 9-10.

elsewhere[157].

Applicable limits. - The damages resulting from an aerial collision or interference, discussed above, may be divided into two general categories, to wit: 1) damages to an operator of the aircraft involved consisting of the destruction of, or damage to, the aircraft; which results in the loss of its use, damages due to failure to comply with a certain specific obligation, and amounts which he may have paid to others under different regimes of law; and 2) death or injury to persons and loss or damage to property on board other than that belonging to the operator.

Admittedly, the determination of what should be the limit or limits of liability in case of damages due to an aerial collision or interference is extremely difficult but not, however, reasonably impossible to resolve. Of course there can be no exact mathematical formula that may be made the standard of such determination. Because assu-

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157. - Drion, supra. In addition, it was also pointed out that even in shipping in the United States, the limitation of liability for passenger injuries and shipper's losses is "inappropriate", and a strict interpretation is now accorded the U.S. Limitation of Liability Act of 1851. Feringa, Jr., "Limitations of Liability: Passenger Injuries and Baggage Losses on Land, Sea and Air", XXXV Tulane Law Review (1960), 354, 370-374.

ming that the loss or damage to property may be determinable in exact figures, yet, the problem of how much of such loss or damage should the operator be held pecuniarily responsible is indeed quite a task. Not to mention the fact that in case of death of, or injury to, a person, the value of human life and the assessment of moral damages due to the sufferings of an individual who was injured in the accident, project such difficulties into an apparently insoluble task. Any effort therefore, towards setting a maximum limit of liability, must confessedly be arbitrary, although legally justifiable.

In the efforts made by the CITEJA to solve this particular dilemma, it obviously looked back and delved into the maritime rules on the subject for possible guidance. The Merchant Shipping Act, 1894, in this particular connection, provides separate aggregate limits for loss of life or personal injury, and damage to vessels, goods or merchandise; and with an over-all aggregate limit not to exceed the value of the ship at fault and its freight.

A similar concept was provided in the various CITEJA drafts of a convention on aerial collisions. An aggregate limit of liability was set equivalent to the value of the negligent aircraft, with minimum and maximum limits, one-third of which was assigned to the reparation of da-

mages to property (the aircraft and the property on board) and two-thirds to the indemnification of injuries caused to persons, with proportional reduction in case the aggregate amount assigned will not be sufficient to meet all the obligations thereunder[158].

The establishment of an aggregate limitation of liability in cases of aircraft collision or interference based on the value of the vehicle at fault does not appear to be a sound principle in air law, particularly in this kind of accident. Records have shown[159] that a collision between a commercial airliner or a heavy type of aircraft and a light plane, like those privately owned and opera-

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158. - CITEJA Doc. No. 208-bis, dated February 1934, which was proposed by M. Ambrosini, provides that the liability in case of aerial collision shall be limited to: the value of the colliding aircraft (at fault) for the injuries caused to the blameless aircraft; and the amount of indemnities provided in the Warsaw Convention of 1929 should be applied. (5 J.A.L. pp. 478-482). CITEJA Doc. No. 237, adopted in Berlin in September 1934, provides that the limit of liability of the aircraft at fault is the value of said aircraft determined at 250 kgms of weight thereof, with a minimum liability of 600,000 francs and a maximum liability of 2,000,000 francs (6 J.A.L. pp. 265-267). CITEJA Doc. No. 320, adopted at Berne on October 3, 1936 (8 J.A.L. (1937) pp. 72-75, 1937 USAvR 341-346) contain almost similar provisions.

159. - See footnote 147, supra.

ted, most often results in the destruction of both aircraft and the death of all its passengers. From this example, it is obvious that if the operator of the light plane is the one at fault, and his liability for such accident is limited to the value of his vehicle, the result will be tragically ludicrous to commercial aviation, because the latter ultimately bears the enormous burden of liability for damages caused by the neglect of another.

During the 10th session of the Legal Committee of ICAO at Montreal, Canada, in September 1954, the difficulty of resolving the foregoing observation was emphasized. It was noted that "a small aircraft may cause the destruction of a very large aircraft and it therefore seems necessary, if liability is to be scaled, that the scale should not be based on the weight of the respective aircraft", and suggested "to provide for a single high limit applicable to all aircraft, the amount to be left for consideration of the appropriate authorities[160]. Pursuant to the recommendations of the Air Transport Committee of ICAO[161], the

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160. - ICAO Doc. 7601-LC/138, Tenth Session, Legal Committee, Montreal, 7-24 September 1954, Vol. II, Documents, p. 10.

161. - ICAO Doc. 7921-LC/143-2, Legal Committee, Eleventh Session, Tokyo, September 1957, Vol. II, pp. 187-199.

original theory of limiting liability to the value of the aircraft at fault was abandoned. The basic principle in tort law of cause and effect was applied, i.e., the liability shall be in accordance with the amount of the damage caused by the negligent operator.

(1) For loss or damage to an aircraft, including its accessories. - According to the present draft convention on aerial collisions prepared by the sub-committee, Legal Committee, ICAO, in Paris in 1961[162], the limit of liability of an operator at fault for loss of or damage to another aircraft including the equipment and accessories thereof and any property thereon belonging to its operator shall be the proved value at the time of the collision or interference or the cost of repairs or replacement, whichever is the least.

The above provision cannot equally escape some valid criticism. It may be argued that it does not actually set a limit of liability as this concept is legally understood and accepted. One of the reasons behind the effort to establish a limit on the liability of an aircraft operator, in addition to what was previously mentioned, was to effect

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162. - LC/SC/Aerial Collisions No. 71, 27/3/61, Appendix A, p. 9.

as wide a distribution as possible of the damages caused by a collision accident in order to alleviate the operator of this burden which otherwise he will have to shoulder alone. This rationale is not met by the said provision, which is simply a requirement to repair and indemnify the actual injury sustained as a result of the accident. In other words, it is a mere restatement of the general principle of reparation obtaining in the law of torts for neglects. It is immediately obvious, supported by jurisprudence from both common and civil law jurisdictions, that the operator at fault in a collision or interference accident in the air cannot be held liable beyond the actual or real damage or loss to property which resulted due to his neglect. This is the basic rule of restitutio in integrum and not an expression of the philosophy of limitation of liability.

On the other hand, it may equally be argued against the foregoing that when a plaintiff in a damage suit arising from an aircraft collision or interference is required to undergo all the legal and practical difficulties attendant to proof of fault on the part of the defendant, then the concept of limitation of liability, which is a quid pro quo to the shifting of the burden of proof to the defendant should not be made applicable. As shown in the

discussion of the principles of liability in a case involving aircraft collision or interference, where the action is instituted by one operator against the other for the recovery of loss or damage to the aircraft involved including its appurtenances, the plaintiff operator is required to prove the fault of the other in order that his action for damages may be sustained.

In view of the foregoing considerations, it appears to be the better rule to hold the blameworthy operator of the aircraft involved in a collision or interference accident liable for damages caused to the aircraft or its engines and accessories due to his negligence. If a maximum limit is provided therefor, who should be made to shoulder the amount in excess of said limit? Legally and economically it should not be charged against the innocent operator of the other aircraft, nor passed on to the end-users of aviation. Further, a different view will unwisely disturb, to a considerable extent, the equilibrium of the deeply entrenched principles in tort law.

(2) <u>For loss of use of the aircraft</u>. - The loss of the use of the aircraft, which is considered in law as an intangible property, resulting from the destruction or damage to an airplane involved in an aerial collission or interference, causes prejudice to its operator and demands

compensation for such injury from the operator of the other aircraft at fault.

Being an intangible asset, the determination of its pecuniary value is another serious problem that confronted the framers of a draft convention on aerial collisions. The theory of including the loss of use of an aircraft which was damaged as a result of an aviation accident is an innovation in the general law on delicts. It was not expressly included under the concept of damage in case of collisions of vessels in maritime law, although the same may be deemed assimilated in the term "consequential damage" for the loss of a ship.

The CITEJA drafts of a convention on aerial collisions did not also show an express inclusion of "loss of use" of the aircraft as one of the damages considered as having resulted from an aerial collision. Up to the 10th session at Montreal in 1954 of the Legal Committee of ICAO, the similar draft conventions adopted by ICAO also made no mention of this kind of damage. However, it may be explained that since admiralty rules and the above-mentioned drafts have prescribed an aggregate limit of liability it may be assumed that the "loss of use" of the vessel and aircraft, respectively, are already assimilated within the purview of the loss or damage caused to the ve-

hicle. With the revision of the concept of prescribing an aggregate limit of liability, the necessity of providing various limits for the different damages or injuries resulting from an aerial collision or interference becomes apparent.

By the very nature of the proprietary character of "usus", its pecuniary assessment is highly relative, in view of the various effects that the loss thereof will produce to its operator or owner. In commercial aviation, the "loss of use" of the aircraft may be represented in terms of income or profit which the operator failed to realize. In the other areas of civil aviation, the term may express the loss of enjoyment in the use of the airplane or may mean the deprivation of facilities which air travel has now afforded to the modern sportsman or businessman.

Under military standards, the loss of the use of a military aircraft may connote failure or delay in the performance of certain missions, either routine, training, administrative, or operational.

From the foregoing diverse considerations, the establishment of a mathematical formula to translate the actual value of the "loss of use" of an aircraft is almost impossible. Since some sort of a limit should be provided in a convention on aerial collision for the "loss of use" of

an aircraft, the basis thereof must, perforce, be arbitrary.

From the provisions of the 1961 draft of a Convention on Aerial Collisions prepared by ICAO[163], an amount equivalent to 10% of the value of the aircraft is considered as the limit for the loss of use of said airplane. It may also be deduced from the wordings thereof that if the plane is merely damaged and thus simply requires repairs to return it to its original operational status, then 10% of the cost of such repairs should be the limit. In the absence of any precedent on this point, legal or economic, the foregoing limit may be accepted, subject to revision or amendment if future experience along this line will so dictate.

(3) For compensation paid under other legal regimes. - It was previously mentioned that there are three other legal sources which may require an air carrier to pay for injury or damage caused by an aircraft collision or interference wherein he may have been involved, i.e.: the Warsaw Convention, as amended; the Rome Convention; and the lex fori.

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163. - Art 10 (b) provides: "for loss of use of that aircraft: 10% of the value of that aircraft as determined under subparagraph (a);"

The limits of liability prescribed in the Warsaw and Rome Conventions, respectively, may be set as the limits in aerial collision rules for the compensation to be reimbursed to the operator who was legally required to pay, and actually paid, under the said covenants. Although the said amounts cannot be predetermined, the reasonableness of its assimilation and the logical justification therefor cannot be gainsaid.

In most jurisdictions, particularly in the United States, domestic laws on delicts do not provide for any limit of liability. Where an operator has been required to pay compensation for damages arising out of an aerial collision or interference under the lex loci delicti, he should be entitled to a complete and total reimbursement therefor from the operator of the other airplane at fault without any limitation. There can be no legal, or even reasonable, justification to hold otherwise. Although such amount is indeterminable, yet it is undeniably foreseeable and may be considered fair and equitable according to the general standards of liability in the law of negligence.

It is a recognized practice, also in aviation accidents, that efforts are initially made towards an amicable or extra-judicial settlement of the liability resulting

from delictual or even contractual obligations. Settlements thus made should also be the subject of compensation. The danger of collusion, by an inflation of the amount supposed to have been paid by way of such settlement, may be obviated by including the reasonableness of the amount allegedly thus paid with the other issues raised for determination by the court seized with the case. To require a judicial decree as a prerequisite before compensation is paid therefor will discourage extra-judicial settlement of claims thereby unnecessarily and unreasonably protracting the disposition of liability claims which will be cumbersome not only to the operator but also tedious to the legitimate claimants.

(4) <u>For death or injury to persons and damage to property on board the other aircraft other than that belonging to the operator</u>. - In order to render uniform and in a way standardize liability limits in international air law, the same limits of liability as provided therefor under the Warsaw Convention, as amended by The Hague Protocol, should be provided in a convention on aerial collisions. This will reduce to a considerable degree the number of litigations arising out of an aerial collision or interference incidents as both systems have the same principle of liability, i.e., presumption of fault, and the same limit

of liability. Therefore, the plaintiff instead of suing both operators, either jointly or jointly and severally, may only file an action against either one of them, depending on their solvency, because, after all, the amount that he can expect to collect, irrespective of the convention which he may choose to submit himself, will be the same.

An earlier draft convention on aerial collisions adopted by ICAO[164], assimilated the limits of liability under the Rome Convention for such damages. Such a concept will promote suits by passengers and cargo owners against the operator of the other aircraft because it may be expected that more compensation will be paid than where the action is instituted against their own carrier under the Warsaw Convention. This will lead to a more extensive application of the complicated process involved in recourse actions and impose addition burden to the air carrier. Said theory was based on the hypothesis that said passengers and cargo owners may be considered similarly as "innocent victims" of the accident. Aircraft users may be presumed as having voluntarily assumed the risks incident to aviation, The same cannot be said regarding persons and property on

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164. - The draft convention on aerial collision adopted at Montreal during the 10th session of the Legal Committee, in September 1954. ICAO Doc. No. 7601-LC/138, Vol. II, Documents, p. 9.

the ground who suffered injury or was damaged as a result of an air crash. The only point of similarity in both instances, which has no material bearing in considering the limits of liability to be provided, is that the basis for their claim for damages is delictual, unlike in the Warsaw Convention which is based on contractual obligation.

From all the foregoing considerations, it may be concluded that the principle of limitation of liability in aircraft collision or interference will only apply in the following cases: 1) where fault on the part of either or both operators of the aircraft involved in the accident is proven; and, 2) in cases where the presumption of liability is not overcome. The converse of these propositions are equally true. In addition however, liability limits will not also apply in: 1) cases involving relatively minor damages where the limit will not be reached; and, 2) in certain specific cases where the principle of unlimited liability controls.

Unlimited Liability. - The application of the principles of liability limitation in an aerial collision or interference is not absolute. There are certain situations in aircraft operations which equitably and legally justify the exclusion of the said benefits from an aircraft operator involved in such an accident.

(1) Wilful misconduct or gross negligence. -

Under the provisions of the Warsaw Convention of 1929, the limits of liability provided thereunder will not be applicable in case the accident is caused by the wilful misconduct (dol) or gross negligence (faute lourde) of the operator, or, those caused as aforesaid, by his servants or agents acting within the scope of their employment[165]. In view of the technical difficulties encountered in the interpretation of the terms "wilful misconduct" and "gross negligence" in the different legal jurisdictions, which are "inexact" translations of the phrases "dol" and "faute lourde" appearing in the original French text of the Convention, The Hague Protocol of 1955, which took effect in 1963, now provides that the limits of liability shall not apply if the damage results from an act or omission of the carrier, or his servants or agents acting within the scope of their employment, done with intent to cause such damage

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165. - Art. 25, provides: "(1) The carrier shall not be entitled to avail himself of the provisions of this Convention which exclude or limit his liability, if the damage was caused by his wilful misconduct or by such default on his part as, in accordance with the law of the Court seized of the case, is considered to be equivalent to wilful misconduct.

"(2) Similarly the carrier shall not be entitled to avail himself of the said provisions if the damage is caused as aforesaid by any agent of the carrier acting within the scope of his employment."

or recklessly and with knowledge that damage would probably result[166].

It is interesting to note that in the efforts to draft a convention on aerial collisions, from the early days of the CITEJA to the current concept of ICAO, the same words, "wilful misconduct" or "gross negligence", were provided in their drafts. However, the problem in this respect, which confronted the framers of international air law, is not in revising or changing the concept of unlimited liability but on the proper and appropriate phraseology to be used in enunciating the said principle.

There are already numerous jurisprudence in air law which define as to what acts and omissions may be considered as wilful misconduct in aircraft operations and bar the application of the principle of limitation of liability in favor of an air carrier. In the interpretation of this term under the Warsaw regime, courts of various jurisdictions have held that wilful misconduct may be considered as the intentional performance of an act or the omission to do an act with knowledge that its performance or omission will probably result in injury or damage, or it may constitute an intentional performance or omission of an act in

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166. - Art. XIII of the Protocol.

such a manner as to imply reckless disregard of the probable consequences of the performance or non-performance of such an act[167]. This concept in the application of liability limits has thus acquired invaluable precedents in air law. The same principle was adopted by ICAO in its current draft of a convention on aerial collision[168]. By its very

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167. - Ulen vs. American Airlines, Inc., (DC-Dist.of Columbia) 1948 USAvR 162-166, 1949 USAvR 338-349; Ritts vs. American Overseas Airlines, Inc., 1949 USAvR 65-71; Pekelis vs. Transcontinental Western Airlines, Inc., 1950 USAvR 296, 1951 USAvR 2-15; 187 F (2d) 122, 3 Avi. 17,440, cert. denied, 241 U.S. 951; Froman, et al. vs. Pan American Airways, Inc., 1948 USAvR 47-48, 1949 USAvR 168-190, 1953 USAvR 1-24, 1954 USAvR 400; Nordisk Transport vs. Compagnie Air France, R. Gen. Air, 1953, 180-183, R. fr. Dr. Aer., 1953, 105, ZLR 1953, 367-370, R. Gen. Air 1950, 952-954; Del Vina vs. Compagnie Air France, R. Fr. Dr. Aer. 1954, 191-201; Hennessy vs. Compagnie Air France, R. Gen. Air, 1954 80-83, R. fr. Dr. Aer., 1954, 45-66; Gallais vs. Societe X, R. fr. Dr. Aer., 1954, 184-190, ZLR, 1955, 66-70; Fischer, et al. vs. Compagnie La Sabena, R. fr. Dr. Aer. 1950, 411-427, Rev. Gen. Air, 1951, 160-180, 1950 USAvR 367-381; Grey, et al. vs. American Airlines, Inc., 1955 USAvR 60-79, 4 Avi. 17,572; Goepp vs. American Overseas Airlines, 1952 USAvR 486-493, 117 NYS (2d) 276, 3 Avi. 18,057; Rashap vs. American Airlines, Inc., 1955 US&CAvR 593; Coultas and Polak vs. K.L.M., et al., 1961 US&CAvR 199; K.L.M., et al. vs. Tuller, 292 F (2d) 775, 7 Avi. 17,544, 1961 US&CAvR 181, 368 U.S. 921.

168. - Art. 11 of the 1961 Paris Draft of a Convention on Aerial Collisions provides that the limits of liability provided thereunder shall not apply:

"(a) if it is proved that the damage resulted from an act or omission of the operator, his agents

nature, it appears obvious that there is no defense available against this principle.

(2) Unlawful user. -

Possibly influenced by the provisions of the Rome Convention of 1952[169], the idea of excluding from the benefits of liability limits any person who may have wrongfully taken and made use of the aircraft without the consent of the person entitled to permit its use was incorporated in the ICAO drafts of a convention on aerial collisions[170].

The exclusion of the so-called "unlawful user" of the aircraft from the ambit of limited liability benefits in an aerial collision or interference was critized. It was argued that the primary consideration of liability is fault or neglect, not in having unlawfully appropriated for

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or servants, done with intent to cause damage, or recklessly and with knowledge that damage would probably result; provided that in the case of such act or omission of an agent or servant, it is also proved that he was acting within the scope of his employment; ....".

169. - Particularly Art. 12, which provides: "(2) If a person wrongfully takes and makes use of an aircraft without the consent of the person entitled to use it, his liability shall be unlimited."

170. - This was initiated in the draft convention on aerial collision prepared by ICAO in Montreal in 1954 and retained in the 1961 Paris Draft.

himself the use of the aircraft but for his subsequent negligence which caused the accident[171]. Also, there is no relationship between cause and effect, between the theft of the airplane and the collision wnerein it was involved: the former should be actionable according to penal laws, while the latter is governed by delictual rules which are civil in nature[172]. On the other hand it may be stated that society, as a rule, does not favor the extension of any economic benefit to a person who trespasses on the property of another, because one who seeks equity or benefits extended by law should do so with "clean hands".

There is merit to exclude an "unlawful user" from the benefits of limited liability in collision incidents. This principle is sought to be extended only to an aircraft operator or carrier, including his servants or agents who are acting within the scope of their employment, as an economic measure, in the form of indirect subsidy, to protect the airline industry. With this rationale, the proposition is submitted that in so far as the legal

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171. - Comment of the Australian delegate during the 10th Session, Legal Committee, ICAO, at Montreal, 7-24 September 1954. ICAO Doc. 7601-LC/138, Vol. I, (Minutes), p. 108.

172. - Argument of the delegate of Italy during the discussion mentioned in the preceding footnote. Ibid, p. 109.

application of the rules on aircraft collision or interference is concerned, the same should be framed as to include only within its purview, either directly or indirectly, the aircraft operator including his servants and agents as qualified above. Unless falling within those categories, the provisions of an aerial collision convention should not be made to apply and the matter should be decided according to some other legal regime.

Further, an "unlawful user" does not fall within tne legal concept of operator as to be the recipient of the benefits of liability limits in international air law.

However, although the rationale of excluding an "unlawful user" from the scope of the liability limits of the rule may be well taken, there is felt no necessity of making such express inclusion in the provisions of the law on aerial collision. There is always danger in making such enumeration. Under the principle of statutory construction, when the law contains an ennumeration those not included therein are deemed excluded. So that if a person who was properly authorized the use of an aircraft by the person who is legally entitled to its use is involved in a collision incident, such situation might be immediately construed as falling within the ambit of the convention merely because he is not an "unlawful user".

His status is not necessarily so. The liability rules that should govern cases of such nature should be provided in another legal regime.

RESUMÉ

The studies herein presented on some of the legal problems in international law on aerial collisions have not been pursued up to their remotest nooks and corners. This was prompted by an apprehension, may be speculative but nevertheless ominous, that to do so, which will assume the staggering proportions of a chain reaction and possibly reach up to purely imaginable and theoretical heights, may lead to so many instances where a rational solution might not be offered. This discussion was therefore limited to those common and practical problem areas which immediately invite attention in cases of an aerial collision or interferance.

Obviously, there is a phletora of other legal problems involved in such an aircraft accident which will equally afford opportunities to a student of air law to delve, and even wallow, into. The basic requirements of this work prevented their being included herein. Time and opportunity permitting however, a sequel to this study may be presented sometime.

In the main, it may be observed that in the consideration of the legal problems involved in aircraft accidents, particularly in a collision or interference situa-

tion, the rich and abundant jurisprudence in the general rules on negligence in tort law and those eveloved through centuries of experience in admiralty and highway rules may be assimilated in so far as they may find similar application, without, however, in any manner or form whatsoever, impeding nor retarding the growth of aviation enterprise. The ingenuity of the legal scholars are thus challenged, in blazing a new trail in air law that will meet aviation requirements while this enterprise is still unfettered by hoary and antiquated legal strictures. After all, the law should be tailored to suit the unique and peculiar requirements of aviation and not the airline industry to be made to fit into a ready-made legal framework, as in the mythical bed of Procrustes.

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