The Problem of Liability for Damages Caused by Aircraft on the Surface

Andre Kaftal
THE PROBLEM OF LIABILITY FOR DAMAGES CAUSED BY AIRCRAFT ON THE SURFACE*

André Kaftal†

INTRODUCTION.

Compensation for damages caused by aircraft to persons and property on the surface of the earth constitutes one of the most important and difficult problems in the field of air law. Aviators are forced to fly over towns and fields in the course of flight, and, at any moment, may unwillingly cause damage by the falling of their aircraft or of objects therefrom, or by a forced landing on private or public property outside an airport.

Injuries thus caused may, in principle, be very important. If we admit that, for the protection of persons on the ground, there must be instituted a very severe rule of liability—not allowing any defense on the part of the aviator and with no consideration of the causes of the damage; and if we admit, on the other hand, that compensation resulting from such liability should not be limited to a small sum, the result is that aviators are constantly running the risk of being financially ruined as the result of any one air accident. However, if we put ourselves in the position of the persons on the ground, who generally have no means of avoiding any damage caused by an aircraft and can not even determine the cause of the accident, we see that the application of the droit commun in this case would be very unjust and even inadmissible for the greater part of the people who as yet derive no benefit from air navigation.

*The following article was written in French for The Journal of Air Law with the understanding that it would be translated at the Air Law Institute. The translation has been made by Katherine Fritts, Secretary-Librarian of the Institute.
†Avocat à la Cour d'Appel de Varsovie.

[179]
It is true that this conflict of interests between aviators and persons on the ground exists only in theory. Actually, the situation is not nearly so difficult because generally the damage caused on land by aircraft is of little importance. The aircraft must fall on real property. Even so, the accident alone does not cause very serious damage. The greatest danger is from fire. But most laws forbid unnecessary flight over cities and, in any case, require that an altitude of sufficient height be maintained, in order to avoid a forced landing in a town. Furthermore, measures are taken to avoid fire on land, as, for example, the immediate emptying of gasoline tanks, etc. Thus, as may be shown by statistics, serious damage caused by aircraft on the surface fortunately presents only a very rare exception.

Consequently, the conflict of interests between aviators and persons on the ground is less sharp and frequent in practice than in theory. However, the problem of compensation for damage caused on the surface of the earth does not lose its importance. Every state is interested. But some believe it too soon to make special rules for air liability; they think it better, in spite of certain disadvantages, to apply the rules of the droit commun instead of adopting special rules which, for lack of sufficient experience, might bring about undesirable results or even give rise to conflicts in the legal system of the country. Other states, the greater number of which have a highly developed air navigation system, consider it necessary to make special regulations for the liability of aviators toward third persons on the surface of the earth.

Some aircraft accidents, which happened before or immediately after the world war, made an unfavorable impression upon the public mind. It was concluded that aircraft were of great danger to persons on the ground, because the aircraft were then far from perfection in development and very often, for unknown reasons, got out of control of the pilot. People saw in aviation a new and inexplicable phenomenon—something to be feared. They imagined that any aircraft accident would cause serious damage on the ground, damage which it was impossible to avoid. Likewise they believed this danger to be much greater than that to which they were exposed with motor traffic. Jurists had not then tried to change this point of view. Through the use of statistics and documents, they exaggerated the degree and frequency of danger which an aircraft presents to persons on the ground, and found it necessary to provide substantial compensation for damage, without considering the interests of the aviator. They
LIABILITY FOR DAMAGES

did not limit themselves to making it easier for the injured party to get compensation, by freeing him from the burden of proof, but they further decided that, without limiting in any way the amount of damages, the damages must be paid by the aviator—no matter what the cause of the accident, even though it be through force majeure. Thus, most of the early legislation evidenced a belief that absolute liability of the aviator, without any limitation, was advisable.

In time, air navigation changed. Aircraft ceased to be considered new and unknown. It was discovered that, in spite of the constant growth in number of aircraft, accidents were fewer and, above all, injuries caused on the surface of the earth were rare and generally of little importance. Furthermore, the jurists began to show a change of opinion. Thus, as we shall see in the first part of this study, certain recent laws have found it impossible to place upon the aviator the burden of absolute and unlimited liability. For example, Poland¹ and Mexico² have been content to establish a presumption of liability against the aviator—giving him the right to prove lack of fault on his part. In Poland, the particular liability of air law has been conceived in a manner less severe than that of the droit commun. In Italy the law of August 20, 1923, now in force, instituted less severe liability than the aeronautical law of November 27, 1919, preceding. In the United States, the Uniform State Law of Aeronautics, which maintains absolute liability, had been favorably received from the very beginning. From 1923 to 1929, a number of States and territories adopted it. However, since 1929 no State has adopted it and even one of those who adopted it in 1925 has repealed it.³

Evidently, as we shall see by the following, the greater number of these states who have dealt with liability toward third persons in their air laws, have adopted the principle of absolute liability. In twenty-one aeronautical laws which at this time regulate our problem throughout the world, eleven have adopted the principle of absolute and unlimited liability in all cases, two apply this liability rule only to damage caused outside of authorized airports, and one law limits the amount of the damages. Furthermore, two laws adopt different principles of liability according to the nature of the injury (that of absolute liability, among others). Lastly, five laws completely reject the principle of absolute liability. Moreover, certain laws place under the head of the

¹. Decree of March 14, 1928.
². Law of August 31, 1931.
³. Idaho.
special regulation of air law all damage caused by aircraft; others limit themselves only to damage caused by accidents. This liability generally concerns all aircraft, but sometimes it concerns only aircraft propelled by motor and does not apply to balloons and gliders. Finally, seven laws, in order to safeguard and protect the interests of the injured party against the insolvency of the aviator who is liable, demand that the latter guarantee payment of damages which he can be required to pay. Generally, this guaranty must take the form of insurance or the deposit of money or securities. But the laws do not agree regarding the form and amount of this guaranty.

We can see now what differences there are among the air laws of various countries. But this condition is very detrimental to the progress of air navigation. At the present time, aircraft are traveling at a very high and constantly increasing rate of speed, which speed has already surpassed that of other means of transportation. Furthermore, aircraft are not limited by the contour of the land, nor by a route laid out beforehand; also they can take the shortest way, by flying in a straight line from the point of take-off to the point of landing. Thanks to aircraft, two cities are linked much more rapidly than by railroad, automobile, or boat. This saving in time is especially appreciated over great distances and it is there that the aircraft—heavier- or lighter-than-air—is irreplaceable.

Due to the speed of aircraft, their radius of action is constantly growing. Thus in Europe, divided as it is into many countries of which the largest is not very great, the aircraft is of interest only on international lines. Furthermore, continental lines are no longer sufficient; aviation and air lines which unite continents are becoming daily more numerous. Europe-Asia, Europe-Africa, Europe-Australia, Europe-South America, are regular commercially operated lines. In America, in spite of the great size of some countries, particularly the United States, commercial aviation is not content to operate only in the confines of one country, but air lines unifying North and South America are operating daily.

We see, then, aircraft of large air navigation companies flying every day over many countries each of which is regulated by a different law. The same accident, the same damage caused on the surface would have varying results according to the country where it occurred. One country might force the aircraft operator to pay an enormous amount of damages where another might exact only a modest sum, and a third might allow him complete exemption
LIABILITY FOR DAMAGES

from liability. Moreover, the defense against any suit might be entirely different between countries. To provide for and if possible to cover risks, the air transport operator would require a number of legal advisers constantly studying the laws, decisions, decrees and ordinances of all countries to be flown over. This fact alone makes such flying impracticable for sportsmen and air tourists who cannot have sufficient legal assistance. All these difficulties are dealt with in aeronautical laws, but it is in the field of liability toward third persons that the aviator suffers most. For this reason, uniformity of laws concerning liability for damage caused on the surface is imperative.

The work of the jurists who have devoted themselves to it has been very difficult. In the first place it has been necessary to establish the principle on which liability would be based. Although the great majority of aviation laws have adopted absolute liability, nevertheless a certain number have preferred to maintain a presumption of liability. Furthermore, it is necessary to consider those nations which, not having made any regulations regarding this problem, have applied the droit commun to its solution, i.e., the principle of fault. However, there are two facts beyond doubt: (1) the injured parties must be granted certain means of obtaining compensation, because if they are forced, as is seen generally in the droit commun of most of the countries, to bring proof of fault on the part of the aviator, that would mean denial for them of all compensation, since an injured person generally cannot establish the cause of an air accident; (2) it would be inadmissible to charge the aviator with absolute, unlimited liability with respect to the amount of the damages.

Two solutions present themselves to the jurists: (1) either to adopt a presumption of liability against the aviator, by granting him the right to use one or another means of proof, such as force majeure; or (2) to adopt the principle of absolute liability, while limiting the indemnity.

The first solution, which approaches most nearly the droit commun of all countries and which appears the most logical, has however, the great disadvantage of placing upon the injured person the burden of the injury caused by force majeure. Furthermore, inasmuch as limitation of indemnity could not logically be concluded from this system, a guaranty of payment of indemnity, under such a form as this, could not be practically possible.

The second solution does not have these disadvantages. Absolute liability limited to a fixed amount could be combined with a
guaranty, especially with compulsory insurance against risks, since the establishment of an insured sum would not offer any difficulty. The result would then be that the injured party would always receive compensation, whatever the cause of the accident. The aviator would have nothing to pay since the insurance company would assume the responsibility of paying the indemnity.

This last solution was adopted by the member jurists of the C. I. T. E. J. A., charged with the duty of drawing up the project of the convention—the object of which was to make uniform the laws of the different countries in regard to liability toward third parties. With some final corrections, this principle was also accepted by the Rome Conference of May 15-29, 1933.

Nevertheless, it is not enough to adopt a uniform principle for liability; it is also necessary to agree on the details, without which uniformity can not be attained. It is necessary not only to have uniformity between the different laws of many countries, but also to eliminate those which, in theory and operation, are opposed to uniformity. We shall see in the second part of this work what end is reached in effecting a convention acceptable to all states, and in successfully unifying all aviation law.

To appreciate fully the work of the Rome Conference, it is necessary to understand the aviation laws of the countries which have taken part. That is why the writer has devoted the first part of this work to an examination of the regulations concerning liability toward third persons in aviation law throughout the world. Various legislative types have been analyzed; as to others, which differ only in detail, it has been necessary only to point out the purport of their regulations. For clarity, the national laws have been set forth, in their alphabetical order, in an additional comparative table.

The second part of this work is devoted to the explanation, analysis and criticism of the Rome Convention of May 29, 1933, which, in spite of its deficiencies and errors, will always be a great legal document of our era.

**National Laws.**

**Austria**

*Analysis of Types of Legislation.*

Aviation is regulated by the law of December 10, 1919, and the decree of the Minister of Commerce and Communications, of September 8, 1930, amended by the decree of June 11, 1932.  

4. See Fischl, Dr. H., Das österreichische Luftfahrtrecht (Vienna, 1929).
The decree includes in the definition of aircraft: airships, airplanes, gliders, free and captive balloons, kites and parachutes. Nevertheless, regulations for third-party liability are not the same for all these types of aircraft.

Relative to damage caused to third persons by motor-driven aircraft—airships and airplanes, the law of December 10, 1919, reverts to the automobile law of August 9, 1908. In regard to liability of motorless aircraft, the droit commun will apply.

The automobile law as applied to the problem of third-party liability of motor-driven aircraft has been the result of a compromise between the adherents to the absolute liability theory and those who prefer to maintain the old principle of delictual liability. Furthermore, the regulations of this law seriously feel the lack of a clear and definite principle as their basis, and consequently contain certain inaccuracies.

Article 1 of the automobile law contains in its first line the principle of absolute liability, but Article 2 readily provides a series of defenses for the person liable.

It is not surprising to note that contributory fault constitutes the first defense, because, whatever the principle of liability, it must nevertheless give way before the fault of the person injured when he is causa efficiens of the injury.

The second defense allowed by the Austrian law is fault of a third party. Those persons who are responsible for the operation of the automobile (or aircraft) are not considered as third persons. This regulation must be broadly interpreted: the fault of a third party, even if it is the only cause of the injury, would not exempt the aircraft owner from his liability in case the fault was committed by his own employee, even though it occurred outside the aircraft.

The terms of Article 2, line 2, of the automobile law raise a question concerning the fault of a third person. To serve as a defense, must it be impossible that the aircraft owner can foresee

6. §1.
8. In the absence of jurisprudence dealing with damage caused by aircraft, some cases concerning automobiles will be cited, since in Austria the same law regulates compensation for damage caused by automobiles as by aircraft. The motorist is freed from all liability in the case where the injured person has passed him on the wrong side (Supreme Court, Feb. 22, 1910, Rv. II 64/10), and, likewise if the injured person, seeing a car approach, crosses the street in front of it (S. C., June 21, 1910, Rv. VI 318/10), but actual carelessness on the part of the injured person does not free the motorist from the duty of taking all necessary measures of care (S. C., Nov. 19, 1912, Judgment Records XV 6140).
9. For example, liability is incurred by a transport operator, airport owner, over whose airport the accident happens, if the accident was caused by the fault of an employee who had given the wrong signals to the aircraft: Kilkowski, Die Haftung für Luftverkehrsschäden usw. (Marburg, 1930), p. 72.
and avoid such fault? If any fault of a third person would exempt the person liable, the conclusion is that the aircraft owner would not be obliged to give either attention or normal care to avoid an accident. Even the\textit{ droit commun} (which is less exacting) requires normal care and attention.\textsuperscript{10} But to allow the fault of a third person to be used as a defense only in case the aircraft owner normally could neither foresee nor prevent it, is to identify it with\textit{ force majeure}, which the Austrian law apparently had no intention of doing. However, certain jurists conclude that the fault of a third person, to serve as a defense, must normally be unforeseeable and, especially, inevitable.\textsuperscript{11}

Evidently, the fault of a third person or of the injured person would not entirely relieve from the responsibility, except in case it is the only cause of the damage. If it only contributes to it, the liability of the aircraft owner would be diminished in such proportion as the judges would deem equitable. The regulation of §1304, Austrian Civil Code, which holds the injured person liable for that part of the damage which is in proportion to his fault, and for half if such proportion is impossible to establish, would not be applicable.\textsuperscript{12}

The third and last defense is, however, little understood. Principally, in order to be freed from liability, the aircraft owner must prove that the accident could not have been avoided in spite of all precautions imposed not only by law and regulation but also by the nature of the circumstances, and that, furthermore, it had not been caused by any defect, special characteristics, or fault in operation of the aircraft. We note then that the law speaks of two sets of facts, joint proof of which can serve as an excuse. In the first place, the party liable must show proof that he has taken all necessary precautionary measures, that is, he has not been at fault;\textsuperscript{13} after which he must prove that the injury could not be due to the special nature of aircraft which would make it more dangerous for travel than any other means of locomotion. In this way the same regulation confuses the principles of delictual liability and created risk. Evidently, if the damage is

\textsuperscript{10} §§1297 & 1299, Austrian Civil Code.

\textsuperscript{11} Bielecki & Rapaport, \textit{Ustawa Automobilowa AutrJacka} (Krakow, 1911), p. 38.

\textsuperscript{12} In case of joint fault on the part of the motorist and the person injured by him, the damage could not be apportioned according to §1204 Civ. C. (\textit{droit commun}), but compensation would have to be reduced, according to Article 2, line 4, of the automobile law (S. C., Oct. 21, 1913, Record of Judgments XVI 6619).

\textsuperscript{13} If proof is not shown of caution taken by the automobile driver, the latter would not be able to establish that the special character of the automobile is not the cause of the injury (S. C., Feb. 8, 1910, Record of Judgments XIII 4938).
LIABILITY FOR DAMAGES

not caused by contributory fault (first defense), or fault of a third party (second defense), if the aircraft owner has taken all necessary precautionary measures, and, finally, if this accident could not be attributed to any structural defect or individual and special characteristic of the aircraft, *force majeure* is then the only cause. Thus, it would be sufficient simply to call the third defense *force majeure.*

We conclude then: the Austrian law institutes liability from which exemption can be secured only by proof of *force majeure,* fault of the injured person or of a third person. It is doubtful whether one can there recognize liability for created risk; it is more properly, as commentators speak of it, delictual liability with a presumption of fault on the part of the person causing the injury, to which French jurisprudence has given an analogous juridical construction in line 1 of Article 1384 of the Code Napoleon.

Thus aeronautical liability in Austria is based on the principle of fault, but it is more severe than that of the *droit commun* because on the one hand it institutes a presumption of fault on the part of the aircraft owner, while on the other hand it allows him to escape liability only by proof of contributory fault, fault of a third person or by proof of *force majeure.* The conclusion is that the person liable is not allowed to exempt himself by proving lack of fault on his part.

In order to apply this special liability rule, the law stipulates that the injury subject to compensation must have been caused by the operation of a motor-driven aircraft.

The Austrian law means by the term “operation” (*exploitation*) the sum total of energy and effort which it is necessary to apply in order to achieve directly or indirectly the purpose of an aircraft. Therefore, an injury would be considered the result of aircraft operation if such injury was caused by the power which is inherent in a motor-driven aircraft, even if the part the aircraft takes in the activity is made against the will of the operator. On the contrary, damage caused by an aircraft which was put in motion solely by animal force or *vis inertiae* could not be due to operation. Thus the term “operation” includes all functions from the take-off preparations to the end of the flight, but on the condition that they be directly connected with the flight and present a specific danger from aviation.

According to Article 1 of the automobile law, only death or

---

injury to persons or damage to property constitutes damage which is subject to compensation. In this regard, the law refers us to the *droit commun*, where, particularly in case of death, §1327, Austrian Civil Code, would be applied. It follows that the operator must not only pay for all damage caused by the death of the injured person but he will be held, according to law, for full payment of indemnity to all dependents of the deceased, though obviously within the limits of their injury. In case of injury, §§1325 and 1326, Austrian Civil Code, would be applied. Costs of treatment and medicine must be repaid as well as profits lost, and, in case of incapacity to work, compensation must be paid the injured person; finally, the latter would have a right to compensation for sufferings undergone. In regard to damage caused to property, §1323, Austrian Civil Code, only exacts payment for the actual damage and not payment for profits which the injured owner would have been able to make through use of the injured property. Between the aircraft operation and the injury there must be a causal relation.

What persons incur this special liability? Article 16 of the law of December 10, 1919, and article 1 of the automobile law indicate the owner and crew of the aircraft. Until its amendment of May 3, 1932, the automobile law still held the operator (*exploitant*) liable, but this limitation has since been revoked. If the aircraft at any time had been unlawfully taken from its owner, the unlawful possessor would then be liable in his stead. In case the operator piloted the aircraft professionally in private or public service, he would not incur liability if the damage had not been caused through his fault.

Regarding liability for damage caused by aircraft without motor power, such as free or captive balloons, gliders, kites and parachutes, the *droit commun* would be applied, especially §§1293-1341, Austrian Civil Code, which maintain liability for fault, proof of which must be made by the plaintiff, i. e., the injured party. The *droit commun* holds liable, besides those persons noted in Article 1 of the automobile law, also all those who through their own fault have contributed to the damage.

The question is whether liability can be incurred for damage caused by the normal operation of an aircraft. For example, in regular flight, the noise of the motor, and so forth, can cause annoyance to inhabitants of the region flown over, or can even cause damage in frightening cattle or game. Article 1 of the law of December 10, 1919, authorizes the flight of aircraft over
Austrian territory, but on the other hand, §§1295, line 2, and 1305, Austrian Civil Code, exempt from all liability those persons who cause damage in the exercise of their rights, providing the exercise of this right does not purposely cause damage to a third person. It follows then that any damage caused by the normal flight of an aircraft would not in general allow any right to compensation, providing that such flight had not been undertaken with the purpose of creating a nuisance.

To assure the injured person of the opportunity of actually obtaining compensation which is allowed him, the Austrian law requires that the aircraft owner contract liability insurance, for instance in the form of money deposit, without which an aircraft is not permitted to fly in Austria. This regulation is applicable both to motor-powered aircraft and to those which are not motor-powered, and excepts parachutes, inasmuch as they are used only as an aircraft accessory.

The regulations providing these insurance guaranties are the same for all kinds of aircraft. The guaranty must be contracted with an insurance company licensed to carry on its business in Austria. This is effective only for Austrian aircraft; a foreign aircraft, in order to enter Austria, must offer proof that it has contracted a guaranty of liability or made a deposit to this effect, either in the country of its nationality, or in another country. The insurance contract must be drawn up in such a manner as to remain in force in case of change of ownership of the aircraft. The amount of the insurance is fixed by a competent authority, but in any case it can not be less than the sum of 40,000 shillings for each person killed or injured, 125,000 shillings for each accident, and 8,000 shillings for damage to property. If the guaranty is in the form of a deposit of money or securities, the regulations of the droit civil are applied. In such case the minimum value of the deposit can never be less than 130,000 shillings.

In résumé, the Austrian legislation bases liability toward third persons on the principle of fault. Where it deals with motor-powered aircraft, it shows more severity—maintaining a presumption of fault on behalf of the defendant and limiting his means of defense. The question is raised as to why more severe rules are

16. §3 of the Decree of the Minister of Commerce and Communications, Sept. 8, 1930.
17. §13.
18. §106.
19. §101, line 3.
20. §106.
21. §1, line 1 of the Decree of June 11, 1932.
22. §1, line 2 of the same decree.
applied to motor-powered aircraft. If it is a question of danger, there is little doubt that a free balloon is likely to cause damage more often than an airship; as to gliders, they are as dangerous to persons on the ground as an airplane. Thus the discrimination between aircraft with no power but the wind, and those powered by motors, does not seem rational in the field of liability. Nevertheless the Austrian law possesses a great advantage, that of a guaranteed payment of compensation awarded to the injured person.

France

The law of May 31, 1924, relative to air navigation, maintains absolute liability for damage caused by the flight of aircraft or by objects which fall from it onto persons or property on the surface. This liability is based, as Professor Ripert pointed out in his report on this consideration to the Commission of the Society for Legislative Study, that "... whoever puts into motion an apparatus for flying creates for mankind a new peril. ... whoever is the cause of an exceptional risk for mankind must take the consequences of it." Thus this is the liability for risk. Liability will be incurred whether the injury is due to fault on the part of the person liable, unforeseen event, or even force majeure. It is only fault on the part of the injured person which can relieve from or lessen the liability of the person causing the injury. In other words, Article 53 of the law of May 31, 1924, establishes a formal presumption of liability against the aircraft operator. He would be able to relieve himself from or lessen liability only in case of fault of the injured person.

Who are the persons on whom this added liability falls? The law, in Article 53, states that it is the operator (exploitant). Professors Henri and Léon Mazeaud maintain that two meanings can be applied to the term operator. On the one hand is the meaning gardien, which Article 1384, line 1, of the Code Napoleon has recognized, but on the other hand the definition also includes that individual who profits materially or otherwise from the operation...
of the aircraft. These writers prefer the second meaning, which seems also to be that of jurisprudence. Thus, in one case, a military airplane, at the request of a group of pilots, took part in a festival and injured one of the spectators. The Tribunal of the Seine, in deciding who was liable for the damage, maintained that the group was the operator of the aircraft, to the exclusion of the state, because this group was the only one to profit therefrom. This conclusion was reached, although the state had to be considered as the gardien of the aircraft because it had power to command and direct.27

However, Article 55 maintains that in case the aircraft is leased, the owner and operator are jointly liable. It follows then that, in this case, the owner would not be considered as an operator. But there is no doubt that in case the aircraft is leased, the owner would profit materially. If then by "operator" (exploitant) the law means he who receives profit from the aircraft, this designation would have to apply as well to the owner as to the person who rented the aircraft. Article 55 would then be inoperative. It is only necessary to repeat what has been stated in Article 53 that, in making an operator liable, there are surely included within this meaning, not only one, but many persons, in case many profit from one and the same aircraft.

On the other hand, if the definition of aircraft operator as given by Professors Henri and Léon Mazeaud were adopted, who would be liable in case the aircraft is unlawfully taken from its owner and causes damage while it is in the hands of the thief? The conclusion is that the owner is no longer its gardien (owner or legal possessor), so the thief would be liable, because he is profiting therefrom though it is immaterial to him whether these profits come legally or illegally. Thus the aircraft owner would not be liable if the aircraft were stolen, or if he has leased it and entered the lease in the registration records.28 If, in this second case, the legislator has found it possible to exempt the owner from liability, it is because there is in his stead another person liable, whose name and address can readily be found by the injured person, and who, having been inscribed in the registration records, presents the same liability guarantees, generally speaking, as the owner—which quite evidently would not be the same for a thief. Since Articles 53 and following are drawn up entirely in favor of the person injured by the aircraft, it would be against the wishes of the legislator

28. Article 55, line 2, of the law of May 31, 1924.
to exempt the owner of the stolen aircraft from liability. That is why we speak here of the definition of "operator" (*exploitant*) as adopted by doctrine and jurisprudence. It seems to the writer then that this expression must soon be interpreted as meaning *gardien*.

According to Article 53, for the operator to incur absolute liability, injury must be caused by the flight of aircraft or by objects falling from it.

What is meant by the word "aircraft" (*aéronef*)? The law of May 31, 1924, in Article 1, defines it as any apparatus capable of leaving the ground and circulating in the air. This would include any apparatus which can rise into the air without other assistance than its own power: (1) all balloons—free and captive, and airships, and (2) all airplanes—landplanes, hydroplanes, amphibians, autogiros, helicopters, and so forth.

Kites raise a question because they can, with the help of the wind, rise in the air, although they also need assistance from the ground; in particular, the cable or rope to which they are attached must be fastened on the ground and let out as they ascend. They are thus incapable of rising in the air entirely through their own power. Nevertheless, this doubtful case must be settled in the affirmative, and kites must fall within the jurisdiction of the law of 1924, because they are expressly mentioned as aircraft by Annex D of the Convention of October 13, 1919.29

Giders and parachutes are yet to be discussed. The first cannot rise into the air by their own power, for they must be catapulted or towed by an airplane; but once in the air they can not only remain there for hours, but even can stunt fly and travel for considerable distances. Evidently they are far from being as manageable as airplanes: not having their own power, they are operated only by being catapulted into the air. However, capable pilots, permitted to choose their own time and height, can fly them in the desired direction. Can it be considered that gliders are capable of circulating in the air (*circuler dans les airs*)? To "circulate" means to move in a continuous manner and to return to the point of departure. Generally, pilots prefer to fly a glider in a straight line rather than in a circle; it is evident that, very often, weather conditions hinder the glider from following exactly the directions of its pilot. However, there is little doubt at the present time that a glider can travel in the air and return to its

29. France deposited its ratification of this Convention, June 1, 1922.
LIABILITY FOR DAMAGES

point of departure. It is then with reason that the Tribunal of Vitry-le-Francois, in its decision of July 14, 1932, held that gliders are within the jurisdiction of the law of May 31, 1924.

Lastly we must discuss parachutes. It is evident that they are incapable of rising or flying through the air; they serve only to diminish the falling speed of objects or persons. Thus parachutes are not included in the air navigation law. And, in case a person making a parachute jump causes damage on the surface, he would be liable only in conformity with the droit commun. The operator of the aircraft, from which the parachute jump had been made, could not come within the jurisdiction of Article 53 and would incur liability only in case of personal fault. It would be different if objects—newspapers, for example—were thrown from an aircraft and were attached to a parachute. The aircraft operator in this case would be liable in conformity with Articles 53 and 54, because these regulations, though making him liable for the falling or throwing of any object—even of regular ballast—do not distinguish whether this object is attached to a parachute or not. It is surprising that the air navigation law deals only with falling objects and not falling persons.

We have explained what should be meant by the term "aircraft (aéronef) and the phrase "the objects which drop from it" (les objets qui s'en détachent). We have yet to understand the meaning of the "movements of the aircraft" (les évolutions de l'aéronef). Evidently, an aircraft évolue as soon as it is in the air. But can it be said that it évolue when it is rolling along the ground or is moving on the surface of the water? And, affirmatively, from what moment can the movement on land or water be considered as évolution within the meaning of Article 53? One theory states that: "when the movement of the apparatus on land is the beginning or completion of a flight (take-off or landing of the airplane), the law of 1924 must apply, because this movement is closely linked to the flight itself and because dangers are particularly great at the landing and take-off. . . . But if the apparatus changes its position on land for another reason (for example, an apparatus which leaves its hangar and goes toward the point where it will take off), this apparatus is in every respect similar to an automobile; Article 1384, §1, only will apply." However, jurisprudence interprets the word évolution more broadly. It holds that the évolution begins not at the moment the

THE JOURNAL OF AIR LAW

airplane rolls along the ground in order to take off into flight, but when, with its propellers revolving, it begins under its own power to roll over the ground. So also would be the case where the airplane rolls along the ground simply to return to its hangar at the airport.\(^2\) Thus, contrary to the point of view of doctrine, as soon as the aircraft is in motion under its own power, whether on land or water, it is in *évolution* within the meaning of Article 53.

To avoid absolute liability or even to lessen it, the aircraft operator must show proof of fault of the injured person. Any other cause, though it be the fault of a third person, risk of the air, or even *force majeure*, can not be taken into consideration and the liability of the operator is still absolute. The regulations of the law point out that fault of the person injured would completely free the operator from liability only if the injury caused as well as the fault of the person injured took place at the airport. In any other case, fault of the injured person could scarcely bring about anything but a partial liability (lessening of the liability) because the accident would not have happened if aviation had not existed.\(^3\)

Thus, in case of damage on the surface caused by an aircraft under the conditions just mentioned, the operator will be held for full compensation for the damage, whatever it may be: death or injury to persons, destruction or damage to property.

The question always arises as to whether the damage, to be compensable according to Article 53, must necessarily be caused by an accident or, equally, by the normal operation of an aircraft. Article 19 of the law of May 31, 1924, has granted to aircraft the right of innocent passage over French territory. Would not this freedom be impaired if aircraft operators were held liable for damage which a normal flight might cause on the surface? It would seem so at first glance, but this would be poor reasoning. Article 53 makes the aircraft operator liable for all damage caused by his aircraft, without making any distinction as to whether it had been caused by an accident or by the normal operation of the aircraft. On the other hand, line 2 of Article 19 limits the freedom of passage by stating that a flight can not be made if it interferes with the exercise of the rights of the landowner. The result is that the operator is as liable for damage caused by a single

---


\(^3\) Report made to the Senate by M. Vallier, in the name of the Commission de Législation Civile et Criminelle, ordered to examine the draft of the law adopted by the Chamber of Deputies relative to air navigation: *Senate Documents, 1923, No. 473, p. 5.*
flight of his aircraft as for injury caused, for example, by the
14 crash of his ship or by objects falling from it. He would thus be
15 responsible for depreciation in the value of property, as well as for
16 nuisance caused by frequent and continued flights of aircraft, for
disturbance caused by the noise of motors, and so forth. This
17 point of view was adopted by the courts even before the pro-
mulgation of the law of air navigation.
18
19 In résumé, the French law applies absolute liability to the air-
craft operator, only allowing him to avoid it by proof of the fault
of the person injured. Compensation is limited only by the ex-
tent of the damage. On the other hand, the victim is not guar-
34 anteed against the insolvency of the party liable. The conclusion
35 is that the remedy given by the law of May 31, 1924, is very un-
favorable to airmen, and yet does not give any actual advantage
to persons on the ground.

Germany

Liability for injury caused to third persons on the surface is
regulated by the same rules and in the same manner as that toward
other travelers. But, actually, the application of these regula-
tions is very different, because the non-liability clause evidently
can not apply when it has to deal with injuries caused to third
persons.

The air navigation law of August 1, 1922, provides two sys-
tems of liability: on the one hand, §§19 and following introduce
objective liability (responsabilité objective); on the other hand,
§28 maintains droit commun liability such as is expressed by the
Civil Code.

Paragraph 19 proceeds from the principle that any person
who, to his own advantage, operates a dangerous instrument must
always bear the burden of the damage which he causes to a third
person (created risk). It is entirely indifferent as to whether or
not any fault be committed. Force majeure and, with more rea-
son, the act or fault of a third person would not serve as defenses.
The law, in instituting such severe liability, evidently limited, in
very exact fashion, the field of its application. In the first place,
the liability of §19 would be applied only to damage caused by
the operation of aircraft.

Paragraph 1 means by "aircraft": airships, airplanes, balloons, kites, and any other mechanical device constructed for the purpose of moving in the air. Paragraph 1 of Chapter A of the ordinance of July 19, 1930, explains what would be qualified as aircraft as well as gliders and parachutes.

What is meant by the expression "operation"? Evidently, it is not identical with that of "flight" (vol). The latter is not as broad as the first. An aircraft would be considered in operation from the time it is under the control of motive power sufficient to sustain and propel it through the air. For airplanes, such power would be the wind and motor; for airships, gas must be added; for balloons, the wind and gas; for gliders, the wind. Thus, an airplane would be in operation as soon as its motor is started—even though it be only for the purpose of testing the motor; or when the wind causes it to move—even if the motor is not going. The operation can be considered ended only when the aircraft is in such a position that neither the wind nor its motor can cause it to move. A glider would be in operation as soon as the wind catches its surface; the airship and balloon, as soon as they are filled with a sufficient amount of gas to raise them in the air. We see then that the regulations of §19 would be applied in securing compensation for damage caused not only during flight, but also during certain maneuvers preparatory to the take-off of the aircraft.

The operation of the aircraft must be a direct cause of the damage. To decide whether this causal relation exists, the German doctrine is based on the theory of adequate cause. This theory, often applied in Germany, is, as Professor Demogue has so ably explained, that a "condition, to be qualified as a cause should make the same result objectively possible through its appearance alone. The more a cause renders a result probable, the more it should be qualified as adequate." Thus, the aircraft operation must, in general, be able to cause the injury in question. If this aircraft operation could have caused the injury only under unusual conditions, extraneous to the normal operation of the aircraft, it would be different. It is necessary that the damage be the immediate and direct result of the aircraft operation. Thus §19

38. Reichsgesetzesblatt 1 S. 389.
40. Schleicher, op. cit., p. 89.
LIABILITY FOR DAMAGES

could not be applied, for example, in securing compensation for injury to a person who had a heart attack while seeing the accident, or on learning that one of his neighbor passengers had been killed.42

The damage must be caused by an accident. By “accident” is meant an unexpected event, suddenly causing death or injury to a human being or damage to property. It follows that the regulations of §19 could not be applied in case of damage caused to property owners of rural property the value of which was depreciated by continued flight of aircraft.

Objective liability instituted by §19 could be applied only: (a) in case of danger to the life or safety of persons. Thus injury caused by a delay could not be considered, even if the delay is caused by an air accident. On the other hand, §§21 and 22 limit the extent of injury subject to compensation; (b) in case of injury and destruction to property.

In general, objective liability is incurred only by the possessor (détenteur), i. e., by the person who possesses and uses the aircraft for his own purposes, taking the profits and assuming the costs of his enterprise. It is not necessary that the possessor be also the owner of the aircraft, though generally this will be the case. If the aircraft is used without the authorization and knowledge of its possessor, the latter will be exempt from his liability, which in turn will fall entirely on the person who unlawfully uses the aircraft. However, the legitimate possessor (détenteur légitime) will be jointly liable with the latter in case the unlawful use of the aircraft has been made possible through his fault.

The only defense of the possessor of an aircraft lies in proof of the fault of the person injured, which defense is specifically mentioned by §20. In order to estimate the proportion of compensation to be paid by the possessor of the aircraft, according to the extent of fault of the injured person, droit commun rules must be followed.43 The fault of the person injured should therefore coincide with the sustaining of the injury, which would occur when not only the accident but the injury itself would be the natural outcome of the fault (négligence) of the injured person. Thus the fault of the person injured, though coincident with the sustaining of the injury, could just as well take place before the

42. Wimmer, op. cit., p. 79.
43. Especially §254 of the Civil Code (B. G. B.).
accident as after. By the term "person injured" (victime), the law means the person whose body, safety or property has been damaged. Nevertheless, since the law well recognizes the right which persons indirectly injured have to compensation, it must be admitted that their fault could exempt the possessor of the aircraft, at least to some degree. It is evident that, in general, fault in this class of persons could occur only after the accident. On the other hand, fault of the gardiens or possessors of the object damaged must evidently be considered.

This very severe liability is nevertheless limited by §23 to the sum of 25,000 marks-capital or 1,500 marks annuity for injury to or death of the injured person. If the same accident injures many persons, the total sum of compensation which can be allowed them must not exceed 75,000 marks-capital or 4,500 marks annuity. Compensation for property can not exceed the total sum of 5,000 marks.

Besides objective liability, instituted by §§19 and following of the law of air navigation, this law maintains droit commun liability, as set forth by the Civil Code, and expressly stated by §28 of the said law. Thus, the injured person could choose between instituting an action based on the specific air law regulations or one based on the rules of the Civil Code.

Recourse to the civil law is had whenever one of the many conditions which will be enumerated and which are necessary for application of the severe regulations of the air law fails. This will be the case when damage caused by an aircraft will not be the result of an accident; for example, damage caused to property by continued flight of aircraft; when the aircraft, at the time it caused damage, was not in operation; when it is a question of making a charge against the pilot or any other person, excepting the possessor of the aircraft; when the injured person wishes to get compensation for an injury such as caused by delay, and so forth; finally when the damage exceeds the sum as indicated in §23 of the air navigation law.

Thus the droit commun allows greater possibilities to the injured person and allows him to secure full compensation, but its

44. For example, the victim, in spite of a barrier, has crossed onto the aircraft territory.
45. For example, the victim, slightly injured, goes to a quack doctor who makes his injury much more serious.
46. For example, persons who have borne the expenses of funerals or those who had been dependent upon the person injured.
47. Kilkowski, op. cit., pp. 67 et seq.
48. Nevertheless Schleicher is of a different opinion; he believes that no liability can be incurred in a case where there is no accident.
49. B. G. B.
application has the disadvantage of making it necessary that the plaintiff show proof of fault on the part of the defendant. It will then be in only extremely rare cases that the injured person could base his suit on the rules of the *droit commun*.

The German legislator, in dealing with air accident victims as a group, wished to safeguard them from the risk of insolvency on the part of the aircraft possessor. To this effect, §29 of the air navigation law of August 1, 1922, as well as Chapter K of the ordinance of July 19, 1930,\(^5\) has granted a special guaranty to the victims of aviation accidents. Particularly, before receiving permission to operate an aircraft, the aircraft possessor must show proof that he has contracted insurance to the maximum amount indicated by §23 of the law of August 1, 1922, or at least that he has furnished security by the deposit of money or securities, sufficient to guarantee a trust fund to be used for payment of damages. The insurance must be contracted with an insurance company whose operation is authorized by the Reich, and the policy must be drawn up in such a manner that it will continue in force, in case of a change of possessor, throughout the period of the insurance contract. It must be noted that the security deposit can serve as damages payment only in case the aircraft possessor: (1) would be bankrupt; (2) would delay payments; or (3) would stop operations—operation of his aircraft or several aircraft. On the other hand, the aircraft possessor could only recover the sum or securities deposited as security at the end of the fourth month following the completion of business operations.

It is obvious that a guaranty in the form of a security deposit proves very impractical, both for the person injured and for the aircraft possessor, whereas in the form of insurance it presents many advantages and benefits to both parties. Unfortunately, the form in which it is adopted in Germany presents certain faults which it would be impossible to eradicate. Specifically, the injured person can not take direct action against the underwriter; he can only bring suit against the aircraft possessor; the insurance policy does not cover damage caused by a wrong (*dol*) on the part of the insured; it will be valid only in case the papers on board the aircraft are in order and if the aircraft has the regulation certificates and licenses; lastly, the policy does not cover damage caused by the aircraft, if it is being operated by an unlawful possessor. Thus, the person injured has no guaranty in those cases where he most needs it.

\(5\) R. G. Bl. 1, p. 363
In résumé, the German law, while adopting the principle of absolute liability, limits compensation to a relatively modest sum. This system is completed by a guaranty granted the person injured as security against insolvency of the liable party. The solution expressed by the German legislator seems quite practical, and, if certain changes were made, the interests of the airmen and those of persons on the surface would be adjusted.

**Great Britain**

Liability for damage caused by aircraft to third persons on the surface is regulated by the Air Navigation Act of 1920. From its promulgation, this law has been applicable in England, Wales, Scotland and Northern Ireland. Furthermore, Section 4 of this Act authorizes the King, by decree of Council, to extend the jurisdiction of this law to all British possessions, excepting the Dominions and India. By order of the King, rendered in Council, the law of 1920 was extended in 1922 to the Colonies, in 1927 to the Territories under Mandate, and lastly was adopted by the Irish Free State.

Since Great Britain is signatory to the Convention of Paris of October 13, 1919, in which Annex D defines the expression “aircraft,” this definition was necessarily included in English aeronautical laws. Thus Article 31 of the Consolidated Order, 1923, Number 1508, states that the word “aircraft” means all captive and free balloons, kites, airships and airplanes. Consequently, the aeronautical laws do not apply to gliders and parachutes. Furthermore, Section 18 of the Air Navigation Act maintains that this law will not apply to aircraft belonging to His Majesty or exclusively set aside for his service. Thus the regulations of the aeronautical law do not apply to military aircraft (whether they belong to the land army, to naval forces, or to air forces), or to aircraft destined solely for civil service of the Crown, or to aircraft belonging to the King or used by him in his personal service.

Section 9 of the Air Navigation Act deals with liability. In view of the very particular terms of this text, and for purposes of clarity, the essential part is quoted, as follows:

... but where material damage or loss is caused by an aircraft in flight, taking-off, or landing, or by any person in any such aircraft, or by any article falling from any such aircraft, to any person or property on

---

51. 10-11, Geo. V., c. 80.
52. S. R. and O., 1922, No. 121.
NO LIABILITY FOR DAMAGES

Land or water, damages shall be recoverable from the owner of the aircraft in respect of such damage or loss, without proof of negligence or intention or other cause of action, as though the same had been caused by his willful act, neglect or default, except where the damage or loss was caused by or contributed to by the negligence of the person by whom the same was suffered.

What is the character of this liability? Theoretical opinions are divided. Certain writers see in it the principle of absolute liability; others believe that Section 9 combines two principles: on the one hand, the rule concerning the transfer of the burden of proof, known as res ipsa loquitur, and on the other, the rule concerning created risk. Finally, others see in it only a rule concerning distribution of proof, a simple presumption of fault of the aircraft owner.

Personally, the writer believes that we cannot recognize in it the principle of absolute liability. This for the following reasons: if the British legislator had wished to introduce absolute liability, he would have found it sufficient to have a brief, clear text stating simply that liability was incurred for damage caused on the surface by an aircraft or an object falling from the aircraft. He could even have added “absolute liability” as the Uniform State Law of Aeronautics of the United States has done. Instead of that, Section 9 explains at length that this damage would be judged to be caused by the negligence of the aircraft owner, and it adds—which seems superfluous—that the injured person need not show proof of this negligence.

The writer believes that the intent of the British legislation is clear. It creates a presumption of negligence on the part of the aircraft owner and nothing further. The purpose of this regulation is to set aside the application of the common law to the regulation of proof. Generally, the English law, as well as the law of continental countries, requires that the plaintiff show proof of fault on the part of the defendant. Since the person injured in an aircraft accident is almost always unable to furnish such proof, then, that he may obtain compensation, the legislator comes to his rescue by transferring the burden of proof. But the objection is that, in England as well as in the United States, the common law rule of res ipsa loquitur is applied, which in some cases frees the plaintiff from the duty of proving fault of the defendant. It would therefore be quite useless to add special regulations.

Evidently, this observation has its importance, but if the rule of *res ipsa loquitur* is always applied when an object is thrown from a plane, nevertheless there will be cases where it could not apply in the action concerning injury caused on the surface by the aircraft itself. Thus this rule is applicable only to damage which, obviously and in consideration of the normal circumstances accompanying it, is caused by the negligence of the defendant. Thus this rule would not necessarily be applied to all damage caused by an aircraft. For example, suppose that, in a heavy fog, an aircraft pilot strikes the roof of a house and causes damage. It is very doubtful whether one can immediately recognize negligence of the pilot. The writer does not believe that the English courts would be able to apply the rule of *res ipsa loquitur* in such a case. Instead he believes that, precisely for this reason, the British legislator thought it useful to introduce into air law the presumption of fault of the aircraft owner.

Section 9 shows us exactly at what moment the aircraft is likely to incur liability as expressed by this text, especially at the take-off, i.e., the complete maneuver carried out on the ground for taking off. The aircraft also incurs this liability upon landing, or, in other words, as long as it rolls along the surface or moves on the water through passive resistance.

Compensation must be paid not only for a direct injury, caused by physical harm to a person or by destruction of property, but also for nuisance and disturbance caused by the flight of aircraft to landowners on the surface.58

Generally, liability is incurred by the aircraft owner. However, line 2 of Section 9 of the Air Navigation Act frees him of all liability in case he has *bona fide* rented the aircraft for at least 14 days, and on condition that no member of the crew is in his service. In this case, the lessee of the aircraft alone will be liable. Furthermore, in case the damage has been caused solely through the fault of a third person, the aircraft owner will have recourse against the latter.

We have yet to discuss the defenses available to the aircraft owner. Section 9 only mentions negligence (fault) of the person injured. Proof would not be the necessary condition of absolute liability nor even of liability for presumed fault. Because, in the latter case, it is quite useless to state that the fault of the injured

---

58. A. D. McNair cites in *The Law of the Air* a case granting compensation for continued flight at low altitude over the property belonging to a young ladies' school near Brighton (*Roedean School, Ltd. v. Cornwall Aviation Co., Ltd. & Phillips*).
person relieves the aircraft owner from liability, since any proof of absence of fault of the defendant is sufficient as a defense. This objection seems important. Nevertheless, in looking more closely at the text of Section 9, one can readily understand that the legislator simply wished to do away with presumption of negligence of the aircraft owner in case of fault of the person injured. If the presumption of fault is eliminated and if there only remains the fault of the injured person, as the only cause of the injury, it is easily understood that this latter would have nothing to claim from the aircraft owner.

But let us suppose that the fault of the injured person only contributed to the injury, while the negligence of the defendant was proved. Three possible cases of this contributory negligence present themselves. The plaintiff had been negligent, but his fault would not of itself have been able to cause the damage, if the defendant had not subsequently been grossly negligent. In this case, the damage would be entirely admitted. On the contrary, the negligence of the plaintiff creates by itself the situation wherein the defendant, not having sufficient time necessary for consideration, could not take such measures as would avoid the injury, as he would otherwise have been able to do. In this case the defendant is entirely exempt. Lastly, there would be the case where the joint negligence of defendant and plaintiff was the cause of the injury. Then, in conformity to the common law, the plaintiff would not receive compensation, and, in accordance with the Admiralty regulations (applicable to damage caused on sea), the damage would be apportioned.

If we take as our point of departure the point of view of Section 9, which expresses absolute liability of the aircraft owner, contributory fault could only be explained as exemption of the defendant from all liability, even though the fault of the plaintiff had only slightly contributed to the damage. On the contrary, if, as the writer believes, presumption of fault is recognized, i. e., a rule regarding distribution of proof, then the section concerning fault of the injured person could, as has already been mentioned mean only the elimination of presumption of negligence. We return then to the common law, and by this means even the injured person who has contributed to the injury can sometimes obtain either entire or at least partial compensation.

No explanation is necessary of the other defenses of the aircraft owner, because if it is believed that he incurs absolute liability, there would be no defenses. If we otherwise grant only
presumption of fault, the means of defense are those of the common law.

In résumé, the English law institutes liability for fault, and adopts more severe rules toward the defendant than does the common law.

Italy

The problem of compensation for damage caused by aircraft to third persons on the surface is regulated by complicated rules, hard to understand, which jurisprudence and doctrine interpret in different ways.

In order to explain correctly the opinion of some writers and the point of view of certain decisions, we must first study the aeronautical legislation prior to that now in force. This law, since repealed, particularly the royal decree of November 27, 1919, maintained in Article 8 a presumption of liability for damage caused by aircraft, against the person or persons causing the injury, the commanding officer and the aircraft owner. This presumption could be avoided only by proof of absolute *force majeure*.

The present law, especially the decree of August 20, 1923, has not upheld this Article. On the contrary, it has preferred to distinguish many cases of damage. Notably, Article 38 states that if an object is thrown, the right to damages for the injury caused is always granted. As to damage caused by the falling of objects, during the take-off or landing of aircraft, the right to compensation is likewise granted, providing it had not been caused by *force majeure*. The present law does not mention any other causes of injury to third persons. It is limited in Article 40 to an enumeration of persons liable for the injuries caused by aircraft, and it adds that in case of contributory fault on the part of the injured person the rules of *droit commun* will be applied.

Thus the law of August 20, 1923, deals with exceptional cases, such as the throwing and falling of objects, but it says nothing regarding the more frequent possibilities, i.e., the crash of the aircraft and forced landings. The complicated regulations of this law, as well as the serious deficiencies which are found in it, have aroused contradictory comment.

Thus, M. Musto*60 maintains that the present law institutes

---

59. The Law of air navigation of Jan. 11, 1925, in Article 1 describes an aircraft as a mechanism or equipment which is capable of carrying persons and things by using the sustaining force of the air, either static or dynamic. Aircraft are divided into airplanes, hydroplanes, kites, airships, free or captive balloons.

absolute liability in all cases of damage caused on the surface of the earth. He states that Article 38 of the law of 1923 is only a wordy and imperfect reproduction of Article 8 of the law of 1919, which, according to him, in allowing only absolute force majeure as a defense, maintains no delictual liability, but only absolute liability. It is true that Article 38 only regulates compensation for damage caused by the throwing or falling of objects. However, according to the writer, the silence of the law of 1923 on other causes of injuries, especially in comparison with the laws of certain countries (France, for example) which apply the principle of absolute liability to these other cases, authorizes the application of the same principle to injuries the causes of which are not specified in Article 38.

Another writer, M. Brasiello,\textsuperscript{61} takes the contrary view of the theory expressed by M. Musto. He believes that the law of 1923 never recognized—even in cases of the throwing of objects—absolute liability, but simply upholds a presumption of fault on the part of those persons responsible for the aircraft, in every case without exception.

Some writers,\textsuperscript{62} while criticizing the law of 1923 in a different way, believe that the throwing of objects gives rise to absolute liability, falling objects to the presumption of fault, while in all other cases the droit commun will be applied, i.e., that the injured person will be held to show proof of fault on the part of the possessor of the aircraft.

Lastly, Professor Ambrosini believes that the law of 1923 sanctions the principle of liability according to the droit commun, demanding proof of fault in all cases, except in that of throwing objects, where the principle of objective liability will be applied.\textsuperscript{63}

Italian jurisprudence lacks uniformity. The lower courts hold that all damage caused on the surface of the earth gives rise to absolute liability, which they maintain to be upheld by Articles 38 and 40 of the law of 1923.\textsuperscript{64} The higher courts admit that in such a case as foreseen by Article 40 there could be a question only of liability according to the droit commun. In any case, there is neither absolute liability nor presumption of liability as supported

\textsuperscript{61} La Navigazione Aerea nel Diritto (Naples, 1925).
\textsuperscript{62} Savoia, Cesare, La Responsabilità Civile del Vettore Aereo (Roma, 1928); Cortesani, Giuseppe, La Responsabilità nel Diritto Aereo (Torino, 1929); Fragali, Michele, Principi di Diritto Aeronautico (Padua, 1930).
\textsuperscript{63} "Caratteristiche Fondamentali del la Responsabilità" 5 Il Diritto Aeronautico 184 et seq.
by Article 8 of the law of 1919. Thus Article 40 of the law of 1923 does not exempt the third person injured from the obligation to furnish proof of the fault of the person causing the injury. On the contrary, a typical case of objective liability is found in Article 38, for damage caused by objects thrown from an aircraft during the course of its flight.\textsuperscript{65}

Personally, the writer believes that the law of 1923 provided three systems of liability:

(1) The throwing of an object, as provided in Article 38, always gives rise to compensation for the damage which it causes. The law allows no defense. Therefore, the liability is absolute.

(2) Injury caused by falling objects—following a take-off or landing—must in principle always be compensated, without considering the cause of their fall. However, Article 38 carefully states that \textit{force majeure} would constitute in this case a valid defense. Thus, in principle, it suffices for the purpose of imposing liability to show that the injury was caused by a falling object. Hence, the injured person will only have to furnish proof of an object falling from an aircraft, the damage caused, and a causal relation between the two. But, on the other hand, the law categorically states that liability will not be incurred if proof of \textit{force majeure} is furnished—which prevents the application of the principle of absolute liability.

The writer does not desire to adopt the point of view of Professor Ambrosini, who believes that even in such a case the person injured is obliged to show proof of fault of the defendant. If this view were correct, the regulations of Article 38 concerning falling objects could no longer be explained. This text states clearly that injuries caused by falling objects during the take-off or landing of an aircraft give rise to compensation, except in case of \textit{force majeure}. Why would the injured person have to show proof of fault of the person liable, if he is exempted by the same law—especially since the meaning of Article 38 is clearly that, in case no fault be proved against the defendant, he would still incur liability unless he showed proof of \textit{force majeure}.

(3) All other cases not dealt with by Article 38 remain to be discussed. These are questions of injuries caused by the crash of an aircraft, by its landing and take-off, and so forth—otherwise spoken of as the cases of more frequent damage. The law of 1923 has not reproduced the regulations which regulated them in

\textsuperscript{65} Court of Appeal of Florence, Nov. 10, 1928; Court of Cassation, Feb. 28, 1929; Court of Cassation, Dec. 3, 1929. These three decisions are reported in \textit{1 Rev. Generale de Droit Aéren} 461 et seq.
LIABILITY FOR DAMAGES

the law of 1919. Article 40 of the present law, which alone can be said to correspond to Article 8 of the repealed law, contains only one rule common to both texts, that of joint liability of the aircraft owner, the operator, and the person causing the injury. The analogy does not go far, because, if Article 8 institutes the presumption of culpability, Article 40 mentions nothing of it. On the contrary, the last line of this Article provides expressly for the application of the droit commun in the case of contributory fault. Thus, the lack of an exact rule in the law of 1923 and its comparison with the law of 1919 definitely shows that the intention of the legislator was not to institute objective liability, as M. Musto believes, or a presumption of culpability, as M. Brasiello maintains, but to apply the liability of the droit commun in allowing only one derogation, that of joint liability, which is mentioned by this law.

In all cases where the aircraft owner incurs liability without having committed a fault (which would be so in case of damage caused by an object thrown), he would have the power to turn his aircraft over to the persons injured (Article 42). This surrender frees him from the necessity of paying further compensation to the injured persons. It is doubtful whether the latter would derive any great satisfaction from it.

We see then that the law of 1923, far from upholding the principle of liability instituted by prior air legislation, has returned to the droit commun and permits severe liability only in exceptional cases.

Poland

Liability toward third persons, regulated by the decree of the President of the Republic, March 14, 1928, dealing with air law, is analogous to that toward other travellers. It is based on a presumption of fault of the aircraft owner. The injured person is only obliged to furnish proof of damage caused by the use of the aircraft. The aircraft owner will be exempt from liability if he is able to establish: (1) the fault of the injured person, or

66. See Kaftal, André, Réparation des Dommages Causes aux Voyageurs dans les Transports Aériens (Paris, 1930), pp. 21 et seq.
67. See Kaftal, André, Komentarz do rozporządzenia Prezydenta Rzeczypospolitej z dn. 14 marca 1928 r. o prawie lotniczym (Warsaw, 1928).
68. Article 4 means by aircraft: balloons, airships, airplanes, gliders and other equipment capable of remaining in the air and carrying persons and things. Since Poland has ratified the Convention of Oct. 13, 1919, we must note that article 4 is in conformity with the definition given by Annex B of this Convention. Consequently, captive balloons and kites must be considered as aircraft.
69. Article 59.
(2) *force majeure*, or, lastly, (3) that he had taken all necessary measures to avoid the accident.\(^7\)

Concerning the fault of the injured person, we know that this can serve as a defense, though it be the principle on which liability is based. As for *force majeure*, it can only exempt from liability as based on the principle of fault. The third exemption, mentioned by Article 60, must be studied more closely.

In instituting, on the one hand, presumption of liability against the aircraft owner and allowing him, on the other hand, to contest it by proof that he had taken the necessary measures to avoid the accident, the law has not only allowed the party liable to prove that he had not been at fault, but also—and this is even more interesting—the law has given a definition of fault of the aircraft owner. Particularly, his fault could consist only in the fact that he had not taken all possible measures to avoid the accident which caused the damage. Thus the aeronautical law places upon the aircraft owner no duty at all—such as does the civil law,\(^7\) but the much more restricted duty of taking all safety measures to avoid the accident. The result is that, in a case where such measures were taken, the owner would not have to answer for the damage caused by an accident involving his aircraft. On the other hand, in order that liability as outlined by the aeronautical law be maintained, a causal relation between the absence of safety measures and the damage caused by the use of the aircraft is necessary, because delictual liability can be incurred only in case the fault of the party liable is the cause of the damage.

The regulations of the Polish aeronautical law may be presented then in the following manner. The aircraft owner is only obliged to take all possible measures to avoid accidents. In case failure to carry out this duty (i. e., his fault) has caused an injury, he will be liable and held to pay full compensation. To aid the injured person, who in the greater number of cases is absolutely unable to show sufficient proof of this fault of the aircraft owner as well as a causal relation between him and the injury, the legislator has instituted a double presumption against the liable party. In particular: any damage caused by the use of an aircraft creates, on the one hand, a presumption of fault of its owner (omission of safety measures to avoid accidents), and, on the other hand, the presumption of a causal relation between this presumed fault and the injury caused the victim.

---

\(^7\) Article 60.
\(^7\) Article 1382 et seq., Code Napoleon applied in Poland.
LIABILITY FOR DAMAGES

Consequently, in order to be exempt from the particular liability instituted by the law of March 14, 1928, the aircraft owner must deal with one of these two presumptions. Either he will show proof of having taken all possible measures to avoid the accident or he will prove that their absence is not the cause of the damage or the accident. In other words, it will be sufficient that he prove that the injury would have resulted even in case all possible measures for safety had been taken.

The law of March 14, 1928, allows two additional defenses: *force majeure* and the fault of the injured person, which seems superfluous. In showing that the injury had been caused by *force majeure* or by fault of the injured person, the aircraft owner establishes thereby that the injury was not due to his own fault. If he has then neglected to take safety measures to avoid the injury, his negligence however has not caused the damage. In other words, proof of *force majeure* or contributory fault leads back to proof of lack of causal relation between the defendant's fault and the damage caused the plaintiff, i.e., to the greater exemption allowed by line 3 of Article 60.

What are the injuries for which the aircraft owner incurs liability in the aeronautical law? In the first place, it seems that there can be no doubt in this regard, since Article 59, line 1 of the law of March 14, 1928, categorically states, without limitation, that the aircraft owner is liable for all damage caused by the use of his aircraft. Consequently, whatever the cause of this damage, whether it results from an accident or the normal operation of an aircraft, its owner always incurs liability such as defined by line 1 of Article 59, and therefore he is presumed to be at fault.

However, this reasoning is not exact, because in order to evaluate the special liability instituted by the aeronautical law, consideration cannot be based solely on the text of line 1 of Article 59. It is true that this text institutes a presumption of liability against the aircraft owner, but to define its extent and application we must turn to Article 60. And we have already seen that, in conformity with this Article, the owner will be exempt from liability, either in case he has taken all possible measures to avoid the accident, or in case there is no causal relation between the accident and the injury. But, if the injury is due, for example, to the normal operation of the aircraft, without any accident contributing to it, or even if none had happened, it is evident that the central idea of liability, as instituted by the aeronautical law is defective, and Article 59, line 1, would not be applied.
But, in this case—when the injury is not caused by an accident—would the aircraft owner, freed from the particular liability of the aeronautical law, incur that of the droit commun? Article 59, line 4, states that any person, whose fault has caused an injury, incurs liability jointly with the aircraft owner. Evidently, this regulation returns us to the droit commun, to liability for fault as summed up in Article 1382 of the Code Napoleon. What persons are meant in Article 59, line 4? These are the pilot, mechanic, radio operator, passenger, and so forth, as well as the owner or possessor of the aircraft—always on condition that the person injured succeeds in showing proof of their fault. As soon as the legislator recognizes, aside from the particular air law liability, the liability of the droit commun, and does not limit the category of persons to whom it can be applied, there is no reason, once the fault of the owner is established, why the liability of the droit commun could not be applied, particularly in the cases which do not fall under the rule of special aeronautical liability.

Consequently, the particular rules for liability, instituted by Article 59, line 1, only concern the cases where damage has been caused by an aircraft accident; in all other cases the rules of the civil law must be applied.

But what are these rules? Can the principles of Article 1384, line 1, of the Code Napoleon, be applied to the aircraft owner, i.e., the presumption of liability of the gardien, in allowing by way of defense only force majeure and the fault of the injured person? This rule is much more severe than that of the aeronautical law. If we permit its application, the result will be that, in case of damage not caused by an accident, the injured person will be favored more, i.e., precisely where he would least need assistance. Because, when the injury occurs, not from a sudden and unexpected happening (accident), but simply from the continual operation of an aircraft, such as frequent flights over land at low altitude, it is evident that the person injured would have no difficulty in proving the fault of the party liable. It would then be not only useless but even unjust and contrary to the purpose of the legislator to apply in this case any more severe rules than those of the aeronautical law. If the legislator has particularly regulated the liability of the aircraft owner, it is purposely to avoid the application of the very severe rule of Article 1384, line 1, at the same time granting to the injured person the advantage of presumption of fault as created by the aeronautical law. Thus, in addition to the presumption of fault,
instituted by the law of March 14, 1928, there is no place for another more severe presumption, based on the civil law.

Therefore, aside from the rules of the aeronautical law, Articles 1382 and 1383 of the Civil Code cannot be applied to the liability of the aircraft owner. However, in case the injury has been caused by his employee, he incurs liability in conformity with Article 1384, line 3, of the Code Napoleon. In granting this, the writer does not wish to incur objection by admitting the more severe rule of the droit commun, aside from the presumption of the aeronautical law. Article 1384, line 3, as Professors Henri and Léon Mazeaud have so carefully shown, does not contain a rule of presumption of fault of masters and employers:

The employee is only an instrument in their hands, of such kind that, when he acts, it is exactly as though the employer himself had acted . . . . the employee is no more than an extension of the employer; it would be as absurd on the part of the employer to refuse to answer for the acts of his employee as to refuse to answer for his own acts, as though he believed that such an act were the work of his hand and not of his body.72

Thus, in case the damage is not caused by an accident—for example, if it is a question of depreciation of property or of nuisance caused to a landowner by the noise of an aircraft motor, and so forth—the person injured could bring no action based on the particular air law liability, he could have recourse only to the civil law, especially under Article 1382 and 1383 and would have to prove fault of the party liable. Nevertheless, by application of Article 1384, line 3, proof of fault of the pilot or of any other employee would be sufficient to hold the aircraft owner for payment of damages.

The aeronautical law holds the aircraft owner liable for damage caused by his apparatus. Nevertheless, he will be exempt: (1) if he has leased the use of his aircraft to another person who operates it to his own benefit, on condition that such lease be inscribed in the national aircraft register; in this case, the latter person assumes liability; (2) if the aircraft has been unlawfully used without the consent of its owner; the unlawful possessor would be liable in this case. However, if the unlawful operation of the aircraft has not been made against the wishes of its owner, the latter and the unlawful possessor would then be jointly liable.

At what moment does the liability of the aircraft owner begin and end, as defined by the law of March 14, 1928? Article 58 states that the owner incurs liability for damage caused by the use

of the aircraft. Then, liability is incurred for damage caused not only by and during the flight of the aircraft, but even while it is on the ground, provided that at that moment it is in operation. It is not important to know whether the aircraft is in condition to fly or not. It is sufficient that at the time it causes injury it be placed under one of the forces necessary for its maintenance or operation in the air. Thus, as soon as an aircraft is in such position that motor power or wind can cause it to move, it will be deemed in operation. For example, an aircraft is about to land; it stops, its propeller stops turning, when suddenly a strong wind comes up which causes a movement of the plane, injuring a person—the particular liability of the aeronautical law will apply in this case.

In résumé, the law of March 14, 1928, instituted against the aircraft owner less severe liability than that of the droit commun. This does not hinder the protection of the interests of the injured person by exempting him from the burden of proof.

United States of America

In considering the principles which regulate liability for damage caused by aircraft on the surface, we must first look into the very particular character of the legislation of this country.

The United States is a union of States. In certain domains, exclusive authority has been granted by the Constitution to the federal government, while in others the federal authority and that of the particular States operate concurrently. Finally, in some other domains, authority belongs exclusively to the particular States. The writer would wander from the body of this article if he wished to analyze the principle of the limitation of this power. He will limit himself then to mentioning that Congress believes that it possesses sufficient power to regulate a great number of the problems raised by aviation. Article 1, Section 8, clause 3 of the Constitution gives Congress the power to regulate commerce between the different States.

The Air Commerce Act was promulgated in 1926. In Section 3, this Act has given power to the Secretary of Commerce to prescribe rules for regulating aviation. These rules, called Air Commerce Regulations, have been duly published and entered into force March 22, 1927. They include among others the rules for air traffic, fixing the minimum height at which aircraft can fly.

72. Complete title: "An Act to encourage the use of aircraft in commerce and for other purposes."
74. Chapter V.
and so forth—questions which indirectly interest us. But the problem of liability is not even touched on. This is explained by the principle on which is based the limitation of federal power and those of each of the States. Actually, each State may regulate all the problems within its boundary and the federal government may not interfere, except in case difficulties arise in connection with interstate commerce in air navigation. But, the problem of liability toward third persons has no relation to interstate commerce.

Also, in spite of the readily recognized necessity for making uniform the principles of liability in adapting them to aviation, no progress has been made in the creation of a federal law. In this regard, the Committee on Aeronautical Law of the American Bar Association drew up a text called the Uniform State Law of Aeronautics. This text only deals in general with problems arising from the legal power of the States, and the subject of liability is not mentioned either in the Air Commerce Act or in the Air Commerce Regulations.

Section 5 of the Uniform State Law of Aeronautics deals with damage caused by aircraft to third parties on the surface and to the liability which proceeds from it. Before analyzing its contents, the writer wishes to mention that Section 5 of this Act has been adopted by eighteen States and territories. In 1931, the State of Idaho repealed the application of this law and promulgated a different law in regard to aerial liability, identical with that of the State of Pennsylvania. Furthermore, the States of Arizona and Connecticut adopted analogous laws, which differ from Section 5 of the Uniform State Law of Aeronautics.

Thus at the present time, eighteen States and territories apply the principle of liability as established by the Uniform State Law of Aeronautics; four States have adopted special and different laws; the rest of the States apply the common law to damages caused by aircraft.
We next have to deal with special texts for aerial liability, such as drawn up, either in the Uniform State Law of Aeronautics, or in the four State legislations which will be mentioned. Afterwards we shall discuss the principles of the common law as applied in all the other States.

Section 5 introduces absolute liability for damage caused on the surface. In the first place, this damage must be caused by the take-off, landing, flight of the aircraft, or even by the falling of some object from the aircraft. Under this law compensation can not be secured for damage caused by an airplane rolling across the surface of the ground. Thus, Section 5 can not be applied to damage caused by an aircraft standing still on the ground, going into or out of a hangar, or simply moving upon the ground. It would be otherwise if the damage were caused by an aircraft rolling, with its motor operating, over the ground to assume position for the take-off, or rolling along the ground without any motor power, immediately after its landing. These transitional moments are included in the terms "ascent" and "descent" mentioned in Section 5, which otherwise would be meaningless, because while the aircraft is in the air, whatever its altitude, it is evidently in flight.

Damage must cause an injury to persons or things on the surface. Since Section 5 makes no discrimination on this point, it follows that any damage whatsoever, if there be a causal relation between it and the flight, take-off or landing of the aircraft, must be fully compensated.

When the damage is caused by an aircraft under the conditions mentioned, it is unnecessary to know what had been the causes. Whether it be negligence of the pilot, act of a third person, air risk, or force majeure, full liability will always be incurred. Only one defense is valid, and that is in case the damage is caused in whole or in part by the negligence (fault) of the person injured, or by that of the owner or guardian of the object injured. To show to what degree the negligence of the person injured deprives him of compensation, we must turn to the common law, where application of this principle to aeronautics is made many times. Thus, in case of air exhibitions, when spectators were injured, the courts have generally granted them compensation, in spite of the fact that they were seated very near

80. However, G. Anstreich and S. Kempner, in their note concerning Section 5 of the Uniform State Law of Aeronautics, 4 Air Law Rev. 174, believe that "Act of God" and force majeure, as causes of damage, completely exempt from liability as instituted by Section 5. Nevertheless, these writers show no proof to substantiate their thesis; their discussion proclaims absolute liability and does not mention force majeure as cause for exemption.
the point of take-off or landing of the aircraft—sometimes even in cases when they had left the seat which had been assigned them. Nevertheless, in some of these cases, negligence of the persons injured could not be proved. For example, a youthful spectator at an air meet, in spite of a barrier, walked over to a balloon at the moment of its ascension and was carried into the air; in another case, the victim, without any compulsion, approached the propeller of an airplane which caught and killed him. In these two cases the plaintiffs were refused compensation.

Section 5 states that absolute liability is generally incurred by the aircraft owner. If the aircraft has been rented, the person who has taken it for hire will be equally liable. The pilot who is not also the owner of the aircraft will only incur liability in case of fault—in conformity with the common law.

Such severe liability has aroused strong opposition. The question has been raised whether Section 5 of the Uniform State Law of Aeronautics was not unconstitutional, whether it does not violate the Fourteenth Amendment of the Constitution of the United States in depriving the aircraft owner of the right of defense in establishing absence of fault, or force majeure.

Furthermore, four States among those who adopted the Uniform State Law of Aeronautics have omitted Section 5. The States of Montana and Missouri apply common law liability, while the States of Pennsylvania and Arizona have promulgated, as has been mentioned, special laws on the subject. Finally, the State of Idaho in 1931 rejected Section 5 and adopted a law identical with that of the State of Pennsylvania.

The law adopted by the States of Pennsylvania and Idaho differs from Section 5 in that absolute liability has been replaced by delictual liability. The aircraft owner is only liable for his negligence, in conformity with the common law—with this one difference, that it is always presumed that he has committed a fault. This presumption can be opposed by proof of fault of the person injured, by force majeure, by the fact that he had taken


84. Section 1: "... nor shall any State deprive any person of life, liberty or property without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

all necessary measures to avoid the injury, or, finally, that there is no existent relation between the pilot and the aircraft owner (for example, in the case of theft and unlawful operation of an aircraft).

The laws on aerial liability promulgated by the States of Arizona and Connecticut base liability on negligence. But it is the pilot whom they make liable in the first place—while admitting secondarily the liability of his employer. As previously stated, the other States apply the principles of the common law to liability toward third persons, i.e., liability for fault. This liability could be incurred only in case the commission or omission of a fault on the part of the owner could be established.

The next question is to determine whether the burden of proof of fault always falls on the plaintiff—the victim of the injury. Generally, he will be made to show proof, which, however, is difficult for him—in view of the fact that a person on the ground will scarcely know, for example, the cause of an accident which results in an airplane crashing onto his house. Also, to assist the plaintiff, the rule of res ipso loquitur has been applied for some time. This rule consists in shifting the burden of proof: it holds against the defendant a double presumption, that of his negligence, as well as the fact that this presumed negligence was the cause of the injury. In order to apply this rule, it is necessary: (1) that the object (the aircraft) which caused the damage be under exclusive control of the defendant or his employee; (2) that the act causing the injury be of such nature that it can reasonably and at first glance be explained by the negligence of the defendant. These presumptions are not incontestable; the defendant can refute them by showing proof, either that there was no fault on his part or that of his employees, or that the injury was not caused through his fault.6

Let us see now under what conditions the aircraft owner incurs liability and upon whom will fall the burden of proof. We shall first consider those cases where damage was caused by the dropping or the falling of objects, by the crash of an aircraft, or by the take-off or landing of an aircraft, i.e., by an accident.

I. An accident is caused by the fault of the aircraft owner or his employees. In this case, he definitely incurs liability. But will the person injured be held to prove the fault of the person

liable? In order to apply the doctrine of *res ipsa loquitur*, it is necessary, as has been mentioned, "that the direct cause of the accident, as well as the conditions which accompany it, be under the control and charge of the defendant or his employees, in such manner as not to seem unjust at first blush to attribute to them liability for the damage."87 Thus this doctrine must be rejected in all cases where, at first blush, the accident can be proved due to causes other than the operation of the aircraft. The person injured will then be held to prove fault on the part of the defendant. In conformity with this principle, the rule of *res ipsa loquitur* has been applied to two aviation cases, the second of which has been greatly disputed. In the first case, the question deals with the crash of a plane in the vicinity of an airport and injury caused to a person on the surface. The injured person, not being able to show the cause of the accident, simply invoked the negligence of the pilot. At the first hearing, the court refused to apply the rule of *res ipsa loquitur* and the plaintiff's suit was denied, since he had not shown proof of the fault of the defendant. But this judgment was reversed on a rehearing for the reason that, in such a case, the rule *res ipsa loquitur* should be applied.88 In the second case, the plaintiff was driving an automobile on a road near an aviation field, when a plane piloted by an employee of the defendant ran into the automobile, causing damage, compensation for which was demanded in court. The plaintiff could only prove the facts of the case as well as the injury he had sustained, but he could not establish fault on the part of the pilot, nor even explain the cause of the collision. He had to base his plea then solely on the rule of *res ipsa loquitur*. Compensation was allowed him by the court.89

II. The accident is caused neither through fault of the aircraft owner nor through that of his employees. (A) First, we will take the case where the fault of a third person causes the accident. We can see two possible results; (1) an act or omission of an act of a third person as direct cause of the accident; for example, aircraft "A" collides in flight with aircraft "B," wherein the latter falls on property and destroys a roof; (2) the defendant purposely causes the accident (fall or sudden landing) to avoid the result of a wrongful act of a third person; for example, the

pilot lands on the square of a park to avoid collision with another plane which is being handled improperly by its pilot. In these two cases there certainly would be some party who would be liable—specifically, the third person whose negligence was the initial cause of the injury. The question is to know whether the owner of the airplane in the accident also incurred liability. But Anglo-American jurisprudence seems to prefer to exempt him in both cases. It is true that there are no decisions dealing with this point in the field of aviation law. But we can borrow from the field of automobile law where there are many cases. For example, the defendant's automobile, violently struck by another, has been thrown into the path of a third party and causes injury. The court does not hold any liability against the defendant. In another case, the defendant's car, in order to avoid collision which threatened it through the fault of another automobile, was violently thrown from the road and through this act caused injury to a third party. Here also the defendant was declared not liable.

(B) Let us turn now to the case where damage is caused by an accident which is not the result of the fault of the pilot nor of a third person, nor of force majeure. It might be caused by some occurrence generally unforeseen by the air transport operator in the present state of aeronautical science. Such would be, for example, an imperfection in the motor or wing structure, which, in spite of constant examination for defects, leaves much to be desired; a new aeronautic phenomenon; an atmospheric condition overtaking the pilot in the course of a flight, and so forth. This might be, as M. Roger Prochasson has stated, "a very special aeronautic risk, of a very complex nature . . . presenting a very limited character, since it brings together only certain clearly characterized facts, not the result of a fault in the piloting." These events which we shall call, in the words of M. Prochasson, "air risks" (risques de l'air) can by themselves cause an aircraft accident that would result in damage to third persons. On the other hand, an aviator, in an effort to avoid such damage, can commit an act which also causes injury (for example, landing on the roof of a house, and so forth).

Because of the lack of decisions dealing with this problem in the field of aviation, the writer is forced to refer to jurisprudence in a different field, where it is shown that the aviator should be held liable and the rule res ipsa loquitur can be applied.

LIABILITY FOR DAMAGES

(C) If the accident is due to force majeure, the aircraft owner will evidently be exempt from all liability. The injured person alone must bear the injury which he has suffered.

We must now view the cases where the injury is not caused by an accident, but by the normal operation of aircraft. Flight over land or rural property can cause nuisance or annoyance to its owner. In these cases, jurisprudence refuses any action to the injured owner when the flight is made in a normal manner at a reasonable height. The conclusions would be different if the flights, for any reasons whatever, were made too often or at too low an altitude—for example, in the neighborhood of an airport or an air school. But normal flight can cause more tangible damage, for example, in frightening animals which are on the surface beneath. Such fear can either do injury to the animals or even, in injuring them, make them dangerous to persons. In the first case, jurisprudence is divided. Under similar conditions, compensation has sometimes been refused, and other times granted. In the second case, where animals take fright at the sight of an airplane and cause injury to persons, jurisprudence grants to the injured persons the right to claim compensation of the aviator. Evidently in all these cases the rule of res ipsa loquitur could not be applied.

Let us now review rapidly the manner of application of the common law to compensation for damage caused by aircraft on the surface of the earth. We have only to discuss a very special case, where a boat on the water would be damaged by the fall of a plane or of objects dropping or having been thrown from it. Admiralty law would then apply. In this case, the essential difference between common law and admiralty law is that in case of concurrent fault by aircraft owner and the person injured, the injury and the compensation would be, according to maritime law,
divided between the two, whereas, in conformity with common law, the fault of the injured person would deprive him in general of any right to full compensation. It is true that this latter rule sometimes allows an exception, where it might happen that the aircraft owner would be adjudged to pay partial or full compensation.

In summing up the principles applied in the United States to aerial liability toward third persons, we see that an attempt has been made to incorporate the principle of absolute liability. This tendency, strong five years ago, is already beginning to weaken. The number of States which have adopted it not only do not grow but are beginning to diminish. The doctrine is returning to the liability of the common law and the question is even raised as to whether the application of absolute liability is permissible or constitutional.

**Examination of All Other Aeronautic Legislation.**

**Bulgaria**

Aviation is regulated by the law of July 23, 1925, of which Article 22 institutes absolute liability of the aircraft owner for damage caused by the operation of his aircraft. In case the aircraft has been used without his consent, the owner is exempt from all liability, which in turn falls entirely upon him who has unlawfully profited by the use of the aircraft.

In case the aircraft belongs to a private aviation interest, the law requires payment of a deposit to serve as guaranty for payment of any compensation incurred. In case the aviation company does not pay compensation, that amount will be deducted from the deposit. The deposit can only be returned to the company four months after its settlement.

**Chile**

Aviation is regulated by a decree having the power of a law, of May 15, 1931. Article 1, specifying what is meant by the term "aircraft," is identical with Article 1 of the French law of May 31, 1924. This has previously been explained in the chapter dealing with French legislation.

---

98. See, for example, the article by Kingsley, Robert, & Gates, Sam E., "Liability to Persons and Property on the Ground," 4 THE JOURNAL OF AIR LAW 516 et seq.

99. Article 25.
LIABILITY FOR DAMAGES

Article 52 institutes absolute liability for all damage caused on the surface, the owner or lessee of the aircraft, the operator and the person causing the injury being jointly liable.

Denmark

The law of May 1, 1923, regulating aeronautics, includes within the meaning of "aircraft": airplanes (land and sea), airships, and free balloons. Thus gliders captive balloons, kites and parachutes are not regulated by the aeronautical law. This law institutes absolute liability for damage caused to third persons, which liability can be avoided only by proof of fault of the person injured. It is interesting to note that the Danish law makes the owner or possessor of the aircraft liable for damage caused, among others, by persons attracted to the aircraft when it lands or crashes outside the airport. Absolute liability instituted by Article 36 of the law of May 1, 1923, will not be applied in case the accident happens within the airport. In that case the droit commun is applied, i.e., liability based on the idea of fault.

The aircraft owner is required to contract for insurance to cover possible damages. The Minister can authorize the owner to make a money deposit instead of insurance.

Finland

The law of May 25, 1923, regulating air navigation, gives in Article 2, line 2, the same definition for aircraft as the Danish law. Article 6 institutes absolute liability, but only on the part of the aircraft owner, excluding the pilot.

Hungary

The Order of the President of the Council of Ministers, of December 30, 1922, regulating air navigation, institutes absolute liability of the owner and pilot of the aircraft. They will be exempt from liability if the accident causing the injury has been caused by the person injured. In case injury resulted from the use of the aircraft without the knowledge of the owner or pilot, only the person profiting by its use will be held liable.

100. Article 1.
101. Article 36, lines 1 and 2.
102. §20 of the Decree of the Minister of Public Works, of Sept. 11, 1920.
103. Article 37.
104. Article 39.
105. Article 19.
Mexico

Air navigation is regulated by rules contained in the law on General Communication Lines and Means of Transport, of August 31, 1931. Book 4 of this extensive code is devoted to air transport. Article 443 defines the term "aircraft." They are machines capable of flight by sustaining themselves in a static or dynamic manner in the air, and designed for the transport of persons and things. Consequently parachutes are not included in the category of aircraft.

Liability toward third persons is regulated by Chapter IX of Book 4 of the law. Article 498 institutes liability of the aircraft owner for all damage which he had caused to persons or things. However, Article 500 exempts the owner from liability for damage, if it has been caused by chance, by force majeure, or in the course of a flight which had been authorized by the authorities. Finally, Article 501 exempts the owner and crew of the aircraft from their liability for damage caused by accidents to persons, if they had taken all reasonable and technical measures to avoid the damage.

We see then that the Mexican legislator instituted delictual liability, with presumption of fault of the aircraft owner, which he can always contest by proof of force majeure or chance, and, in certain cases, by proof that he committed no fault. Thus the procedure of the Mexican law is analogous to that of the Polish law. However, it contains an important difference. In particular, the Polish air law, as we have seen, defines the fault of the aircraft owner as neglect to take necessary safety measures to avoid the accident, while the Mexican law is more exacting in substituting the idea of "damage" for that of "accident." It follows that any damage caused other than by accident does not come under the aviation law in Poland but falls under the jurisdiction of the droit commun, which is not the case in Mexico. However, proof of absence of fault, i. e., that measures had been taken to avoid the injury, will not be admitted in Mexico except in case of damage caused to persons by an accident.

Thus, in case an airplane by flight at a low altitude frightens animals and causes damage to the landowner below, the Polish law of aviation will not be applied, and liability will be maintained under the jurisdiction of the droit commun, which is much more favorable to the aircraft owner. In Mexico, it will be different—

106. Ley sobre vías generales de comunicación y medios de transporte.
LIABILITY FOR DAMAGES

air navigation regulations will apply. There would then be presumption of liability against the aircraft owner, and, since in this case the question is not one of damage caused to persons by the existence of an accident, his exemption would lie only in proof of accident by chance, force majeure or a flight which had been authorized by authorities.

It appears that the Mexican law, although based on the same principle as the Polish law, is more severe.

The person who operates an aircraft without the consent and knowledge of its owner incurs liability instead of the latter. The owner incurs liability jointly with the person to whom he has leased his aircraft for commercial service, unless the competent authorities are duly notified of this lease.

Norway

The law of December 7, 1923, regulating air navigation, applies the same definition in Article 1 for aircraft as the Danish law. Article 37 institutes absolute liability for the aircraft owner, from which he can be exempt only by proof of grave fault of the injured person. The Norwegian law has no regulations concerning damage caused by persons attracted by the crash of an airplane. But the Supreme Court of Norway, in deciding such a case, retained the liability of the aircraft owner. In its report, the Court mentioned that the crash of an aircraft is an extraordinary occurrence, likely to draw curiosity, and that the gathering of a crowd and the injuries which it caused on the land of the plaintiff constituted the natural result of an aviation accident. It follows that there would be a sufficient causal relation between the damage caused by the assembled crowd and that caused by the crash of the aircraft.

Nevertheless, absolute liability as instituted by Article 37 is not applied to damage caused within the limits of an airport. As in Denmark, the droit commun would then be applied, i.e., liability for fault.

Aircraft owners can be forced by competent authority to contract insurance to cover possible future damages.

107. Article 498.
108. See Denmark.
109. Fredrikstad Forenede Teglerverk v. Karl Borch, Axel Johanson & C. Paulsen, decided Oct. 6, 1921, by the Court of Tune, confirmed by the Court of Appeal, Christiania (Norsk Retstidende 1922), and by the Supreme Court of Norway, June 22, 1923.
110. Article 38.
Salvador

Air navigation is regulated by the Decree of May 17, 1923. This law does not define the meaning of aircraft, but, inasmuch as Salvador ratified in June, 1932, the Ibero-American Convention of November 1, 1925, of which Annex D gives a definition of aircraft, there must be included in this definition all captive or free balloons, kites, airships and airplanes.

Article 5 of the Decree of May 17, 1923, institutes absolute liability of the aircraft owner for all damage caused to property of another through any accident or lack of care.

Siam

Air navigation is regulated by the law B. E. 2465 of 1922, modified by Amendment B. E. 2467 of 1924, and the Act of Amendment B. E. 2468 of 1925.

The law does not give any definition of the word "aircraft," but since Siam ratified on February 2, 1920, the Convention of Paris of October 13, 1919, which, in Annex D, clearly points out what is included in this term, it follows that the Siamese law includes within its definition of aircraft captive and free balloons, kites, airships and airplanes.

Liability toward third persons is regulated in a very complicated manner. According to the case in question, there would be absolute liability, delictual liability or presumed liability. In this regard, the Siamese law is similar to the Italian law, but, when it is a question of application of each of these forms of liability, the Siamese law is contrary to the Italian law.

Absolute liability will be incurred for all damage caused to persons and things in case of landing outside an airport or other locality specially designed for the landing of aircraft. The question is whether this rule can be understood in a restrictive sense or whether the word "landing" (atterissage) can be used in a broader sense and include also the crash (chute) of an aircraft. In view of the lack of jurisprudence and doctrine, it is difficult to determine whether the word "land" can also include in Siam the meaning of "crash." Nevertheless, the wording of line 2, §117, leads the writer to prefer the broader interpretation of this text. The said text specifies that liability will be incurred even in case the landing took place as a result of force majeure. It is not the intent of this regulation to inflict punishment by fine on the

111. Section 117, line 2.
LIABILITY FOR DAMAGES

aircraft owner for having landed outside the regular locality, but it is instituted solely to protect adequately third persons injured on the surface of the earth. But what is the difference to the person injured as to whether this be a forced landing or an airplane crash, at the time he is injured? It is equally difficult for him to avoid both. This seems even more reasonable if we compare line 2 of §117 with line 1 of the same section, which only institutes presumption of fault against the aircraft owner, who causes damage in landing at an authorized airport or any other place specially designed for air traffic. It is clear that third persons who are at an airport are less exposed to danger than those who are outside, because, knowing that aircraft are flying over, taking-off and landing at an airport, they must and do protect themselves and their property, and, furthermore, thanks to the assistance of the airport personnel and to the special air traffic organization, they are well protected. If an accident happens to them, it is generally because they do not conform to the rules and regulations of the air transport companies and the airport officials.

Nevertheless, the persons injured by aircraft at airports enjoy special protection, because there is not only a presumption of liability against the aircraft owner, but also the law does not allow him to show proof of lack of fault. He will be excused only through force majeure or through the fault of the airport officials. Although the law does not mention it, the fault of the person injured—in case it was the actual cause of the injury—exempts the aircraft owner from liability in the two cases provided for by §117.

Liability for objects dropping or falling from an aircraft in the air is regulated on a basis much more favorable to the aircraft operator. He will be exempt from all liability for damage caused by the dropping of ballast (fine sand or water), newspapers (in conformity with authorization from the appropriate minister) and the dropping of any other articles as authorized by the competent authorities, on condition that such care be taken as would be taken by an ordinarily prudent person. The aircraft owner is liable for the dropping or falling of any other object, only in case there was any negligence on his part. Thus the person injured will be obliged to show proof of fault of the liable party, in conformity with the droit commun. In all these cases liability is incurred, as has been indicated, by the aircraft owner. In addition, the passenger will be liable for damage caused by the falling

112. Section 115, line 2.
113. Section 12.
114. Section 115, line 1.
of objects, in case the dropping of objects (fallen or thrown) is
done by them with malicious intent, purposely or negligently,\footnote{116} and where any other damage is caused either by their fault or by
non-observance of the rules which have been posted or duly made
known to travelers.

The rules regulating liability in Siam are quite complicated,
but are reasonable. Where the landowners are in greatest danger
from aircraft and where it is impossible for them to take safety
measures, they are quite sufficiently protected by the law which
institutes, on their behalf, absolute liability on the part of the.air-
craft owner. In regard to damage caused at the airport, the danger
is much less and it is possible for third persons to take safety meas-
ures. Also the legislator is less severe in that regard, in adopting
other rules more favorable to the persons injured than those of
the \textit{droit commun}, i. e., instituting a presumption of liability against
the aircraft owner. As for the dropping of objects, either thrown
or fallen, these cases are rare and the damage caused is slight; it
is much easier to prove fault of the party liable, because technical
questions can not enter into the proceedings. Also the legislator
has maintained the liability of the \textit{droit commun}.

We must still indicate the care which the Siamese legislator
has taken in drawing up the aeronautical law. Section 118 deals
with absolute liability of the aircraft owner for damage caused on
the surface by persons who have been attracted to an aircraft ac-
cident, without distinguishing whether they came of their own
accord or were called by some of the personnel of the aircraft.
Of all aviation legislation, only that of Denmark and Siam have
dealt with this case, which in other countries has been much dis-
cussed in jurisprudence.\footnote{116}

\textbf{Sweden}

The definition of aircraft is given in Article 1 of the law of
April 20, 1928. Aircraft are stated to be airplanes, airships and
free balloons.

Aerial liability as regulated by the law of May 26, 1922, is
absolute liability, and only the fault of the person injured is able
to exempt from or lessen the amount of compensation.\footnote{117}
LIABILITY FOR DAMAGES

Liability is incurred by the aircraft owner118 and by the possessor jointly.119 However, the person who uses an aircraft for a flight without having permission from its owner, must assume liability instead of the owner for all damage caused by said flight.120

Switzerland

Liability for damage caused by aircraft on the surface of the earth is regulated by the Decree of the Federal Council of January 27, 1920, concerning regulation of air navigation in Switzerland.

The law does not explain what is meant by the expression "aircraft." M. Hess, relying on former aerial regulation and on the principles of the present law, believes that the word aircraft means airships, airplanes, free or captive balloons, gliders, kites and parachutes.121

Article 26 of the Decree institutes absolute liability. The party liable can exempt himself neither by proof of force majeure nor by that of fault of a third person. Even the fault of the person injured can not necessarily take from the latter the right to compensation, Article 26 actually mentioning that "the judge can grant full or partial exemption from civil liability in case of fault of the injured person." But it is not absolute, for the legislator relies entirely on the discretion of the judge. Also, the injured person, to secure compensation, has only to show proof of injury which he has suffered by the actual operation of the aircraft.

The law does not explain what is meant by operation (exploitation), which is generally interpreted in the same manner as has been shown in the sections devoted to the Austrian and German legislation. Relative to causal relation, the Swiss doctrine is based on the theory of adequate causality. Article 26 maintains liability for all damage, even if indirect. Thus, damage caused by horses frightened by the sound of an aircraft motor122 would be subject to compensation. The aeronautical law does not determine the amount of compensation; this must be determined by the law of obligations. Article 43 of the law of obligations allows the judge complete freedom to determine, according to the circumstances, the amount of compensation. Besides compensation for actual injury, the judge is permitted by Article 47 of the law

118. Article 1.
119. Article 4.
120. Article 3.
121. Schweizerisches Luftrecht (Zürich, 1927), pp. 10 & 20.
122. See Kilkowski, op. cit., p. 17.
of obligations to allow fair compensation to the injured person in case of bodily injury, or to his dependents in case of death.

The same liability is instituted for the dropping of objects. Liability is incurred: (1) by the person in whose name permission to fly is granted, (2) by the possessor of the aircraft, i.e., by the aircraft operator, and, obviously, (3) by the person who causes the injury. All these persons are jointly liable. The persons obliged to pay compensation, in conformity with Article 26, have the right to seek redress against the person whose fault has caused the injury.

This very severe liability is applied not only to private aircraft but also to those belonging to the state.

The Swiss legislator, who wishes to assure persons injured by aircraft the possibility of obtaining full compensation under the most favorable conditions, is not bound to institute absolute and unlimited liability, but he is obliged to assure them receipt of compensation. Thus, the competent authority has the right to demand the deposit of a guaranty by the owner or possessor of the aircraft, before the delivery of a navigation permit or certificate of registration of the aircraft. In conformity with Article 28, this guaranty can consist either of: (1) deposit of money, (2) joint guaranty with a Swiss bank, or (3) liability insurance contracted with a Swiss insurance company.

At the time of the promulgation of the Decree of January 27, 1920, the legislator was of the belief that insurance would be the normal means of guaranty, while the money deposit and a bank guaranty would serve temporarily—so long as the insurance companies lacked statistical information and experience in this field. It is interesting to note that only insurance and the bank guaranty have been utilized and that a money deposit has never been employed. The guaranty thus determined must completely cover the liability as defined by Article 26; furthermore, it must operate in all cases without distinction—even if the aircraft is in the hands of an incompetent pilot who does not possess the required authority.

Although the law only instituted an optional guaranty, leaving to the competent authority the right to exact it or not, nevertheless, in practice it is always requested. The minimum requirement is 15,000 Swiss francs which must be reimbursed as soon as used in payment of indemnity. In regard to insurance, we must note

---

123. Article 22 of the Decree.
124. Article 30.
126. Ibid.
that in conformity with Article 60 of the insurance law of April 2, 1908, the injured person has a right to a guaranty of an insurance sum and the insured party is authorized to pay compensation direct to the injured person.

The Swiss legislator has instituted a supplementary guaranty for the benefit of the landowner who has the right to hold any aircraft which has caused damage to his property.\textsuperscript{127}

We see then that the Swiss legislator in regulating aerial liability, has had in mind only the interests of the injured persons and has very adequately protected them, but has completely failed to recognize the interests of the aviators.

Czechoslovakia

Aerial navigation is regulated by the law of July 8, 1925, Section 6 of which defines aircraft as free or captive balloons, motor balloons, kites, airships and airplanes (land planes, hydroplanes, helicopters, etc.).\textsuperscript{128} There is no doubt that parachutes are not included in the law, but there is doubt as to whether gliders fall under the jurisdiction of the aeronautical law.

Section 29 institutes liability for damage caused by the operation of aircraft. The law only allows two exemptions, in particular, fault of the injured person or that of a third person. No member of the crew or other employee of the transport company is considered as a third person, nor the owner or employee of any organization in the service of air navigation, nor a participant in the flight.\textsuperscript{129}

Thus the fault of a third person seems, in regard to the party liable, more like force majeure. The Czechoslovakian law institutes presumption of liability for fault\textsuperscript{130} which can only be opposed by proof of fault of the injured party or a third person.

Liability is incurred by the possessor and commanding officer of the aircraft. The aircraft owner will be liable if there is no other possessor. The person who has unlawfully taken the aircraft from its possessor or owner, incurs liability in their stead. Nevertheless these latter will not be exempt from liability, if the taking of the aircraft has been made possible through their fault.

To insure to the injured person compensation which would be due him, the Czechoslovakian law demands that the aircraft pos-

\textsuperscript{127} Article 29 of the Decree.
\textsuperscript{128} See Mandl, Vladimír, Letecké Právo (Pilsen, 1928).
\textsuperscript{129} Section 31.
\textsuperscript{130} See Diwald, “Das Tchechoslovakische Gesetz über den Luftverkehr,” 4 Zeitschrift für Ostrecht 498 et seq. (1928).
<table>
<thead>
<tr>
<th>NATION</th>
<th>AVIATION LAW</th>
<th>NATURE OF LIABILITY</th>
<th>DEFENSES</th>
</tr>
</thead>
</table>
| Austria        | Law of Dec. 10, 1919; Ordinance of the Minister, Sept. 22, 1925 | Presumption of liability      | 1. Fault of victim  
|                |                               |                                | 2. Fault of third person  
|                |                               |                                | 3. Force majeure          |
| Bulgaria       | Law of July 23, 1925          | Absolute liability             | Fault of the victim                           |
| Chile          | Decree of May 15, 1931        | Absolute liability             | Fault of the victim                           |
| Denmark        | Law of May 1, 1923            | Absolute liability             | Fault of the victim                           |
| Finland        | Law of May 25, 1923           | Absolute liability             | Fault of the victim                           |
| France         | Law of May 31, 1924           | Absolute liability             | Fault of the victim                           |
| Germany        | Law of Aug. 1, 1922; Ordinance of July 19, 1929 | Absolute liability | Fault of the victim                           |
| Great Britain  | Air Navigation Act, 1920      | Presumption of fault           | Fault of the victim and all excuses of the droit commun |
| Hungary        | Ordinance of Dec. 30, 1922    | Absolute liability             | Fault of the victim                           |
| Italy          | Decree-Law of Aug. 20, 1923   | Absolute liability for objects thrown from plane | Fault of the victim  
|                |                               | Presumption of fault for objects falling from plane | Fault of the victim and force majeure  
|                |                               | Droit commun for take-off, landing and fall of plane | All excuses of the droit commun |
| Mexico         | Law on General Means of Communications and Transit, Aug. 31, 1921 | Presumption of fault          | Unforeseen event or force majeure  
|                |                               |                                | Authorized flight  
|                |                               |                                | All reasonable measures taken to avoid injury |
| Norway         | Law of Dec. 7, 1923           | Absolute liability             | Fault of the victim                           |
| Poland         | Decree of Mar. 14, 1928       | Presumption of fault           | Fault of the victim  
|                |                               |                                | Force majeure  
|                |                               |                                | All possible measures taken to avoid injury |
| Salvador       | Decree of May 17, 1923        | Absolute liability             | Fault of the victim                           |
| Siam           | Law B. E. 2465 (1922)         | Absolute liability for landing or crash outside airport | Fault of the victim  
|                |                               | Presumption of fault if accident happened at airport | Fault of the victim  
|                |                               | Droit commun for dropping or falling objects | Fault of airport officials  
|                |                               |                                | Force majeure  
| Sweden         | Law of May 26, 1922           | Absolute liability             | Fault of the victim                           |
| Switzerland    | Decree of Jan. 27, 1920       | Absolute liability             | Fault of the victim                           |
| Czecho-Slovakia| Law of July 8, 1925           | Presumption of fault           | Fault of the victim                           
<p>|                |                               |                                | Fault of third person                         |
| U. S. A.       | Uniform State Law of Aeronautics, 1923-1929 | Absolute liability | Fault of the victim                           |
|                | (17 states)                   |                                |                                              |
| U. S. S. R.    | Air Code of Apr. 27, 1932     | Absolute liability             | Fault of the victim                           |
| Jugoslovakia   | Law of Feb. 22, 1928          | Absolute liability             | Fault of the victim                           |</p>
<table>
<thead>
<tr>
<th>CAUSE OF INJURY TO RECEIVE COMPENSATION</th>
<th>COMPENSATION LIMIT</th>
<th>PERSONS LIABLE</th>
<th>GUARANTEES</th>
</tr>
</thead>
</table>
| Operation of motor-driven aircraft     | None               | 1. Aircraft owner  
2. Non-professional crew  
3. Unlawful possessor | Insurance  
Money deposit  
Security deposit |
| Use of aircraft                        | None               | 1. Aircraft owner  
2. Unlawful possessor | Security deposit |
| Aircraft                               | None               | 1. Owner or lessee of plane  
2. Commanding officer of aircraft  
3. Person causing injury | None |
| Use of aircraft outside authorized airport | None           | 1. Possessor  
2. Employee of owner | Insurance  
Money deposit |
| Aircraft                               | None               | Aircraft owner | None |
| Aircraft evolutions, or objects falling or dropping | None | Aircraft operator  
Aircraft lessee | None |
| Accident during aircraft operation    | 75,000 Rm. per accident | 1. Aircraft possessor  
2. Unlawful user | Insurance  
Security deposit |
| Flight, landing or take-off; falling of objects from plane | None | 1. Aircraft owner  
2. Leasee for at least 14 days | None |
| Accident caused by aircraft           | None               | 1. Aircraft owner  
2. Pilot  
3. Unlawful possessor | None |
| Dropping of objects                   | None               | 1. Aircraft owner | None |
| Falling objects                       | Relinquishment of plane if there had been no fault of owner | 2. Aircraft operator  
3. Person causing injury | None |
| Crash, landing or take-off of aircraft | None             | Aircraft owner | None |
| Use of aircraft outside authorized airport | None           | Aircraft owner | Competent authority can demand contract of insurance |
| Use of aircraft (accidents)           | None               | Aircraft owner | None |
| Accident caused by aircraft           | None               | Aircraft owner | None |
| Landing or crash of aircraft outside airdrome | None         | 1. Aircraft owner | None |
| Landing or crash of aircraft within airdrome | None      | 2. Passengers if at fault or if they violate the regulations | None |
| Dropping or falling of objects        | None               | 1. Aircraft owner  
2. Aircraft possessor  
3. Unlawful possessor | None |
| Aircraft                               | None               | Aircraft owner | None |
| Aircraft and its use; dropping of objects though authorized | None | 1. Person in whose name navigation permit is registered  
2. Aircraft owner  
3. Person causing injury | Insurance  
Bank guaranty  
Money deposit  
Security deposit |
| Aircraft operation                     | None               | 1. Aircraft possessor  
2. Aircraft owner  
3. Unlawful possessor  
4. Commanding officer of aircraft | Insurance  
Money deposit  
Security deposit  
Bank guaranty |
| Take-off, landing and flight of aircraft; dropping or falling of objects | None | 1. Aircraft owner  
2. Lessee  
3. Pilot in case of fault | None |
| Aircraft                               | None               | 1. Aircraft possessor  
2. Aircraft operator | None |
| Evolution of the aircraft; objects falling from aircraft | None | 1 Aircraft owner and  
2. Short time lessee or  
3. Long time lessee | None |
sessor insure his risks, either by making a money or security deposit or by furnishing a bank guaranty. The injured person will then have a right to either the insurance sum or the guaranty.

U. S. S. R.

The air code of April 27, 1932, in Article 6, defines an aircraft as an apparatus capable of circulating in the air, which is either heavier- or lighter-than-air. Parachutes, kites and captive balloons would not be included as aircraft.

Article 53 institutes absolute liability for damage caused to persons and to property. The only exemption will be grave fault of the injured person. Liability falls jointly on the aircraft owner and its operator.131

Jugoslavia

Air navigation is regulated by the law of February 22, 1928, Article 1 of which qualifies aircraft as airplanes, hydroplanes, helicopters, free and captive balloons, kites and airships. This restrictive enumeration makes the aeronautic law inapplicable not only to parachutes and gliders, but also to autogiros.

Article 88 institutes absolute liability for damage caused by the operation of an aircraft, as well as by objects which fall from it. Liability can be lessened or avoided if it is proved that the injured party himself has contributed to the injury.

Generally, liability is incurred by the aircraft owner. However, in conformity with Article 89 in case of a temporary lease (of short duration), the owner and the lessee incur joint liability. In case of a long lease, the aircraft owner is liable only if it is shown that there has been fault on his part.

(To be continued)

131. Article 57.