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Aerial Domain and the Law of Nations

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AERIAL DOMAIN AND THE LAW OF NATIONS.

In any discussion of the aerial domain of States and their rights and duties therein with relation to each other it is well to consider first the conceptions of private law as to the right of the individual landowner, since the doctrines to be adopted in the former sphere, to be sound, must at least not do violence to the latter.

A study of various systems and the works of text-writers reveals two major and opposing views with respect to the landowner's rights in the aerial space above his land; the first, that he has no rights, since the air is incapable of being possessed in any material sense; and the second, that the landowner does possess rights. Those holding the former view appear to have confused the column of air in a given space at a particular time with the space itself, and it may be said that this school is a very small minority. On the other hand, those who concede rights to the landowner in the superincumbent space are not at all agreed as to the extent of those rights. Some hold that the right is less than ownership and is little more than a right of user only to the extent of the proper enjoyment of the land itself. The theories range from this point up to that of full and complete proprietary rights. The last mentioned is the view most widely acted upon and it is derived from the maxim of the Roman system that whoever owns the land owns all below and above the surface—*cuius est solum ejus est usque ad coelum.*[1]

This is the doctrine adopted into our common law and by a great majority of States. Thus the Code Napoleon says: "Property in land includes property above the land."

German law likewise embraces the principle though it has undergone some statutory modification recently in the interest of aerial navigation. The same is true of the codes of other European States. They still concede proprietary rights in the aerial space but restrict their exercise.[2]

1. Coke on Litt., sec. 4 a.
2. German Civil Code, 1900, sec. 905; Swiss Civil Code, sec. 667.

It is settled that the proprietor of the surface owns *usque ad inferos* and that an actionable trespass is committed by any entry beneath the surface at whatever depth; it is likewise as generally conceded that he owns *usque ad coelum,* yet it is not wholly clear what entries above the surface constitute actionable trespass. All courts appear to be agreed that the unauthorized interference with anything in the air connected with the land constitute trespass, and it has been uniformly held that an owner may rightfully cut wires strung over his land without his consent. In the case of Pickering v. Rudd,[3] decided by Lord Ellenborough in 1815, that jurist said:

"But I am by no means prepared to say that firing across a field *in vacuo,* no part of the contents touching it, amounts to a *clausum fregit.* If this part overhanging the plaintiff's garden be a trespass it would follow that an aeronaut is liable to an action of trespass *quare clausum fregit* at the suit of the occupier of every field over which his balloon passes in the course of his voyage."

American courts appear to have been influenced by this decision, at least by the dictum with respect to discharging a gun through the aerial space of another, and hold it actionable trespass where any shot fall upon the ground, regardless of the insignificance of damage.[4]

Lord Ellenborough's successors have not fully accepted his views, however. Thus Lord Bowen says:

"An owner of land has the right to object to anybody putting anything over his land at any height in the sky. It is not necessary to decide how far one is to justify the principle that the man who has land has everything above or at all events is entitled to object to anything else being put above it."[5]

Hence, a captive balloon, carried by air currents into the aerial space of an adjoining landowner, may constitute trespass, or, at any rate, a nuisance. In the interest of utility and the development of a science that promises to give man com-

3. 4 Camp. 219, 220 (1815).
4. Whittaker v. Stangvick, 100 Minn. 386.
5. Kenyon v. Hart, 6 B. & S. 249a-252; Wandsworth Bd. of Wks. v. United Tel. Co., 13 A. B. 904; Finckley Elec. L. Co. v. Urban Council (1903), 1 ch. 440.

mand of the air, as he has that of land and water, it would seem desirable to concede a privilege of passage to aircraft and limit the owner's right to object to cases where he suffers some detriment. Such is substantially the doctrine adopted by Germany and Switzerland.

Enough has been said of the private rights of the landowner in the aerial space over his own land to reveal their nature as proprietary in practice, subject, of course, to such modification by municipal or national law as the State may deem necessary. These conceptions necessarily imply the doctrine of national sovereignty in the aerial space and point the only sound way for the development of rules of the law of nations touching the subject.

Until the recent Great War gave its tremendous stimulus to the development of aerial navigation, the question of aerial domain in the law of nations was almost wholly academic and speculative, though a decade before, the developments in wireless telegraphy had presented some occasion for concrete discussion. As early as 1899 the States of the World took cognizance of the possibility of the use of the air in war and The Hague Conference of that year adopted a declaration[6] agreeing "to prohibit, for a term of five years, the launching of projectiles and explosives from balloons or by other new methods of a similar nature." As Captain Crozier of the American technical staff reported, it was felt that balloons and other aircraft, as they existed, constituted such inaccurate agencies of war as to be incapable of regulated use.

Following this the appearance of wireless telegraphy tended to increase the practical aspects of the subject of aerial space and in 1903, on the initiative of Germany, a conference assembled in Berlin and produced a convention relating to communication between ships and coastal stations by means of wireless for the better protection of maritime commerce. In 1906 this convention was enlarged. While the question of transmitting the so-called radio waves across State frontiers must necessarily have been in the minds of representatives there was no immediate occasion for considering it.

6. The Hague Declaration IV, I, 1899.

The Institute of International Law, seeing the growing importance of rules to regulate the advances of science in the use of aerial space, met at Ghent in 1906, to devote itself wholly to this subject; and there was submitted to it by M. Paul Fauchille a draft code to be applied both in time of peace and in time of war, which the Institute adopted.

It is a little puzzling to observe the trend of thought among even eminent jurists of this very recent period as to the correct principles to be applied. The very first article of the code,[7] for example, sets out that:

"The air is free. States have in the air, both in the time of peace and in time of war, only those rights which are necessary for their conservation."

Here is a bold denial of the principle of national sovereignty in aerial space, a view that is wholly unhistorical and in antagonism with all of the implications of private law. The arguments used to support the proposition that States possess land domain and fluvial domain but no aerial domain were prompted by a false idealism which found an analogy between aerial space and the high seas, and, recalling the troubled history of the latter, resolved to render that of the former secure.

But as Mr. H. D. Hazeltine[8] pointed out in 1911, it is impossible to argue from the freedom of the seas to the freedom of the air. The sea lies off one side of a State's landed territory while the air lies above. As ships, for example, recede from a State's coasts they become with increasing distance, of less and less danger or concern, whereas the higher airships mount in the heavens the greater the potential danger to the land beneath from objects falling, through design or by accident. To argue, therefore, for a right of innocent passage through the air as through territorial waters in time of peace is to misunderstand the nature and relations of the two elements; while to open the air freely to belligerents would be merely to extend the theatre of hostilities and confound the rights of neutrals.

It was to be expected that among those seeing an analogy

7. Annuaire, 1906, p. 305.
8. Law of the Air.

between the air and the sea there would be some who would urge the application of the principle of territorial waters to a certain area immediately above the landed domain. Such a group appeared but its members are far from agreement as to the extent of territorial space in which the State may exercise exclusive jurisdiction. The principle of territorial waters rests upon the necessities of self-protection and the extent of such waters was fixed at a marine league or three nautical miles, as the range of cannon shot, in the days of Bynkershoek. There it has remained in spite of the ever-increasing range of modern artillery. The principle is wholly inapplicable to aerial space since it cannot be justified on the grounds of protection; in practice, it would actually make for insecurity.

There is, of course, a very great difference between the passage of radio waves through a State's aerial space and the passage of aircraft. The one is intangible and, so far as we know, can cause little or no inconvenience or danger; the other is a weighty, substantial body capable of great injury and destruction, by design or accident.

Certainly, in the development of radio up to this time private law has not considered the passage of these waves as worthy of its cognizance, however desirable general regulation may be as a matter of State policy.

The consideration given to aerial space in the law of nations by the Institute of International Law was followed by the production of an extensive literature and the appearance of a number of codes of the most divergent character. A review of this material shows theories of the legal nature of aerial domain to fall into about a half dozen categories, which may be summarized as follows:

1. The theory of the Institute of International Law of 1906 that the air should be absolutely free for purposes of aerial navigation by aviators of all countries.

2. The so-called zone theory, that though the air is free the subjacent State should have a certain right of control up to a certain height.

3. The theory of freedom of the air coupled with an ac-

knowledgment of the right of the subjacent State to control it to an indefinite height for purposes of its own protection.

4. The theory of absolute sovereignty on a parity with that recognized as to the land domain.

5. The theory of absolute sovereignty qualified by the right of innocent passage.

All of these propositions have a respectable following or, at least, have been advocated at various times by writers of distinction. The arguments of all those proposing absolute freedom of the air appear to rest primarily upon the inappropriable character of this element and its alleged insusceptibility of control. Clearly they have confused the element with the space; and the contention that this space cannot be controlled, as by artillery and an air fleet, is no longer sound. Since the meeting of 1906 the Institute of International Law has modified its views as to the right of subjacent States to protect themselves as neutrals by proposing to forbid belligerent aircraft to penetrate into their aerial space, but it still clings to the doctrine of freedom.

Theories gave way to practical answers to some of these questions during the Great War. The old inhibition against dropping projectiles from balloons, adopted at The Hague in 1899, lapsed in 1904 and no like restrictions were acceptable in 1906 at the second conference in view of the progress that had been made in aerial navigation and the prospective usefulness of this new weapon. The only existing international legislation was contained in the code of land warfare forbidding the bombardment of "undefended towns, villages, etc., by any means whatever."[9] But as there was no definition of an "undefended town"—as the presence of a single soldier might be sufficient to constitute it a defended town—bombardment by aircraft was practically no more restricted by law than bombardment by land batteries.

The first instance of assertion of sovereignty over aerial domain was made by Switzerland in protests[10] to Germany

9. The Hague, Convt. IV, 1909.
10. Garner Int. Law and the World War, ch. XIX.

against the violation of her neutrality by German aviators who flew over her territory in the course of a raid on Belfort in October, 1914. In the following month British and French aviators flew over Swiss territory to attack the Zeppelin establishment at Friedrichshafen. In the same months German Zeppelins flew over Dutch territory, provoking like protests from Holland. Switzerland and Holland claimed exclusive and absolute national sovereignty in the aerial space and both asserted the entry of belligerent aircraft to constitute a violation of territory. In November, 1914, Mr. Churchill, first Lord of the Admiralty, admitted in the House of Commons that British and French aviators had violated Swiss territory, though without intention to do so; and British airmen thereafter were formally instructed not to enter neutral aerial space. Similarly Germany acquiesced in the assertion of Holland of national sovereignty in her aerial space. Violations of neutral aerial space became so frequent as the war progressed, however, that both Switzerland and Holland adopted the policy of expelling violators by force in 1915, through the use of aircraft guns; and Dutch coast guards actually brought down the Zeppelin L-19, on its return from a raid upon England. The giant ship fell into the sea and in consequence of the refusal of the British trawler, King Stephen, to rescue the crew, they were drowned.

Germany protested vigorously to Holland in this case, on the ground that the Zeppelin L-19 was disabled and was in the position of a vessel driven by stress of weather or unseaworthiness to seek shelter in a neutral port. But she did not challenge the right asserted by Holland to repel by force violations of her aerial space.

These practices appear to have put an end to theory and to have established the principle of aerial domain and national sovereignty therein, certainly as between a neutral and a belligerent.

The next practical question that arose was that of the rights and duties of neutrals toward belligerent aircraft, concerning which there existed neither custom nor law. There

were two principles, either one of which might have been applied; namely, that applicable to belligerent troops coming upon the land domain and that applicable to belligerent naval forces coming within neutral territorial waters. In the former case it is the right and duty of the neutral to disarm and intern the land force; in the latter, it is the right and duty of the neutral to permit a limited stay and a replenishment of fuel and supplies. Both Switzerland and Holland adopted the former principle in dealing with belligerent aircraft coming within their power, dismantling the machines and interning the crews. Obviously, to have applied the latter rule would have been highly dangerous, involving the possibility of the use of neutral territory as a base of operations.

Again, this practice, in which all belligerents appear to have acquiesced, seems to have established the right and duty of neutrals to deal with belligerent aircraft and aviators by analogy to the rules applicable to land warfare, including the right and duty to repel intentional violations by force. It is probable that the next few years will bring forth some conventional regulations, comparable to the Declaration of London, setting out definitely the rights and duties of belligerents and neutrals with respect to aircraft in war which will modify and extend the rights and duties to be inferred from the practices in the Great War.

The Congress of Versailles of 1919 attempted, in addition to the peace settlement, to create a code of law for the air, applicable to times of peace, and it appointed a Commission on Air Navigation to draft such a convention. A convention[11] was evolved after much difficulty in attempting to harmonize irreconcilable views, but the United States and Japan declined to sign it. It is, therefore, without authority as law, though it is interesting as a revelation of the views of the other allied powers and exhibits the trend of development.

At the outset the convention recognizes that every State has complete and exclusive sovereignty above its land and water domain, but it pledges all signatory States to accord free-

11. Convention on International Air Navigation, Paris, 1919.

dom of innocent passage to foreign aircraft provided the conditions of the convention are observed. The unanimity of States with respect to the principle of national sovereignty in air space may be said to confirm this as a fundamental law of the future, whatever concessions may be yielded by treaty. It is not so evident, however, that a majority of the States are willing to concede the principle of innocent passage as it exists with respect to ships in territorial waters; and the solution of this conflict is probably to be found in an international convention for some form of regulated passage. The problem of customs control over aircraft would seem to require a denial of any right of innocent passage.

One of the least acceptable provisions of the draft code is to be found in Article 23, which sets out:

"The legal relations between persons on board an aircraft in flight are governed by the law of the nationality of the aircraft."

This clause appears plainly to contradict the basic principle of exclusive national sovereignty in aerial space and harks back to the earlier theories founded on the supposed analogy between the air and the sea. In practice it would place aircraft in the situation of a merchantman on the high seas, which, by the law of nations, is under the jurisdiction of the flag of its registry. It ignores the principle of national sovereignty as it applies to foreign merchantmen coming into the territorial waters of States other than that of its registry. As we know, such foreign merchantmen are as fully subjected to the jurisdiction of the State whose waters are entered as any other private property. In so far as aircraft may be public, it would, of course, be logical and accord with settled principles, to recognize their immunity from the jurisdiction of any other States whose aerial space they entered, thus adapting the maritime rule with respect to public vessels.

A subsequent paragraph of Article 23 declares that the jurisdiction as to crimes and misdemeanors committed on board an aircraft in flight shall be that of the State of the air-

craft's registry, unless the aircraft lands, in which case the State in whose aerial domain the offenses were committed shall then have jurisdiction. Here again the absolute character of national sovereignty in the air is apparently denied in criminal matters contrary to the established Anglo-American view of criminal jurisdiction as being essentially territorial. This paragraph has its explanation in the influence of Continental European conceptions of law as personal, as well as territorial, in its operation. Thus a number of European States have made full provision in their systems of criminal law for the punishment of offenses wherever committed by their nationals.[12] And such States usually insist in their extradition treaties upon non-surrender of their own nationals, preferring to try them at home for offenses committed abroad. Unless the United States embraced this Roman idea of law it could not subscribe to Article 23.

As to the practical problems of air navigation, including such matters as certificates, licenses, marks, light, signals, rules of airway and the like, the draft code gives evidence of conscientious work by men of experience. The code can never become effective, however, until the conflict between the Continental European and Anglo-American systems has been reconciled, nor is it probable that the United States will accept any convention that does not recognize the necessary implications flowing from the principle of exclusive and absolute national sovereignty in its aerial domain.

The growth of aerial navigation in the United States is daily emphasizing the need of adequate legislation by Congress. That the national government is competent to absorb almost the whole field of regulation is clearly implied in numerous decisions[13] construing the interstate commerce clause, though it is not at all improbable that the question of interstate and intrastate navigation by the air will precipitate the same controversies that arose out of the regulation of railroads.

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12. Moore's Digest, Vol. IV, sec. 594.
13. U. S. v. Rio Grande D. & I. Co., 174 U. S. 690; L. & N. R. R. v. Eubank, 184 U. S. 27.

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