CHAPTER III
LEGAL STATUS OF THE AIR SPACE

The legal status of the 'air space' is determined by the generally accepted customary rule of international law that the states possess 'complete' and 'absolute' sovereignty over the 'air space' above their land territory and territorial waters. This customary rule of international law is primarily derived from the national laws, bilateral and multilateral conventions. The most important of all is the Chicago Convention of 1944, which has been described as "the constitution of the post-war global air-world". However, the legitimate extension of a state's territorial rights to encompass the aerial expanse above its terrain was upheld long before the skies had been transformed into a network of overhead highways.

Before the advent of the aviation as early as Roman times, the law recognised exclusive rights of a state, both public and private, in space in connection with the use and enjoyment of the land below. Rome showed no hesitation in controlling the use of space, whenever considered necessary, for the protection of public or rights on earth. The most essential concept to be gleaned from the Roman Code is expressed in the tenet: *Qui dominus est soli dominus est coeli et inferorum*, which dictates the doctrine of absolute jurisdiction over the soil and everything beneath and above
The source of the principle of national control over the air space is derived from the above cited Roman concept, the classic maxim of the Anglo-Saxons known as ad coelum doctrine: 'Cujus est solum, ejus est usque ad coelum.' This maxim was first applied in 1586 in describing the rights of the landowner. It is said to have been first applied to the flight of objects through air in 1815, in a case where the defendant had nailed upon his house a board which projected several inches from the wall and overhung the plaintiff's garden. Such early references deal with the rights of pri-

1. This phrase was applied in enforcement of the right to have a burial place or tomb free from any building or structure that might overhang it. The air space over public highways and over temples was kept open by law. The height at which buildings could be erected was limited. For a comprehensive discussion of this concept, see, J.C. Cooper, "Roman Law and the Maxim Cujus Est Solum in International Law," McGill Law Journal, Vol. 1, 1952, 23-65, also see J.C. Cooper,"High Altitude Flight and National Sovereignty," International Law Quarterly, Vol. 4, 1951, 411.


4. Pickering v. Rudd, 4 Camp, 219 (Eng. 1815). Lord Ellenborough in this case states "I do not think it is a Contd...*
Maris communem usum omnibus hominibus ut aeris.¹

This doctrine, for practical reasons, best suited the developing interests of then major aviation powers. But it was equally apparent to all that a state would naturally be even more concerned about what might take place in the air above it than the seas off its coasts. Fauchille, therefore, proposed to reconcile these conflicting interests by conceding to the subjacent state extensive rights in the air space immediately above it. These rights would not be rights of territorial sovereignty but rights deriving ultimately from the principle of self-preservation.² This theory was

¹...similar pursuits are subject to the law laid down by him who has control over the land," Hugo, Grotius, De Jure Belli ac Pacis (1625) B.K. II Chapter 2, section 3(1). Quoted in Johnson, Ibid.

1. Ibid.

2. Therefore, Articles 8 and 11 of the Code forbid navigation by foreign aircraft at heights less than 1,500 metres above national territory or at a distance of less than 1,500 metres from the coast. Fauchille further prescribed in Article 15 that in general, crimes committed on board foreign aircraft should be within the jurisdiction of the state of the aircrafts nationality, but conceded to the subjacent states a right to punish such crimes as espionage and breaches of its customs and sanitary regulations when committed in air space above its territory, such punishment would, however, be based on the protection rather than territorial principle of jurisdiction because, according to Fauchille, the subjacent air space was "free" and did not form part of the territory of the state. A provision for such protective measures as considered necessary for defence was alluded to in Article 7, where even the basic concept of the freedom of air appears to have been qualified and abridged. Ibid., p. 13.
supported, among others by Meile, Despagnet, Merighnac, Ferber and Meyer.\(^1\) Even in recent times this theory has had its adherents.\(^2\)

The crux of Fauchille's argument for the free air was that the air could not be physically occupied or appropriated, whereas sovereignty according to him implied occupation. But this presumption of occupation is fallacious. Sovereignty does not really involve continual physical presence any more than possession does in private law. A state can exercise sovereignty over a huge desert or a summit of a mountain, if it has \textit{de facto} control and is in a position to quell internal disorder or repel external attack. Similarly, so long as violations of air space and breaches of air sovereignty can be successfully foiled and supremacy in the national air maintained, a state can be said to control, occupy and appropriate the air space above it. In fact, violations and breaches only prove that sovereignty of an

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Moreover, the theoretical weakness of the analogy of the high seas of this theory is evident from the fact that if air were free, in case of war, military operation could also be carried out above the territory of a neutral state. No state could suffer this, hence state practice never lends credence to this theory.¹

According to the theory of complete air space sovereignty every state enjoys complete, absolute and unlimited sovereignty in all columns of superincumbent air space over its territory and territorial waters, extending up to an unlimited height usque ad infinitum -- with a concomitant right to forbid entry of a foreign aircraft. The theory appears to have derived its speculative strength from the classic maxim of the Anglo-Saxons known as ad coelum doctrine, which is derived from the Roman concept, Cujus est solum, ejus est usque ad coelum et ad inferos. This means that he who owns the soil, owns everything above and below. The maxim accepts the tridimensionality of territorial sovereignty by the states. This theory has been fostered by the English lawyers, notably Cock and Blackstone. Both the jurists have exalted the extent and importance of property rights in the land, in the air over and above this and also the ground

2. The state practice has been discussed on the following pages. See pp. 78-98.
under and below it. Johnson also traces the germs of such a concept to the Grotian assertion that "so long as the air is used for purposes not needing the use of land, it may be free. But once the landowner is in some way concerned or affected, i.e. his enjoyment is interfered with or right prejudiced then the use of the air becomes subject of law laid down by him who has control over land.

When exactly this maxim gained entry into English legal thought and jurisprudential literature is not known, but since its first mention in the case Bury v. Pope it has been quoted very frequently. Scholars like Westlake, Hezeltine, Balwin collard and Franz also supported this.

1. Coke stated that "the earth hath in law a great extent upwards, not only of water, as hath been said, but of "ayre" and all other things even upto heaven". Similarly, Blackstone has also commented that "land" not only implies the face of the earth, but also everything under or over or above it. See Johnson, op. cit., pp. 14-15, also see McNair, op. cit., p. 395.


3. Westlake asserted: in the air the higher one ascends, the more damage the fall of objects will cause on earth. If there exists a limit, as to the sovereignty of the state over the oceanic space none exists for the sovereignty of the state over the air space. The right of the subjacent state remains the same whatever may be the distance. So it is obvious that Westlake assumed that the state had territorial rights in space as high as flight could exist, but at the same time he assumed that such flight must take place in what he termed 'air space'. See Cooper, op. cit., p. 412, also see Morenoff, op. cit., p. 100.
This theory has considered the question of the legal status of the air space from the point of view of the individual, whereas, in order to determine the legal status of the air space it has to be viewed from the point of view of the state’s control over its territorial air space. Moreover, even in the individual cases concerning private property rights, the position stated in the maxim that he who owns the land owns everything above and below has in many cases not been taken as an authentic statement of law. In England Lord Ellenborough was the first to question the unqualified application of the ad coelum doctrine. This

1. While delivering a lecture at the University of Cambridge in 1910 Hazeltine said, "I believe that the proper settlement of the question as to what rights states have in column of air above their territory is of fundamental importance". He rejected the theory of freedom of the air and strongly advocated the sovereignty of the subjacent state over its air space. He did not consider it necessary to concede the right of innocent passage. See H.D. Hezeltine, The Law of the Air (London: University of London Press, 1911), p. 8. The same opinion is expressed by Sir Erle Richard at the University of Oxford in 1912. In his views the sovereignty of the states over the superjacent air space was even more essential for the preservation and protection of their territories than was over territorial waters. In his own words, "In my judgement, the matter is covered, or as I would rather say, is concluded, by a principle of International law which is fundamental in the determination of the extent of the state sovereignty and must apply as much to the air space above state territory as to the territory itself...". See Johnson, op. cit., p. 23. See for more extensive list Sand, et al., op. cit. p. 28.

2. Pickering v. Rudd (1815), a case involving a wooden board overhanging the plaintiff's land. In this case

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doctrine of unlimited ownership of the air space was repudiated in many cases in the United States on the ground that recognition of private claim to air space without limitation would transfer into private ownership that, to which only public has just claim.¹

On the national plane, this maxim has been discounted on the basis of astronomical facts. It is said that claim to sovereignty over infinite columns of space is not tenable on astro-cosmic realities because the columns of space are variable and not static or permanent.²

Even scholars like Westlake who, otherwise support this theory, recognise the limitation of state sovereignty cover-

*...the court did not consider that it is a trespass to interfere with the column of air superincumbent on the close. See Supra, note 4, pp. 45-46. See for more interesting details of such cases McNair, op. cit., chapter 2.

1. See the United States v. Causby case (1946). For details see Supra, note 1, p. 47; also see for the similar cases like, Johnson v. Curtis North West Air Plane Co; North West Air Line v. Minneco, R.W. Fixel, The Law of Aviation (Virginia: The Michie Coy, 1967), p. 84. Also see Morenoff, op. cit., pp. 96-97; Moon Jr., op. cit., p. 30. However, an owner of the land may be said to own and control air space over his land to the height usable by him either in the way of buildings or their accessories. But apart from such use, the air is free from all claims on the part of the properties of lands over which aerial flights or public use take place. Ibid.

2. C.W. Jenks, "International Law and Activities in Space", "International and Comparative Law Quarterly, Vol. 5, 1956, 103-104. It is stated that due to rotation of the earth, its revolution round the sun and movement of other celestial bodies, changes take place in the relative position of space beyond atmosphere. Hence, as a geophysical reality the upper stratum of space over the territory of a state does not remain static and constant.
The theory does not assure any meaningful sovereignty also because tools to exercise sovereignty to unlimited heights do not exist and violations cannot be effectively intercepted to establish visible supremacy. Therefore, since sovereign air space at unlimited heights cannot be patrolled or controlled, the claim of sovereignty therein is a vacuous assertion rather than a tangible reality.

Further, the states performing space activities have been launching satellites, placing spacecrafts and space labs in the orbit round around the earth for more than three decades. These space objects have moved over the territories of almost every state, but no state has raised any objection to or protest against these activities, as violation of its air space. The launching states, too, have never sought any permission, before launching such space objects, from those states over whose territory these space objects were scheduled to pass. The states have acquiesced in this practice giving rise to the legitimate presumption that it has gained

1. See Gal, op. cit., pp. 51-52. The Hungarian author Lazzlo Buza has also shared these views. Ibid.

2. However, now in "the Bagota Declaration" (1976) some equatorial states have made sovereignty claims over the parts of the geostationary orbit 35,871 kms., above the earth to be a part of the sovereign territory of states whose territory is below on the earth. A detailed discussion on this issue has been made in Chapter VI of this study. See pp. 241-274.
the semblance of international law. The practice has also been formalised through the United Nations declarations.\footnote{1
However, the underlying principle of the maxim and common law is unassailable. It is the paramount right of the landowner to enjoy unrestrained liberty to use the air space above his landupto a limit to which he can put it to effective utilisation. It is equally essential for the safety and survival of the sovereign states that they possess jurisdiction to control the air space above their territories. Every sovereign government must possess the legal authority to prevent anyone or any object, whom it determines to be undesirable and prejudicial to its interests, from entering its confines of air space. Thus, the right to control its air space takes roots from the theory of territorial sovereignty and the principle of self-protection.

The \textit{territorial} or the \textit{zone theory} expounds that every state has absolute sovereignty in the air upto, but not beyond, a certain height and above that level the air is free for all alike. The theory appears to draw its strength from the international maritime law which offers similarities in geometric order and technique for regulation of locomotion.

\footnote{1. "Outer space and celestial bodies are free for exploration and use by all States... and are not subject to national appropriation," Part A (B), see United Nations General Assembly Resolution 1721/XVI, 20 December, 1961. For a detailed discussion see \textit{Chapter V.} pp. 231-237.}
Its proponents preferred to divide the air space into various strata of different legal status. Sovereignty would extend to a territorial air space (analogy of territorial sea) to be defined by various methods, and above this layer the air space would be free (analogy of high sea).\textsuperscript{1} It was believed that such a theory could provide adequate safeguards and regulatory rights to subjacent states to protect their interest of security and self preservation, while, at the same time, permitting freedom of aerial navigation for international traffic beyond a presumably certain and safe height.

This theory postulates ambiguous denominators and has ushered in a host of uncertainties and subjective parameters which could readily and frequently be exposed to disputes and cause clash of views. The major uncertainty is about the exact height upto which such sovereignty extends. This parameter is also susceptible to variable scientific and technological criteria as well as arbitrary individual

\textsuperscript{1} For example, the upper limit of state air space was suggested by Bluntschli and Rivier at the range of a gun, but Rolland to the height of the buildings whereas Csarada proposed that the limits should be fixed in an international convention. In the theory of Merignac the air space is divided into three zones. The 'zone national' upto an altitude of 200 m, is under the exclusive sovereignty of the state, and flights in this layer can be prohibited without limitation. The 'zone international', between 200 and 400 m, bears an international character in as much as only the offensive noxious flights can be prevented. The air above this layer is free and is not covered by any state sovereignty. See Gal, op. cit., pp. 52-53.
claims which could be conflicting as well as controversial.

Further, the demarcation of the air boundary is beset with serious difficulties. Even if fixed, Jessup and Taubenfeld have pointed out, boundaries in air cannot be easily traced as on the earth by landmarks or on sea by buoys.\(^1\) Therefore, boundaries, if accepted and delimited will be illusory, on the contrary such air boundary is likely to raise legal, political, military, scientific and technical problems.

Moreover, there is no established state practice to lend credence to or suggest acceptance to this theory. As regards aircraft flights, there is no zone of free air. Aerial navigation is strictly regulated and the right to do so has been zealously guarded by the states. Some equatorial states, as stated earlier, have even raised objections to satellites being placed in the orbit in space by space powers. Thus, this theory inevitably shares the fate of Fauchille’s theory of the free air.

**The innocent passage theory** postulates that each state has complete sovereignty in the air space above its land similar to that conceded to the territorial waters subject only to the right of innocent passage of civil aircraft of all nations without discrimination and that too during peace.

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1. Quoted in Sachdeva, op. cit., p. 403.
The theory is an attempt to harmonise the "inclusive" and "exclusive" interests of the subjacent state and, at the same time, provide the greatest possible freedom of communication and transport. It was believed that since the concept of innocent passage had stood the test of time in maritime law, it could, per analogium, find acceptance as a principle of air law. Its supporters include Rolland and Blewett Lee, McByrne etc.  

The state practice refutes the proposition of this theory. The states consider their security and defence interests as paramount and have displayed a consistent concern to zealously safeguard and assert supremacy over their air space, and have never conceded the privilege of using their air space, without prior permission, even to the non-military aircrafts of the other states. 

Moreover, the analogy of maritime innocent passage is not complete and fully relevant to air because surface vessels in territorial sea are subject to geographical limitations of movement and slow speed, but aircrafts confront no such barriers and cruise at supersonic speed. Furthermore, ships ply littorally away from land whereas aerial

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1. This theory specifically denied the privilege of innocent passage to military aircraft and reserved certain rights in time of war for reason of public safety and self preservation. 

2. For the views of these scholars see N.M. Matte. *Aerospace Law* (London: Sweet and Maxwell Ltd., 1969), p. 36.
aerial flights occur in the air space directly above the subjacent land. Hence, this theory compromises and jeopardizes security. It also exposes the subjacent state to indiscriminate environmental pollution by higher noise levels, risk of nuclear contamination and greater hazards due to accident damage.

From the above discussion on various air law theories, it may be deduced that primarily two contradictory viewpoints emerge: one believes in the "freedom of the air space", while the other claims that states possess "complete control over the air space" above their territories. Much of the discussion among the proponents of the above said viewpoints took place in the two major international organisations, Institute de-Droit-International and the International Law Association.

The Institute de-Droit-International discussed Fauchille's free air theory at its Ghent Conference in 1906. Fauchille's doctrine of the "freedom of the air" was challenged by the Englishman John Westlake, who advocated the right of each state to control its air space and exercise full sovereignty.¹

In an attempt to compromise these polar views, Fauchille proposed that freedom of the air be allowed, subject to the right of self-defence. The Institute in September 1906, voted to accept the ten-article plan as amended by Fauch-

¹. See Supra, note 3, p. 53.
ille. Articles 1 and 3 are related to sovereignty. Fau-
chille's theory was once again presented at the meeting of
the Institute at Paris in 1910. This time, however, it was
presented in the form of a convention and was limited to
peacetime aviation. This time his concepts of air space were
changed with respect to the protection of the state. The
Institute met again in 1911 in Madrid, and a committee
chaired by Fauchille reported on the topic of the free circ-

1. Article 1: The air is free. Governments have no control
over it either in peace or in war, beyond that which is
essential to their own preservation. Article 3: Each
Government has the right, so far as is necessary in main-
taining its security, to forbid the passage of Hertzian
waves above its territory or its territorial waters, to
any height that it may deem advisable, whether these
waves be sent forth by a Government transmitter or by a
private one, located on land, on board a ship, or in a
balloon. See H.B. Jacobini, "International Aviation Law:
A Theoretical and Historical Survey", Journal of Public

2. The relevant articles are 7, 8 and 10. Article 7 provi-
des that aerial circulation is free, nevertheless, the
subjacent States retain the rights necessary to their
continued existence, that is, to their security and to
that of the persons and property of their inhabitants.
According to Article 8, in order to protect their right
of continued existence, States may prohibit circulation
in certain areas of the atmosphere. They have the right
to prevent navigation above or in the vicinity of forti-
"fied works. And, Article 10 prohibits military and
police aircrafts from crossing the frontier of their
country without permission of the State above which they
wish to fly or in which they proposed to land. Article
11: prohibits private aircraft operating in interna-
tional commerce from carrying on board either explosi-
ves, arms or a munition of war. The same prohibition also
applied in principle to photographic and radio appara-
tus. See Jacobini op. cit., p.318, also see Morenoff,

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ulation. One report dealt with wartime regulations for aircraft\(^1\) and the second report dealing with peacetime aviation.\(^2\) Furthermore, the Institution adopted that the aerial circulation is free, saving the right of subjacent States to take certain measures to be determined, to ensure their own security and that of the persons and property of their inhabitants.

The International Law Association discussed the subject of air Law for the first time at its 27th Conference held in Paris in 1912.\(^3\) The conflicting theories were reported to a committee which reported back at the Madrid session in 1913. The committee's report classified the opinions into two major categories, each of which was composed of three subdivisions which are as follows:

I. Those who maintain the freedom of the air space.
   
   (a) Air freedom without restriction.
   
   (b) Air freedom restricted by some special rights (not limited as regards height) of the subjacent state.

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1. It proposed to give belligerents the right to make war anywhere in air except over neutral territory.

2. It classified aircraft as public or private and required every aircraft to have only one nationality which would be that of the country in which the aircraft is registered.

3. In all four papers were presented, three were presented by the Frenchmen (including Fauchille), which favoured the freedom of the air theory, while the other paper was presented by the Englishman, Hazeltine who advocated the state sovereignty.
(c) Air freedom restricted by a territorial zone.

II. Those who maintain the theory of the sovereignty of the subjacent state in the air space above its territory

(a) Full sovereignty without restriction.
(b) Full sovereignty restricted by the right of innocent passage for aerial navigation.
(c) Full sovereignty up to a limited height only.¹

The second part of the report declared that firstly it is the right of every state to enact such prohibitions, restrictions and regulations as it may think proper in regard to the passage of aircraft through the air space above its territories and territorial waters; and secondly subject to this right of subjacent States, liberty of passage of aircraft ought to be accorded freely to the aircraft of every nation.² The Association ultimately voted to accept the national sovereignty theory. Consequently, just prior to the World War I, Institute-de-Droit International had accepted the free air theory, whereas International Law Association favoured the national sovereignty over its air space. Following the war, the Paris Convention of 1919 on air navigation was brought into being, which established the 'complete' and 'exclusive' sovereignty of the states over

¹ Jacobini, op. cit., p. 321, also see Morenoff, op. cit., p. 102.
² The third part of the report was devoted to the reservations by Fauchille.
the air space above their territories and thus, the era of the theorists came to an end.

However, the impact of the theories discussed above is clearly reflected in the early attempts through agreements by the states to develop the rules of the International Air Law determining the legal status of the air space. The reason for this is obvious. The International Air Law is still in its infancy and the importance of customs and usages is practically nought. Hence, the predominant source of International Air Law, establishing the legal status of air space is the **international agreements**, **multilateral** and **bilateral**, the **world organization** and **regional pacts**.

During the last quarter of the nineteenth century, several efforts were made to establish the international regime of the air space.\(^1\) For example, at the Hague Peace Conference of 1899 a provision relating to the launching of projectiles and explosives from the ballons was drafted and approved.\(^2\) The Second Peace Conference of Hague in 1907

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1. The first international ariel council to be convened was the Paris Congress of 1889, which discussed the juridical questions affected by the presence of balloon flights, but no convention was signed. It was not, in fact, a conference of states since the plenipotentiary powers had not been authorised by respective Governments to the various delegates from Brazil, France, Great Britain, Mexico, Rumania, and the United States. See Morenoff, op. cit., p. 98.

renewed this declaration. But, with the beginning of World War I, the rule set forth in the said declaration ceased to be binding in relations among the belligerent powers. On the other hand, the London Declaration of 1909 refers to air law in its Article 24, distinguishing engines for peaceful uses and those capable of serving war purposes.

The World's first International Conference on Air Navigation was convened in Paris in 1910 with the representatives from eighteen European States in attendance. At the conference, two proposals were presented: one by Germany and the other by the French delegation calling for 'open air' doctrine or 'the freedom of the air'.

Though accord was reached on matters such as nationality and registration of the aircraft, the representatives disagreed as to which of the theories of the air space be adopted. Consequently, no agreement was


2. The Declaration of 1899 was only binding on the Contracting Powers and in case of war between two or more of them, it shall cease to be binding from the time when, in a war between the contracting War Powers, one of the belligerents is joined by a non contracting power (The binding force of this provision had expired in 1905), see Verplaetse, op. cit., p. 22.

3. The British delegates, due to security reasons, refused

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signed. At the Conference of the Pan-American Federation held at Santiago, Chile, on March 17, 1916, the American States declared that it was lawful to drop projectiles from the air.

The real breaking point towards the establishment of the international legal regime of the air space came with the conclusion of the Paris Convention of 1919 in which complete control of the states over their air space was accepted. With the close of World War I, the peace Conference assembled in Paris, on March 22, 1919, the Supreme Council of the Peace Conference adopted a resolution creating an Inter-Allied Aeronautical Commission for drafting of an international air convention for the regulation of air navigation in times of peace. The Commission adopted

*to endorse either the German or the French proposals. Admiral Sir Douglas A. Gamble, on behalf of his government, stated: "Having regard for municipal legislation and decisions of the British Courts, abstract authorisation in general terms permitting aircraft to navigate above a foreign territory or to land will not be recognised and could have no sanction in English law." See Morenoff, op. cit., p. 105. Also see A. S. Hershey, "The International Law of Aerial Space", The American Journal of International Law, Vol. 6, 1912, 381.

1. However, a general agreement was obtained on matters of lesser importance. See Jacobini, op. cit., p. 322, also see R. W. Young, :The Aerial Inspection Plan and Air Space Sovereignty:, George Washington Law Review, Vol. 24, 1956, 565.


3. The Commission was composed of two delegates of each of
the principle of sovereignty over the air space and thus, repudiated the theory of international freedom of flight. The Convention, drafted by the commission and accepted by the Supreme Council of the Peace Conference, became the Paris Convention of 1919.¹

According to Article 1 of the Convention "The High Contracting Parties recognise that every Power has complete and exclusive sovereignty over the air space above its territory". The Convention defined "territory" as national land area, colonies, and adjacent territorial waters. Article 2 grants freedom of innocent passage above its territory to the other contracting States without discrimination (in times of peace), provided that the conditions laid down in the Convention are observed.² Article 15 limits freedom in the sense that, in case of crossing without landing, the

¹...the main Allied and Associated Powers (U.S.A., Japan, Great Britain, France, Italy) and one representative each from Belgium, Brazil, Cuba, Greece, Portugal, Romania and Serb-Croat-Slovene State (now Yugoslavia) See Morenoff, op. cit., p. 108.

² This Convention was ratified by thirty-three nations (excluding the United States) and became effective on July 11, 1922. The United States also signed this Convention in 1920 with some reservations. Technically the Convention was divided into two parts; the main and fundamental text of 43 Articles, the second part called as Annexes from A to H. For a complete list of countries ratifying the Convention, see Jacobini, op. cit., p. 324, also see J.C. Cooper, The Right to Fly (New York: Henry Holt & Co., 1947), pp. 291-305.

aircraft must follow the route fixed by the state overflown. It lays down the principle of equality of all aircraft of all the member States. It sets up an international permanent organisation, the "International Commission for Air Navigation" (I.C.A.N.) for the administration of Public International Air Law. It determines the principles of nationality and registry of the aircraft, the condition of airworthiness, the jurisdiction of the personnel etc.

The Paris Convention became the first international agreement laying down a rule of international law in regard to national sovereignty over the air space, which was universally accepted though it was not ratified by the United States.1

This Convention is considered as complete acceptance for national control of air space and remained an important instrument of regulation of air law until the eve of the Second World War.2 However, during this period few more

1. However the United States Congress, by passing the United States Air Commerce Act, 1926 (Later amended on June 23, 1938) declared its adherence to the rule of national air sovereignty embodied in the Paris Convention, see Sharma, op. cit., pp. 36-37. The U.S.S.R., Germany, China were also not the original members.

2. However, some scholars view the Convention as a compromise between the "absolute sovereignty" view and the "free air" view in as much as it declared national sovereignty of the air space with the right of innocent passage provided in peace times. See L. T. Lee, "The International Flying Convention and the Freedom of Air," Harvard Law Review, Vol. 33, 1919, 27.
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conventions were signed, but the terms of the Paris Convention were closely followed in these conventions. 1

The outbreak of World War II in 1939 brought revolutionary technical changes in the development of the aircraft, and the vital role played by it gave renewed significance to the legal rights of the states to the air space above their territories. The immediate need to make the rules of the international air law uniform and universal was felt. The war was still on when, at the invitation of the United States, the representatives of fifty-four nations except the

1. Notable among these are: The Convention of Madrid on Aerial Navigation, Nov. 1, 1926 (The Madrid Convention) It was signed between Spain and twenty Latin American Republics, but was ratified by only seven of the participating states. It was never an effective instrument and even Spain and Argentina, which had ratified, later adhered to the Paris Convention. The Convention followed substantially the provisions of the Paris Convention, but it was not that comprehensive. The United States again was not a party; The Pan American Convention on Commercial Aviation, Feb. 20, 1928 (The Havana Convention). It was signed by the United States and other American States plus Spain. This Convention served the purpose of uniting the nations of the Western Hemisphere which abstained from ratifying the Paris Convention. This Convention contains mainly provisions of public law. Article I, of the Convention uses identical language of the Paris Convention in which contracting Parties recognise complete and exclusive sovereignty over the air space above their territory. This convention remained the supreme law of the Western Hemisphere on the subject until the Second World War; Apart from these Conventions, another Convention on Aerial Navigation was signed at Bucharest on January 24, 1936 which is known as "The Balkan Convention". It had some interesting features but it did not apply to scheduled flights. For details of these Conventions see Verplaetse, op. cit., pp. 24-27; Morenoff, op. cit., pp. 113-118.
U.S.S.R. met in a Civil Aviation Conference at Chicago on November 1, 1944. Inspite of the sharp conflicts of interests among the representative powers, the most significant result of the Conference was the drafting and adoption of the Convention on International Civil Aviation on December 7, 1944, referred to as the Chicago Convention of 1944.

Article 1 of this Convention declares that, "the contracting States recognise that every State has complete and exclusive sovereignty over the air space above its territory." Article 2 defines the bounds of territory it declares "For the purposes of this Convention, the territory of a State shall be deemed to by the land areas and territorial

1. The U.S.S.R. first accepted the invitation but later rescinded its acceptance.

2. The Great Britain favoured the regulation of freedom while the United States stood for absolute freedom. For further details, see Morenoff, op. cit., p. 116; Verplaetse, op. cit., pp. 26-27.

3. It was signed by thirty-five States participating in the Conference on December 7, 1944. It entered into force on April 4, 1947 after ratification by twenty-six States. It was divided in four parts and 96 Articles. Part I deals with air navigation, Part III deals with administrative functions with respect to international air transport and part IV provides for the denunciation of the Paris and the Havana Conventions. For the text and the Commentaries, see McNair Op. cit. pp. 401-428; upto 1989 there were 156 parties to the Chicago Convention, also see for a critical evaluation of this Convention Michael, Milde, "The Chicago Convention—After Forty Years" Annals of Air and Space Law, Vol. 9, 1984, 119-31

waters adjacent thereto under the sovereignty, suzerainty, protection or mandate of such States.\textsuperscript{1} Further this Convention was made applicable to Civil Aircraft only and the Contracting states agreed "not to use Civil Aviation for any purposes inconsistent with the aims of this Convention."\textsuperscript{2} Part II created the International Civil Aviation Organisation (I.C.A.O.) which was to replace the I.C.A.N. created by the Paris Convention of 1919.

In addition to the Convention on International Civil Aviation, the Conference also adopted three separate Agreements as well as a number of recommendations and resolutions.\textsuperscript{3}

\textbf{An Interim Agreement on International Civil Aviation} was signed to fill the gap between the signatures of the Chicago Convention and its ratification.

\textbf{International Air Transport Agreement} which is also known as "Transport" or "Five Freedom" Agreement was the second agreement. It gave each contracting State the so

\begin{enumerate}
\item Article 2.
\item Articles 3 and 4. However, in Article 8, it is declared that "no aircraft capable of being flown without a pilot shall be flown without a pilot over the territory of a Contracting State without special authorization by that State and in accordance with the terms of such authorization."
\item As the permanent Convention did not provide for a multilateral grant of commercial transit or traffic rights for scheduled airlines because the Chicago Convention proved unable to reach an agreement as the terms of such a grant.
\end{enumerate}
called "five freedoms" affecting scheduled international services.¹

This agreement was signed by 16 states which were all, except four, Latin American States, which already had, with the U.S., bilateral agreements on similar lines. Great Britain and several other countries refused to accept it in toto.

The third Agreement concluded was the International Air Services Transit Agreement. It is also called "Transit" or "Two Freedoms" Agreement. It grants mutually, in respect to scheduled international services, the so called "two first freedoms", the right to fly across the territory of a Contracting State without landing and the privilege to land for non-traffic purposes. It was signed by 26 States.

The Convention also dealt with the regulation of the 'Aircraft' which were invested with the attribute of nationality. Significantly, the Convention omitted to define the 'air space'.

The Chicago Convention did not make any material departure from the Paris Convention and only re-affirmed the principle of "complete" sovereignty of the states over their

1. These "Five Freedoms of the Air" proposed by the United States were: (1) Fly across foreign territory without landing (2) Land for non-traffic purposes (3) Disembark in a foreign country traffic originating in the State of origin of the aircraft (4) Pick up in a foreign country traffic detained for the State of origin of the aircraft (5) Carry traffic between two foreign countries. See Jacobini, op. cit., p. 325; also see Morenoff, op. cit., pp. 118-119; Sharma, op. cit., p. 38.
Generally speaking, the Chicago Convention recognized the sovereignty of the States over their air space and established a right of entry and passage under certain conditions. The Convention which has been described as 'the constitution for the post war global air world' is a comprehensive basic document embodying the current rule of international law regarding national sovereignty over air space.

Even after forty-four years, the Convention continues to provide a firm legal basis for co-operation of states in the field of international civil aviation and represents an acceptable balance of interests among the states.

In the development of the legal regime of the air space the principle of national control over the air space has been not only affirmed in the above discussed multilateral agreements, but also has been adopted as the basis for bilateral agreements on the air navigation between the states.

The first actual bilateral agreement reflecting the assertion of the principle of national control over the air space was signed between Germany and France in 1913. In 1913, a German Zeppelin landed at Lunneville. This caused a tension and led to the first German-French air treaty. As a result a net work of prohibited zones appeared in France and
Germany.\(^1\) The military planes were barred from flights over alien territory except in case of invitation or distress. Civil aircrafts were permitted to cross the frontier (except over the closed zones), provided that they possessed licence either from German or French embassies.

During the period between the two Wars some important bilateral agreements were signed. One of such agreements was signed between Norway and Sweden on May 26, 1923, of which Article 1 reads "that the Contracting States mutually acknowledge each other's sovereignty over the entire air space above their land and sea territory."\(^2\)

The other important bilateral agreement was signed between the United States and Canada on October 22, 1929. This agreement dealt with the regulation of flights between the two States and certain other matters relating to flying personnel and equipment.\(^3\) The United States concluded another bilateral agreement with Canada on August 18, 1939. These agreements governed the extensive international flying between the two North American neighbour-nations and also

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1. Cooper, op. cit., p. 21. It is interesting to note that in this agreement of 1913 the national and military security from the new and unknown dangers overhead took precedence over their theoretical contentions in which the lawyers of these countries supported the free air theory.


the newly established trans-Atlantic Commercial Service.

While the Chicago Convention failed to reach an agreement on transportation in order to foster and regulate the traffic of international air lines, states bypassed the deadlock on the issue through bilateral agreements.¹

The most illustrative of such bilateral conventions is the Bermuda Pact of February 11, 1946 between the U.S.A. and Great Britain. This Convention based its deliberations on the preamble to the Chicago Convention. It modified the law of the Chicago Convention, and granted the right of commercial stop on certain routes. This was followed by a number of bilateral conventions based on the Bermuda Agreement model.² The Argentina has also signed bilateral conventions with a number of countries on the lines of a full-fledged principle of total sovereignty of state over its superincumbent air space.³

This practice among the states of entering into bilateral treaties conferring on each other, some of the

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2. Upto 1953 the U.S. alone had entered into agreements in regard to Air Transport Services with 34 countries. See Sharma, op. cit., p. 43.

3. After the Chicago Convention of 1944, Argentina has signed bilateral Conventions with France, Italy, Switzerland, Norway, Denmark, Brazil, Holland and Chile. Ibid, pp. 42-43.
'five freedoms' of the Chicago Convention, has been responsible for undermining if not destruction of the uniformity of law and practice of aerial navigation which was one of the primary objectives of the Chicago Conference on International Civil Aviation, 1944. For example, the International Air Transport Agreement embodying the so called "Five Freedoms of the Air" is no longer valid for the United States. Of the sixteen states, who were parties to this agreement, five, among which the United States is included, have denounced this agreement in accordance with its provisions under Art V. The states have considered it more advantageous to enter into bilateral agreements among themselves embodying in them the substance of "five freedoms" than to bind themselves to a multilateral treaty.

Apart from the above said agreements, some other conventions were also signed in various private international conferences on air law. Such international conferences on air law were instituted by Fauchille and others in 1902 among private participants and were revived with representatives of government in attendance in the late 1920s and early 1930s. These conventions contributed, in a significant way, to the growth of the legal regime of the air space: firstly, by reconciling the conflicting usages and customs of each state (concerning air navigation) into uniform rules; and secondly, by incorporating these rules into the bodies of law of all states, members of such conventions.
These conventions are: The Warsaw Convention 1929 which deals with the liability of air carriers for death or injury to passengers or damage or destruction of property; The Rome Convention 1933 intended to protect free air traffic against abusive measures of the so called creditors of the owners of the aircraft; The Geneva Convention 1948 dealt with the right of property, of acquisition and possession, of possession under lease, of mortgage, "hypotheques" and similar rights under certain conditions; and The Rome Convention 1952 attempted to regulate and establish uniformity with respect to the liability of the aircraft operators to persons on the surface who sustain injury, death or property damage, as a result of accident caused by foreign aircraft.¹

From the foregoing discussion on multilateral and bilateral agreements it may be concluded that the states have been asserting on their full national control over the air space above their territories and the "theory of free air" gave way to the "complete sovereignty theory" with few exceptions within the framework of these agreements.

The recognition of the principle of the complete sovereignty of states over the air space above their territories is not only reflected by the agreements as discussed above but also by the state practice right from the beginning of

¹ For further details of these Conventions see Verplaetse, op. cit., pp. 38-46; Haley, op. cit., pp. 50-55.
the aviation. The development of air law establishing state's control through state practice over the air space above their territories practice can be divided into four phases, viz., first, period upto the first World War; second, the period between the two World Wars; third, the period during the second World War; and fourth, the post second World War period.

During the period upto First World War, the first legal response regulating the invention of a flying object was a decree promulgated by the Paris Police in 1784 prohibiting balloon flights without permit,¹ and the first decree with compulsory character, enjoining the balloons to carry parachute was issued in Seine Department in 1819. The first

1. On 19 September, 1783 the Montgolfier brothers, in France, succeeded in sending a silk balloon to a height of 1500 feet, in the presence of Louis XVI. Later on, many similar incidents were followed in the subsequent years till the first controlled flight in an aeroplane by the Wright brothers was made in 1903 at Kitty Hawk, North Coroline. This emphasized the increased potential of man's use of the air space and encouraged a re-examination of the existing laws which were no longer adequate. The other such incidents are: The crossing from Dover to Calais by John Jeffries and Francois Blauchart in a balloon in 1785; the travelling of Robert Holland in a balloon in 1836 from London to Duchy of Nassau, a distance of 500 miles; the trying of Bomb-laden balloons by the Austrians at the siege of Venice in 1849 (most of these balloons were carried away from the target, some even drifted back on Austrian lines); the escaping of over one hundred and fifty persons in balloons from Paris during Franco-Prussian War (1870-71); the first controlled flight by Renard and Krebs in 1884; and the putting up of first airship into air by Zeppelin in 1890. See for details Johnson, op. cit., pp. 7-9.
case relating to a tort in Air Law was brought before the U.S. Court in 1822 and was decided to the pursuant to the principles of common law.¹ The first Company for air navigation known as the Aeriel Navigation Company of New York was created in 1865.

So far the governments did not show any interest in the matter, but in 1908 and 1909 the matter came to assume some importance. During this period France witnessed the drifting of a very large number of balloons into its territory, many of which apparently were manned by military personnel. And when Loise Bleriot, a French pilot in a French monoplane, crossed the English Channel and landed in England, the question of national sovereignty over air space versus "freedom of the air" ceased to be theoretical. The involvement of national security, freedom of aerial navigation for communication and transport, and the commercial interests of states resorting to aviation as an industry made the problem a pressing political question on the highest Government levels.²

1. Guille v. Swanson (1822) In this case a balloon landed in a garden, the aeronaut was held liable for damage caused by landing and also for that caused by people who trampled the garden in an effort to rescue him. Quoted in, Verplaetse, op. cit., p.20.

2. By this time, it had become obvious that the flying machines were not only for adventure or sport but had come to stay as weapons of war and instruments of commerce. States, therefore, acknowledged the imperative need to co-operate and mutually agree on certain rules regarding international aerial navigation.
In framing laws regulating international air navigation, nations right from the very beginning of aviation based themselves on recognition of the sovereignty of the state in air space. For example, the British Air Navigation Acts of 1911 and 1913\(^1\) declare that the British possesses sovereignty in the air space above its territory. Russia established prohibited airzones by enacting a law on July 5, 1912,\(^2\) and its Council of Ministers also issued an order prohibiting foreign airships from crossing the eastern borders of Russia, which entered into force on January 1, 1913.\(^3\) Germany and the Austro-Hungarian Monarchy retaliated by closing their frontiers and later on declared its military areas as closed zones. All these developments show that even prior to the First World War the principle of complete control over the air space above the territories of the states was zealously asserted in the state practice.

1. Under the British Air Navigation Act of 14th February, 1913, the Home Secretary had complete power to regulate the entry of foreign aircraft into Great Britain, and to prescribe zones over which no foreign aircraft could fly. See Morenoff, op. cit., p. 54.

2. It empowered the War and Naval Ministers to establish prohibited air zones. See Kislov, et al., op. cit., p. 36.

3. It gave the War Ministry the right, by agreement with the Ministry of Foreign Affairs, to prohibit foreign airships into western borders. Russian border guards opened fire on a German balloon which had violated the Russian Frontier. Ibid.
The First World War in 1914 brought about a realisation of the importance of aerial navigation and of its potential dangers to the subjacent state. In the early years of the War both the belligerents and the neutral states made it clear that national sovereignty extended into air space without any limit.

The affirmation of air sovereignty was proclaimed by a number of official documents during the course of war, especially by the protests of neutral countries against flights by belligerents over their territories. The Swiss declaration of August 4, 1914 was the first to lay down that the penetration into the country's air space of any type of aircraft was forbidden and that such action would be prevented by every means. Again, in a note protesting against the

1. It is relevant to mention that in the beginning of the War in 1914, the Great Britain possessed only 12 military aircrafts whereas at the end of war in 1919, it had 22,000. In the beginning the aircrafts were unarmed save as a personal weapon of the aviator, but very soon as the war progressed aircrafts came to be used in all kinds of combat roles and for diverse military purposes.

2. During the War, European neutral countries generally closed their air space to belligerent aircraft. In numerous instances, they did not hesitate to enforce this measure by firing at intruding military aircraft and apart from early but rather ineffectual declarations reserving their rights, the belligerents also recognized this practice. See O.J. Lissitzyn, "The Treatment of Aerial Intruders in Recent Practice and International Law", The American Journal of International Law, Vol. 47, 1953, 562, also see A.K. Kuhn, "Aerial Flights Above a Three-Mile or Other Vertical Limit by Belligerents Over Neutral Territory", The American Journal of International Law, Vol. 34, 1940, 106.
flight by the two German Zeppelins over the Dutch territory on September 8, 1915, the Dutch Government pointed out that "flying over the territory of a state without its consent was incompatible with respect to its sovereignty."¹ Even, France which had previously supported the theory of the "freedom of the air" came round during the War years to the stand of sovereignty in the air.

At the end of the war, it became evident that the question of the legal status of the air space was of vital importance. The experience in the war made it clear that the states would accept nothing less than full sovereignty over the air space superincumbent over their territory and territorial waters and as stated earlier, the Paris Convention of 1919 confirmed this principle as law.

The state practice between the two World Wars also manifests the acceptance of air space sovereignty. This period is marked by domestic legislation and bilateral agreements.² For example, the principle of sovereignty in the air space has been embodied in the British Air Navigation Act of 1920, the first Hungarian Legal rule of Air Traffic of 1922; the German Airways Law of 1922; the French Airways Law of 1924; the United States Air Commerce Act of 1926; and the Air Code

². The bilateral agreements have been discussed in the preceding pages of this chapter. See pp. 74-77
the U.S.S.R. of 1935. The only state where the theory of free air space found statutory confirmation was Peru.

During the period of the Second World War the international state practice has shown a consistent and a zealous

1. The British Air Navigation Act of 1920, states that "complete and absolute sovereignty and lawful jurisdiction of His Majesty extends and has always extended to the air space over all the possessions of His Majesty and the territorial waters adjoining them ...", Quoted in Kislov, et al., op. cit., p. 37; "The sovereignty of the State of Hungary extends also to the air space above its territory. Aerial traffic, unless limited by the present Decree or other decree implementing the present one, shall be free." Sec. 1 of Decree 10,270/1922 ME of the first Hungarian legal rule on air traffic. Quoted in Gal, op. cit., p. 57; Paragraph 2 of the German Airways Law of 1922 proclaims that "airships can make flights over Germany only if they are on the register of German airships," that is if they are German. Quoted in Kislov, et al., op. cit., p. 37; Article 8 of the French airways law enacted in 1924 reads "Airships of foreign nationality can fly over French territory only if entitled to do so by virtue of diplomatic convention, or if they have received permission which shall be of a provisional and special character", Ibid.; In section 6 (point "a") of the United States Air Commerce Act of 1926, it is pointed out that "The United States of America is hereby declared to possess and exercise complete and exclusive national sovereignty in the airspace above the United States, including the air space above all inland waters and the airspace above those portions of the adjacent marginal high seas and bays, and lakes, over which by international law, or treaty or convention the United States exercises national jurisdiction," Ibid.; Article 1 of Air Code of the U.S.S.R. of 1935 states, "To the Union of Soviet Socialist Republics belongs complete and exclusive Sovereignty in the air space above the Union of Soviet Socialist Republics", Ibid., p. 38;

2. In the air law of Nov. 18th, 1929, it was declared that the State sovereignty extended to a height of 3000 metres. But after the ratification by Peru of the Chicago Convention in 1944, this rule, too was superseded. See Gal, op. cit., pp. 58-59.
assertion of the sovereignty over the air space. The American Republics, in the declaration of neutrality at Panama on October 3, 1939, declared that any flight by military aircraft of belligerent state over their territory will be regarded as a contravention of their neutrality.\(^1\) Germany claimed in 1939, the right to fly over the territory of the Netherlands at a height in excess of three miles on the basis of the theory that national sovereignty over the air space is limited to a distance equal to the maritime territorial belt. It was firmly rejected by the Netherlands and it declared that air column over the Netherlands is an integral part of its territory up to an unlimited altitude. An interesting contrast between the use of the Panama Canal by belligerent men of war and vessels and the denial of use of the air space over the canal to the belligerent aircraft is found in 1939.\(^2\) This was because the legal

1. Non-military aircraft was also to adopt various measures, "such aircraft shall fly only with the permission of the competent authority... shall follow routes determined by the said authority...", See Haley, op. cit., p. 52.

2. In 1939 the U.S. President issued an Executive Order regulating the flight of foreign and domestic aircraft in the Canal Zone. But a Panamanian Court challenged the sovereignty of the United States in this area, claiming that the Republic of Panama had sovereignty over the air space, the United States made it clear that it had traditionally assumed jurisdiction over the air space in the Canal Zone area pursuant to well-established international law, Ibid., p. 51.
regime of the sea and the state practice on the status of air space did not concur on this point. In 1940, the United States permitted a Canadian aircraft and its crew to leave the United States following a forced landing on its soil. Turkey interned four American military planes with their crews, after forced landing in Turkey in June 1942. Canada enacted in 1939 and 1940 a number of wartime measures including the Defence Air Regulations which the United States treated as suspension of prior agreement between them and ordered that the Canadian aircrafts must obtain advance entry permits before entering the United States. It is evident that during the war each state asserted its rights to regulate aviation within and over its territory.

During the Post Second World War period too, a number of incidents indicate state efforts towards the maintenance of national sovereignty in the air space. For example, on August 9 1946, a U.S. plane on a regular flight from Vienna to Udine encountered bad weather, and while attempting to find its bearings was fired upon by Yugoslav fighters and forced to crash land. The U.S.A. however, protested and pleaded for the usual courtesies of innocent passage. Again,

1. As a result, Canada amended in 1940, the objectionable provisions of its Defence Air Regulations. Ibid., p. 53.
on August 19, 1946, an unarmed US transport aircraft was shot down by Yugoslavia, killing its pilot and the crew. The U.S.A. again protested and claimed indemnification. 1 The incidence of the flights of Sidney Cotton, over the territory of India to Hyderabad before the police action in September 1948, without due permission, was severely condemned by the Indian Government. 2

During the years 1951-56, the United States released a great number of balloons from the territories of Norway and Turkey. 3 Simultaneously, the balloon action sponsored by private organisations in West Germany was also launched. These balloons penetrated into the air space of the U.S.S.R. and many other Eastern European and Asian Countries like Poland, Czchoslovakia, Hungary, the German Democratic Republic, Bulgaria, Albania, the People's Republic of China and

1. Yugoslavia regretted the incident and declared that in future aircraft will not be shot at but invited to land or the identity will be noted for necessary action. See for details, Glahn, op. cit., pp. 62-63.

2. It was asserted that the passage was not innocent in as much as it was engaged in transporting arms and ammunition to Hyderabad. On a complaint from the Government of India, the British Air Ministry suspended the flying licence of Sidney Cotton.

3. These balloons were released under the "Operation Moby Dick" initiated by the United States. The balloons were carrying meteorological instruments, reconnaissance equipments and propaganda leaflets. See for details Kislov et al., op. cit., pp. 39-41. Also see Gal, op. cit., pp. 98-100; Bin Cheng, "International Law and High Altitude Flight: Balloons, Rockets and Man-Made Satellites," International and Comparative Law Quarterly, Vol. 6, 1957, 487-550.
the Mongolian People's Republic. These countries alleged that these balloons were launched by the U.S.A. subversive organisations and protested strongly several times to the U.S.A., the West Germany and Turkey for the violation of their air space and hence also of the generally recognised rules of international law. But the United States asserted that it was the work of 'free' and 'private' organisations. It was also argued that these were the weather balloons which were designed exclusively for scientific purposes. This explanation did not satisfy the protesting countries and later on the United States agreed that it would seek to avoid launching such balloons as might cross the territory of these countries.

The shooting down of a U-2 reconnaissance aircraft of the United States in 1960 by the Soviet Union over its terr-

1. According to Charles Robson, nearly two million of these balloons had been launched over Czechoslovakia, Poland and Hungary alone. See Kislov, Ibid.

2. The Czechoslovak Government lodged official protests with the United States Government on July 20, 1953, on May 5, 1954 on April 19, 1955; the Soviet Government on Feb. 5, lodged protest with Governments of United States, Turkey and West Germany. During February, similar protests were made by the People's Republic of China, Poland, Czechoslovakia, the German Democratic Republic, Bulgaria, Hungary, Albania and the Mongolian People's Republic with the U.S. and West Germany Governments. In addition protests were also lodged to the Secretary General of the United Nations. Czechoslovakia also protested to the European branch of the International Civil Aviation. Ibid.
itory flying at an altitude of 68,000 feet is again an affirmation of the state's control over its air space. The United States accepted the lawfulness of the Soviet action without demur and called off all further U-2 flights over the Soviet Union. But when two months later on July 1, 1960, the Soviet Union shot down over the high seas, another United States reconnaissance aircraft, the RB-47, the United States protested and took the matter to the Security Council of the United Nations. The Soviet Union, in due course, implicitly admitted the illegality of its action by returning to the United States the two survivors from the RB-47 without attempting to try them for espionage.¹

During this period, the states claim to complete sovereignty over their air space is also reflected through the establishment of Air Defence Identification Zones (ADIZ).²

In February 1961, a Soviet transport plane was intercepted by a French fighter plane over the Mediterranean, about

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eighty miles off the coast of Algeria, which was within French zone of responsibility (Identification Zone), as the French call the area. The French argued that the plane had not responded to the request of identification. The Soviet Government lodged a strong protest and said it should be well known to the French Government that the generally accepted norms of international law provide for the freedom of flight in the air space over the high seas. Many more such incidents during this period can be recounted showing, as said earlier, consistent and zealous assertion of sovereignty in the air space.¹

The state practice as reflected in the domestic legislation after the Second World War has also affirmed the theory of sovereignty over the air space. For example, complete and exclusive sovereignty has been claimed in Air Aviation Acts of the United States (1958), Rumania (1953), Czechoslovakia (1956), Poland (1962), The German Democratic Republic (1963) and the Soviet-Union (1962).²

1. A big commercial airliner belonging to E.I.A.I. Israel Airlines, which apparently had lost its way due to failure of its navigation instruments in bad weather was shot down over Bulgarian territory on July 27, 1955; On October 1963, a small private aircraft while flying over Czechoslovakian territory was shot down, see for more such similar incidents, Johnson, op. cit., pp. 70-74; Glahn, op. cit., pp. 363-367.

2. The Federal Aviation Act of 1958 (Sec. 1108. a) states "United States is declared to possess and exercise comp- Contd...*
Several states have also incorporated provisions regarding sovereignty over their air space in their constitutions. The Constitution of Nicaragua 1950, lists among the constituent parts of the state territory the air space and the atmosphere. According to the Venezuelan Constitution 1955, Venezuela exercises complete sovereignty in the air space above the state territory and the adjacent territorial waters up to any altitude. Even Peru, where the theory of free air space found statutory confirmation, as stated

*...lete and exclusive national sovereignty in the air space of the United States including the air space above all inland waters and... above those portions of the adjacent marginal high seas, bays and lakes, over which by international law and treaty or convention the United States exercise national jurisdiction," Quoted in Gal, op. cit., p.58.; "The Rumanian People's Republic has sole and full sovereignty over its air space... The air space of R.P.R. is situated within the boundaries and above the territory of the R.P.R." (Dec. 5th 1953, Sec. 1.) Ibid.;"The Czechoslovak state has complete and exclusive sovereignty over the air space above its territory" 24th May, 1956 (Section 3), Ibid.;"The People's Republic of Poland exercises complete and full supervision over the air space above its territorial area, inland waters and territorial seas," May 31st, 1962 (Section 4), Ibid.; "The GDR has unlimited sovereignty over the air space of its sovereign territory. This includes the air space above the land water areas, including the territorial seas of the GDR," July 1st, 1963 (Section 1) Ibid.; "The USSR has complete and exclusive sovereignty over the air space of the USSR. Air space of the USSR shall mean the air space above the land and water territory of the USSR including the territorial waters, as determined by the USSR Law and international agreements entered into by the USSR," January 1st, 1962 (Section 1), Ibid.

2. Section 2, Quoted in Ibid.
earlier after ratifying the Chicago Convention of 1944, accepted the sovereignty principle.

It is evident that state practice from the beginning of the aviation lends credence to the recognition that the air space above the state forms an integral part of its territory, leaving no doubt, that the states exercise 'complete' and 'absolute' control over it.

The above discussed position regarding the legal status of the air space assumed a new dimension when after the dawn of the space-age in 1957, a number of space objects like satellites, spaceships, space laboratories, missiles etc. were placed at varying orbits in space close to the earth. It is obvious that these space objects have been generally passing above the territories of many states. Now the question is: what bearing the movements of these space objects would have on the exercise of sovereignty by the states over the space above their territories? This question elicited an interesting debate in the legal science, which led to the expression of the conflicting views on this issue.

If the complete and exclusive sovereignty declared in the Chicago Convention, in several bilateral conventions and air enactments, were indeed extended upto the infinite, or at least beyond the usual perigee of the satellites, these

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orbiting space objects would, in the absence of express or tacit permission, violate the territorial sovereignty of the states. Since the rule of 'complete' and 'exclusive' sovereignty over the space was firmly embodied in the air law, some scholars believe that it seemed all too obvious to interpret the term 'complete' as limitless. For example, Kislov and Krylov submitted in 1956 that "the question of upper limit had long been settled both in practice and international law". These authors were alluding to Clunet's standpoint dating from 1913, according to which sovereignty in air space -- as the ancients used to say -- extended in principle *usque ad coelum*, up to heavens.1

It is also argued that the framers of the Paris and the Chicago Conventions intended to include the whole outer space into the air space.2 Some scholars are of the opinion that even prior to the formation of the air law, the state sovereignty also included the outer space.3 Simila-

1. Kislov, et al., op. cit., pp. 42-43. However, these Soviet authors expressed their opinion not in connection with space activity but in response to the American viewpoint in which the United States inferred the lawfulness of the use of reconnaissance balloons on the ground that the upper limit of sovereignty is not clear.


3. Articles 1 of the Paris and the Chicago Conventions, respectively, gave a ruling on the limitation of sovereignty.*
rly, scholars like Ming-Min Peng, P. de La Pradelle and Ch. Papathanassiou also stand for the tenet of unlimited sovereignty.¹

Furthermore, so far no pilot of an aircraft, accused of flying over the territory of a state without its prior permission, had offered the defence that he was not operating through the air space, but was navigating above the upper limits of air space or in outer space beyond the earth’s atmosphere.²

The above said viewpoint of unlimited sovereignty is hardly acceptable not only because the arguments in its support are incorrect with reference to positive law, but

*...ignty not only over the air, but the term air space mentioned in them merely corresponded to the level of technical and scientific knowledge at the time of the signature of these Conventions, whereas today it would be more correct to introduce the term "the space above the territory". The present-day international law, therefore, has accepted the ‘complete’ and ‘exclusive’ sovereignty of the states in the said space without limit to any altitude. For details see M. Milde, "Considerations on Legal Problems of Space Above National Territories," Review of Contemporary Law (Brussels) Vol. 5, 1958, 5-22.

1. For the views of these authors see Gal, op. cit. pp. 65-66.

2. Even in the famous U-2 incident, in which on May 1, 1960, an American U-2 reconnaissance plane was shot down by a Soviet Rocket without warning while flying over the Soviet territory at an altitude of approximately 60,000 to 68,000 feet, Garry Powers who was the pilot of the plane was captured, convicted of espionage and sentenced to ten-year imprisonment, did not offer the defence of not knowing the upper limit of the Soviet Union’s air space. For further discussion of the U-2 case, see Wright, op. cit., pp. 135-142.
also because it is opposed to fundamental facts of natural science.\footnote{1} If the projecting of sovereignty limits is attempted \textit{ad infinitum}, it will immediately be seen that the infinite, cone-like beam of an imaginary reflector will scan areas "changing continually". Even in the near proximity of the earth it would be rather difficult to determine, whether at a given moment a spaceship is passing above the Netherlands or Luxemburg or e.g. the high seas. So to claim any mechanical extension of the concept of sovereignty from the earth or the global atmosphere to the cosmos would be little more than unscientific geocentricism, a return from Copernicus to Ptolemy.\footnote{2} Szutucki has rightly remarked that it is dangerous to conceive of sovereignty as a fiction, whether in theory or in practice.\footnote{3} Though the maxim \textit{ad coelum} continued to be a legal doctrine during several centuries,

\begin{enumerate}
\item The earth revolves around its axis, and at the same time proceeds at the velocity of 29.8 KM/sec along its orbit round the sun. This doubly relative motion of the state territories in relation to the universe is further complicated by the galactic orbit of the sun round the centre of the Milky Way (28.5 KM/Sec), See Gal, op. cit. p. 67.
\item E. Korovin, "International Status of Cosmic Space," \textit{International Affairs} (Moscow), Vol 5, 1959, 54. Similarly Jenks said, "The idea of sovereignty over the various sectors of the universe is just as ridiculous as if the Island of St. Helena claimed the Atlantic Ocean", see Jenks, op. cit., p. 103.
\end{enumerate}
yet it has no affinity whatsoever with the Paris and the Chicago Conventions. In the later enactments incorporating this tenet, or in the judicial practice it has never been a rule of public law, i.e. the legal relation of the citizen to the state -- even less of international law -- but of civil law only. Further, as stated earlier, this doctrine has no place in the modern world.

Moreover, it is incorrect to allege that the signatories of the Paris and Chicago Conventions, when speaking of the air space under complete and exclusive sovereignty, really meant "the whole space above the state territory". The scope of these Conventions was restricted to civil aviation without taking, in the least, into consideration the subsequent technical developments.¹

The above viewpoint that national sovereignty does not extend upwards to infinity is also supported among others by Cheng, Rivoire, Hannover, Feldman, Fenwick, Bloomfield, Schachter, Horsford, McDougal, Lasswell, Vlasic and Haley.³

¹. H.D. Klein, quoted in Gal, op., cit. p. 69.
². On the date of signature of the Chicago Convention (Dec. 7, 1944) the V-2 guided missile which attained an altitude of nearly 100 kms on its ballistic trajectory had already known (First launched September 8, 1944) Benecke and Quick, "History of German Guided Missiles Development," quoted in Ibid.
³. See B. Cheng "Recent Developments in Air Law", Current Contd...
Above all, the states, too after the first flight of Sputnik I in 1957 and also the subsequent launching of satellites and other objects till 1975, did not evoke any objection either by words or by acts, that such flights were violations of their air space sovereignty. On the contrary, unlike the principle of freedom of the high seas which came to replace age long claims for control of seas, the states from the very beginning of the space-age, recognised the global character of the space activities and have constantly acknowledged the binding character of the principles of


1. In 1975, Colombia’s Foreign Minister in his address to the UN General Assembly claimed his country's sovereignty to a part of the geostationary orbit 22,300 miles above the earth, over her territory. Similar claims were jointly made by eight equatorial States (Brazil, Colombia, Congo, Equador, Indonesia, Kenya, Uganda, and Zaïre) in the "Bogota Declaration " on Dec. 3, 1976, at Bogota. For a comprehensive and critical discussion of such sovereignty claims see Chapter VI of this study, pp. 241-274.
"freedom" and "non-appropriation" of the outer space, initially through silent consent and later through the General Assembly Resolutions of the United Nations and the multilateral treaty. It may be concluded thus that state sovereignty does not extend to an infinite height. Nevertheless, the upper limit of air space is yet to be decided in the international air law.

From the foregoing discussion, the legal position in respect of the air space appears to be, that it is assumed by the states that they possess complete and absolute sovereignty over the 'air space' above their land territory and territorial waters. This assumption is based on a generally accepted rule of international customary law which can

1. These principles were the parts of the positive international law even before the Outer Space Treaty of 1967. And this is borne out by the fact that prior to the Treaty, the principle of freedom of outer space was unanimously approved by the UN General Assembly in the "Declaration on the Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space" on Dec. 13, 1963. See V. Vereshchetin, "On the Importance of the Principle of State Sovereignty in International Space Law", Indian Journal of International Law, Vol. 17, 1977, 203; D. Goedhuis "Influence of Conquest of Outer Space on National Sovereignty: Some Remarks", Journal of Space Law, Vol. 6, 1978, 40.

2. "The Outer Space... shall be free for exploration and use by all states..." and that such activities shall be carried on "in accordance with international law, including the Charter of the United Nations...", Articles II and III of the Outer Space Treaty 1967.

3. A number of proposals have been advanced to determine the upper limit of the air space but without any resolution. A detailed discussion on these proposals has been made in the Chapter V of this study. See pp. 163-195.
primarily be derived from the national laws, bilateral and multilateral conventions. The air space over the high seas is now free. There is a further trend, though disputable, indicating jurisdiction and rights of regulatory control in the air space over the economic zones of the states. The state practice is yet to crystalise on this issue.

Both, the Paris Convention of 1919 and the Chicago Convention of 1944 deal only with those flight instrumentalities which derive support in the atmosphere from reactions of the air, such as the balloons and airplanes, and do not deal with such instrumentalities as rockets, satellites and other spacecrafts which are designed or meant to move through space without atmospheric support.

There is nothing in the Chicago Convention which should be said to prelude the possibility of national sovereignty being extended by an international agreement, or by the use of force unilaterally, above the sectors in which airplane and balloon can be used.

Each state may regulate the use of its air space both in respect of its own aircraft as well as of foreign ones. Any state may close its air space to the overflight of a foreign aircraft. This right might only be restricted by obligations under international law. International air traffic is conducted on the basis of international treaties or separate permits given in each case. A previous permit is also required for pilotless (robot) planes. The restrictions listed
for other aircrafts also apply to pilotless aircrafts.

The right of an innocent passage can only be based on a treaty or permit, no state may claim this right under international Customary law, and each state may restrict above its territory, the freedom of flight by designating routes, prescribing flight altitudes and fixing prohibited zones. Taking of photographs or films can also be prohibited. The states may restrict the use of telecommunication means on board and it may exclude any dangerous cargo (explosives weapons) from air traffic.

Any aircraft penetrating into the air space or violating the restrictions may be commanded or forced to land. The state's right to force the tresspassing plane to land or to observe the instructions by any means is recognised both in state legislations and the principle of sovereignty in international law.

Any aircraft undertaking an international flight shall submit to customs and other inspections at the airport designated thereto. For reasons of security, a foreign aircraft possessing the transit permit may be obliged to land and to submit to inspection.

Inside the state boundaries, civil aircrafts are subjected to the jurisdiction of the state having sovereignty. As regards a 'State Aircraft', i.e. the military and police airplanes, a special agreement is required for their flying over the territory of another state.
The sovereignty of the state over its air space does not extend to an unlimited height. However, the question of the upper limit of the air space in international air law is still not solved.

In the end, it may be said that in the development of the air law of aviation, the dominating factor has been economic. It is clear by the widespread adoption of "two freedom" rule and the general rejection of the "five freedom" rule. In military aviation, the dominating factor has been security.

The historical survey and assessment of the legal situation also makes it clear that international air law progressed, parallel with technical progress, from the theory of the freedom of the air towards the practical and statutory recognition of the sovereignty over the air space. It may be seen that the legal status of air space is closely related to the prevailing social, economic and political factors.