

FEDERAL LEGISLATION CONCERNING CIVIL AERONAUTICS

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Fifty years ago there came before the Supreme Court of the United States litigation involving the application of old principles of the Constitution to new conditions. When Chief Justice Waite, as spokesman for the Court, referred to the powers over commerce granted to Congress by the Constitution, he stated that:

“The powers thus granted are not confined to the instrumentalities of commerce, or the postal service known or in use when the Constitution was adopted, but they keep pace with the progress of the country, and adapt themselves to the new developments of time and circumstances. They extend from the horse with its rider to the stage-coach, from the sailing vessel to the steamboat, from the coach and the steamboat to the railroad, and from the railroad to the telegraph, as these new agencies are successively brought into use to meet the demands of increasing population and wealth. They were intended for the government of the business to which they relate, at all times and under all circumstances.”¹

As far from his mind when he spoke those words was our modern instrumentality of commerce, the aircraft, as was from the minds of those who drafted the Constitution, the telegraph to which he referred. But his words are as applicable, their context as true in 1928 as they were in 1877.

Realizing that the Constitution must be a thing alive, adaptable at all times to changes arising from the development of the nation, the American Bar Association in 1922 abandoned its efforts to secure a pertinent amendment to that document and centered its activities in the field of aeronautical law upon a consideration of the commerce clause. Several years of study had convinced this body that the variously advanced admiralty, war,

¹ Pensacola Telegraph Co. v. Western Union Telegraph Co., 96 U. S. 1, 9 (1877).

and treaty-making powers of Congress were not adequate to support the federal legislation obviously necessary, were our aeronautical industry to develop. From the time when the organization focused its thought upon the commerce clause, the study of the legal aspect of aviation went steadily forward to culminate in the enactment by the 69th Congress of the *Air Commerce Act of 1926*.²

The labors of the men engaged in this work succeeded in restraining much haphazard local regulation during the years intervening between the World War and 1926, and in bringing forth a statute which, in proof of its adequacy and comprehensiveness, has functioned so smoothly that the layman is almost unaware of its existence. This fact is in itself a tribute to the perspicacity of the men responsible for the enactment and to the administrative ability of the Honorable William P. MacCracken, Jr., who was appointed to the office of Assistant Secretary of Commerce in charge of Aeronautics created by the *Act*. Indeed, the legal problems involved in man's conquest of the air were even farther from the public mind than were the engineering problems which several spectacularly successful flights during the summer of 1927 demonstrated had been successfully solved, at least in the fundamentals. Likewise has been solved, at least in the fundamentals, the legal aspect of flight.

Regulation of aeronautics existed from the ordinances passed by enterprising towns and larger cities and designed to prevent hazardous flights over and above those centers of population, through isolated state laws, police measures and broader regulatory enactments and the *Uniform State Law for Aeronautics* in force in several states, to the Federal *Air Commerce Act* and the comprehensive regulations promulgated thereunder. In fact, those flights which centered popular attention upon the aeronautical industry were conducted under supervision arising from the Federal *Act* and regulations; and it was undoubtedly due to the standards of the Department of Commerce which the pilots and the aircraft were required to meet, that the flights were successful to a high degree.

² 44 STAT. 568 (1926), U. S. C. (Supp. 1927) TIT. 49, §§ 171-184.

The *Air Commerce Act* aims at the promotion of civil aeronautics within the United States, emphasizing the business aspect of air navigation and enlisting various branches of the Government in the aid of all aerial travel. While it provides for regulation of this means of transportation, it does not seek to regulate to the exclusion of other functions; and while the regulatory provisions are perhaps the more outstanding in their immediate effect upon air navigation, they are probably less far-reaching in importance than other provisions aimed more directly at encouraging the expansion and development of the aeronautical industry.

The purpose of the legislation as declared in its title, is "to encourage and regulate the use of aircraft in commerce," and in general this purpose has been closely adhered to. The opening words of Section 2 of the *Act* make it the duty of the Secretary of Commerce "to foster air commerce" and the subsequent clauses of the *Act* suggest and define the various activities of the Secretary in carrying out the task assigned him. Among the instructions are found duties as diverse as:

- Encouraging the establishment of airports, civil airways and other air navigation facilities;
- Studying the possibilities for the development of air commerce and the aeronautical industry;
- Collecting and disseminating information relative thereto;
- Recommending to the Department of Agriculture meteorological service necessary in the development of air service;
- Advising with the Bureau of Standards and other executive agencies relative to research tending to improve air navigation facilities;
- Investigating aerial accidents and reporting thereon;
- Providing for the registration of aircraft and rating them as to their airworthiness;
- Providing for the examination and rating of airmen and of air navigation facilities available for the use of aircraft;
- Establishing air traffic rules.

Only to enumerate these activities is to show the tremendous and highly beneficial influence of the enactment upon all civil aeronautics within the United States. It is evident that the regulatory steps which the Secretary is directed to take are but a small part of his task of promoting the development of aeronautics, and that the permanent effect of the enactment upon the industry lies in the extensive powers of research and cooperation with other governmental agencies in an effort to lay a sound basis upon which the industry may expand. The magnitude of the task was realized, and an assistant provided to perform the duties imposed by the *Act*.³

Principles of substantive law, as distinguished from the administrative provisions of the *Act*, occupy a small portion of the enactment. The principle of complete and exclusive state sovereignty in the airspace superincumbent upon its domains, a principle long discussed by international jurists and first enunciated as a proposition accepted as true by all nations in the *International Air Convention of 1919*, a pact never ratified by our Senate although the United States was a signatory power, is declared to be the law of the nation.⁴ The statement is but the declaration of an established rule, and is not the creation by Congress of a principle applicable to its jurisdiction alone. Since this theory has been definitely accepted as the rule in international law, no question of the right of the United States to enact and to enforce the rule within its dominions is likely to arise.

Of greater interest to lawyers engaged in domestic law is the provision that the airspace above certain altitudes to be designated by the Secretary of Commerce as "minimum safe altitudes of flight," shall be open and free to all aerial navigation. This "navigable airspace" is declared to be subject to a public right of freedom of air navigation.⁵ This is limited to interstate and foreign navigation, of course, in view of the limitations of Congressional powers over commerce. It creates a unique situation, however. The right of the subjacent owner to use

³ 44 STAT. 573 (1926), U. S. C. (Supp. 1927) TIT. 49, § 178.

⁴ 44 STAT. 572 (1926), U. S. C. (Supp. 1927) TIT. 49, § 176(a).

⁵ 44 STAT. 574 (1926), U. S. C. (Supp. 1927) TIT. 49, § 180.

such airspace for any purpose conflicting with such aerial navigation is rendered inferior in right to the public right to navigate. The problem of ownership of such airspace is avoided, but a right in the nature of an easement is created in the airspace superincumbent upon the lands and waters of the surface owner in favor of the air navigator. Is this an inherent right only now given expression, or is it a right newly created? A deal of discussion may be expected from the questions the provision raises. There are plausible arguments on both sides, and only judicial determination can settle the controversies that are certain to arise.

The advocates of the right as being one inherent in the public may be expected to advance the analogy of navigable waters. The points of similarity of the sea to the air have frequently been indicated and many forceful arguments in favor of applying admiralty principles to aerial problems have had their basis in the sometimes close analogy.⁶ Earliest expressions of the common law declared that the natural and primary uses of navigable waters are inherently public, and though the title to such waters may be vested in an individual, "the *jus privatum* of the owner or proprietor is charged with and subject to that *jus publicum* which belongs to the king's subjects; as the soil of a highway is, which though in point of property it may be a private man's freehold, yet it is charged with a public interest of the people, which may not be prejudiced or damnified."⁷

In the United States the rule of ebb and flow of the tide as determining the navigability of rivers has long been discarded, and the question has become one of fact. The test of navigability is stated in *The Montello*⁸ in these words:

⁶ See, for instance, 46 A. B. A. Rep. 77 *et seq.* (1921). The earlier theory of freedom of the airspace was based upon the analogy of the high seas.

⁷ LORD HALE, *DE JURE MARIS*, reported in I HARGRAVE, *LAW TRACTS* (1787) 36. From this statement it would appear that no right to compensation arises from the taking of private property for a public highway, and, indeed, the Anglo-Saxon theory was to that effect. In Pennsylvania, by the Constitution of 1873, Art. I § 10, an obligation was imposed upon the legislature to provide compensation for such taking for public highways. Legislative acts appropriating property to such uses have, however, almost invariably contained provisions for compensation and the rule requiring it has become too generally established to permit of disregard.

⁸ 20 Wall. 430, 441 (U. S. 1874).

“The capability of use by the public for purposes of transportation and commerce affords the true criterion of the navigability of a river, rather than the extent and manner of that use. If it be capable in its natural state of being used for purposes of commerce, no matter in what mode the commerce may be conducted, it is navigable in fact, and becomes in law a public river or highway.”

It seems clear that an application of this rule to the airspace would declare the right of navigation therein to be one inherent in the public.

Since navigable waters have always been considered to be public property, or if held in private title to be subject to public user, compensation is not granted to the riparian owners for their use. It would therefore appear that if the courts, when this question of the right to navigate the airspace comes before them, declare the right to be inherent in the public, no compensation will be recoverable by the surface owner for the use of the superjacent airspace as a highway of commerce.

If, on the other hand, the maxim that ownership of the surface draws with it the ownership of the heavens be upheld,⁹ it would seem that in order to establish a public airway for commerce, resort must be had to an exercise of the right of eminent domain. There is no doubt but that this inherent right of sovereignty can be exercised for this purpose.¹⁰ Its exercise, how-

⁹ The majority of European states have statutory provisions confirming the right of navigation in the airspace. But as yet only two decisions bearing on the question have been recorded in this country. *Commonwealth v. Nevin and Smith*, 2 D. & C. 241 (Pa. 1922). See comment (1922) 71 U. OF PA. L. REV. 88. This was a criminal action of trespass. The court held the aviators not guilty of the crime. *Johnson v. Curtiss Northwest Airplane Co.*, unreported, (D. C. Ramsey Co., Minn., 1923). See comment (1923) 57 AM. L. REV. 908. This was a civil action for trespass. The aviator was held not liable. These decisions, although both in lower courts, would seem to indicate that the airspace above a man's property will not be considered to be owned by him absolutely.

¹⁰ “The power which Congress possesses in respect to this taking of property springs from the grant of power to regulate commerce; and the regulation of commerce implies as much control, as far-reaching power, over an artificial as over a natural highway. They are simply the means and instrumentalities of commerce, and the power of Congress to regulate commerce carries with it power over all the means and instrumentalities by which commerce is carried on. There may be differences in the modes and manner of using these different highways, but such differences do not affect or limit that supreme power of Congress to regulate commerce, and in such regulation to control its means

ever, requires just compensation for the private property so taken and a taking without just compensation is rendered invalid by the Fifth Amendment.¹¹ The problem is unquestionably one upon which judicial action will be had, and which such action alone can definitely determine.

Other than these statements of substantive law, the *Act* deals with administrative powers and duties to be undertaken in fostering air commerce. The term "air commerce" includes transportation in whole or in part by aircraft of persons or property for hire, navigation of aircraft in furtherance of a business, and navigation of aircraft from one place to another for operation in the conduct of a business.¹² It may seem tautological to emphasize that "air commerce" thus comprehends only the commercial use of aircraft, but it must be remembered that this term is the basis upon which the *Act* is laid and that the scope of the activities of the Secretary of Commerce under the enactment is limited to such uses of aircraft as come within the definition of the term. In light of the controversies as to the jurisdiction of the Federal Government over air navigation which preceded the drafting and passage of the measure, it is not strange to note the caution of the drafters and to find the primary characteristic of that clause of the Constitution upon which the enactment is based, so clearly and deliberately stated.

The Secretary of Commerce has jurisdiction, then, over the uses of aircraft in business and in the furtherance of business. His powers are such powers as are embraced within the interpretation which the courts have given to the commerce clause of the Constitution, and extend to aircraft engaged in interstate or foreign air commerce. Such operations as the carriage of mails, the transportation by a manufacturer of goods from factory to branch office, the use of their own or their employer's aircraft by men travelling upon business, as well as the common carriage of persons or property, are clearly covered by the term

and instrumentalities." *Monongahela Navigation Co. v. U. S.*, 148 U. S. 312, 342 (1893).

¹¹ *Monongahela Nav. Co. v. U. S.*, *supra* note 10.

¹² 44 STAT. 568 (1926), U. S. C. (Supp. 1927) TIT. 49, § 171.

"air commerce," and are subject to federal regulation if the flight crosses a state line. A craft maintained for the owner's private use would not come within the purview of the *Act* so long as it was used for purely pleasure excursions. A flight from one state to another for the purpose of attending a directors' meeting would, however, seem clearly to be within the scope of the *Act* since it would have been made "in furtherance of a business." Similarly, the operation of an airplane for crop dusting or for topographical survey, increasingly important uses of the airplane, would seem to be within the definition of the term. Since "navigation of an aircraft from one place to another for operation in the conduct of a business" is also air commerce, it appears that the delivery of an aircraft from the factory to the place where it is to be put into operation as a carrier of passengers or property for hire would fall within this provision. So, also, would the flights of acrobatic and gypsy fliers from town to town on their barnstorming tours.

One not engaging in interstate air commerce may subject himself to federal regulation, but he is not obliged to do so. The direction providing means for registration of aircraft reads: "The Secretary of Commerce shall by regulation provide for the granting of registration to aircraft eligible for registration, if the owner requests such registration."¹³ This provision makes registration not mandatory but a privilege available to properly qualified aircraft which, when registered, are to be known as "aircraft of the United States." And the regulatory powers of the Secretary, with the exception of the establishing of air traffic rules, are confined to aircraft of the United States, that is, to such voluntarily registered aircraft, and to airmen and air navigation facilities serving such craft. Before an aircraft is permitted to operate in interstate or foreign air commerce, however, it must be registered.¹⁴ The consequences of this provision are, of course, the regulation in any practical sense, of all civil air navigation within the United States. No suggestion of the regulation of intrastate air navigation, as such, is made and

¹³ 44 STAT. 569 (1926), U. S. C. (Supp. 1927) TIT. 49, § 173(a)

¹⁴ 44 STAT. 574 (1926), U. S. C. (Supp. 1927) TIT. 49, § 181(a) 2.

those whose activities are entirely intrastate are not subject to federal regulation unless they have voluntarily submitted thereto. The character of the machine, however, renders it almost of necessity a means of long distance travel and thus within the federal jurisdiction. The uses of aircraft which do not fall within its scope are few. Crop dusting, for example, is a use which can be classed as air commerce and in itself would probably be intrastate—but from its nature such work would probably be done by a company which moved its planes by flight from one plantation to another, oftentimes across state boundaries, thereby navigating aircraft interstate for operation in the conduct of a business, and thus bringing the aircraft under the federal jurisdiction. The other uses which we have determined to be within the classification would almost invariably fall within the regulatory scope of the federal enactment. This extension of federal regulation to "aircraft of the United States" is not open to question since only such aircraft as would in any event come within its scope are compelled to register. The owners of other aircraft so classified will have voluntarily subjected themselves to the federal jurisdiction and cannot be heard to object to the resultant regulation.¹⁵

Since practically all if not all commercially used aircraft are necessarily embraced within this jurisdiction, the qualifications of an aircraft to enter the classification "aircraft of the United States" become important. Eligibility for registration is determined by the use and the ownership of the craft. Two general classes as to use are made: civil and public. A public aircraft is one used exclusively in governmental service¹⁶ and it may be registered regardless of the type of political entity which owns it;¹⁷ while any other aircraft is known as a civil aircraft. Civil aircraft may not be registered in any foreign country and must be owned by a citizen of the United States,¹⁸ that is to say,

¹⁵ *St. Louis Malleable Casting Co. v. Pendergrast Co.*, 260 U. S. 469, 472 (1923); *Pierce Oil Co. v. Phoenix Refining Co.*, 259 U. S. 125, 128 (1922); *Hurley v. Commission of Fisheries of Virginia*, 257 U. S. 223, 225 (1921).

¹⁶ 44 STAT. 573 (1926), U. S. C. (Supp. 1927) TIT. 49, § 179(d).

¹⁷ 44 STAT. 569 (1926), U. S. C. (Supp. 1927) TIT. 49, § 173(a) 2.

¹⁸ 44 STAT. 569 (1926), U. S. C. (Supp. 1927) TIT. 49, § 173(a) 1.

the owner must be an individual whose citizenship is American; or a partnership, all of the members of which are of American citizenship; or a corporation, of which the president and two-thirds of the directors are of American citizenship and in which more than one-half of the voting interest is controlled by American citizens.¹⁹ The requirements for registration are similar to those of the *International Air Convention of 1919*. Registration under these provisions determines the nationality of the aircraft and, it is supposed, will operate in respect to aircraft in the same manner as registry of a vessel does to seacraft under maritime law.

All aircraft so registered are to be rated as to their airworthiness.²⁰ The Secretary may demand information as to the design of the craft, the materials and methods of construction, and may require periodic examination of all registered aircraft to determine the continuance of their airworthiness. The aircraft may be re-rated according to the condition of airworthiness which such examinations disclose. Aircraft certificates setting forth the rating of the aircraft upon which they are issued, are necessary before the craft may be navigated as an aircraft of the United States.²¹ Thus, having chosen to register his aircraft, the owner is not permitted to fly it until it has been found to be airworthy, which means that it must, under certain conditions, have met certain prescribed tests of flight, manageability, strength, etc., which determine that it may be operated with safety.

The qualifications of "airmen serving in connection with aircraft of the United States" also are to be determined by periodic examinations, and airman certificates setting forth their respective ratings issued to the men before they may serve.²² An airman, reads the *Act*, "means any individual (including the person in command and any pilot, mechanic, or member of the crew) who engages in the navigation of aircraft while under

¹⁹ 44 STAT. 573 (1926), U. S. C. (Supp. 1927) TIT. 49, § 179(a).

²⁰ 44 STAT. 569 (1926), U. S. C. (Supp. 1927) TIT. 49, § 173(b).

²¹ 44 STAT. 574 (1926), U. S. C. (Supp. 1927) TIT. 49, § 181(a) 3.

²² 44 STAT. 569, 570, 574 (1926), U. S. C. (Supp. 1927) TIT. 49, § 173(c), (f), § 181(a) 4.

way, and any individual who is in charge of the inspection, overhauling, or repairing of aircraft." ²³ While Congress undoubtedly has the power to bring within its jurisdiction men who repair the instrumentalities used in interstate commerce, ²⁴ one notes curiously the distinction made between those who do the actual repairing, who are not included within the federal regulation, and those who are in charge thereof, but who may not do any of the work.

Likewise, air navigation facilities, available to registered aircraft, are subject to federal inspection and rating, though licensing is not essential for their lawful operation as in the preceding instances. ²⁵ These facilities extend from airports to weather signals, from airway beacons to radio—in short, to any structure or facility used as an aid to air navigation. All of the equipment of this character previously controlled by the Postmaster-General, except airports and terminal landing fields which have been taken over by the municipalities where they are situated, has been placed in the control of the Secretary of Commerce under the provisions of the *Act*. He is authorized to establish airways and to maintain and operate along them such facilities as may be necessary. These include emergency landing fields, but he is not permitted to establish airports. These facilities operated by the government are open to public use, and equipment and supplies as well as mechanical service and temporary shelter to aircraft in emergency, are available at the fields. The Secretary, with the aid of other governmental agencies, is to chart the airways and provide maps of them. The meteorological services of the government are placed at the disposal of the new industry and the Weather Bureau is directed to furnish weather reports to aid air navigation, giving especial attention to the airways designated by the Secretary of Commerce. Meteorological stations are to be established for this purpose. ²⁶ This means of fostering air commerce by the governmental establish-

²³ 44 STAT. 574 (1926), U. S. C. (Supp. 1927) TIT. 49, § 179(k).

²⁴ *B. & O. R. R. v. Interstate Commerce Commission*, 221 U. S. 612 (1911).

²⁵ 44 STAT. 569 (1926), U. S. C. (Supp. 1927) TIT. 49, § 173(d).

²⁶ 44 STAT. 570 (1926), U. S. C. (Supp. 1927) TIT. 49, § 175.

ment and maintenance of air navigation facilities seems an adroit move on the part of the enactors to provide subsidy for domestic airlines in a manner acceptable to the public because it does indirectly what they have never had the temerity to do directly. At any rate, it seems probable that these authorizations will do more to advance the development of civil aeronautics than all the regulation of men and machines which might be done by generations of Secretaries.

Foreign aircraft are forbidden to engage in domestic commerce, but are allowed to navigate American airspace if the nation of their registry grants to American aircraft and airmen similar privileges.²⁷ The first of these provisions accords with the privileges granted by the *International Air Convention* to nationals of States signatory to that pact. How foreign nations will be able to grant reciprocal privileges to American airmen and aircraft under the clause of the *Convention* providing that signatory states shall permit over their territories only the flights of aircraft of states which accept the Convention,²⁸ is an enigma.

Both domestic and foreign aircraft may engage in foreign air commerce, and the Secretaries of the respective departments are empowered to extend the application of existing laws of entry and clearance, customs, immigration and health to such air commerce so far as the present laws are applicable.²⁹ By virtue of this provision, ports of entry with appropriate customs and immigration officers and regulations may be established. While this is not yet of vital importance, one need not be a visionary to see the time when it will be of great practical bearing.

Penalties for operation of aircraft in violation of the *Act* or of the regulations promulgated under its authority are provided.³⁰ The penalties assume the forms of fines against the violator and liens against the aircraft participating in the violation. The lien arises when the violation is by the owner or per-

²⁷ 44 STAT. 572 (1926), U. S. C. (Supp. 1927) TIT. 49, § 176(b) and (c).

²⁸ Convention Relating to International Air Navigation, Art. I (1919), and Protocol (1920). See Williams, *Developments in Aerial Law*, (1926) 75 U. OF PA. L. REV. 139, 148.

²⁹ 44 STAT. 572 (1926), U. S. C. (Supp. 1927) TIT. 49, § 177.

³⁰ 44 STAT. 574 (1926), U. S. C. (Supp. 1927) TIT. 49, § 181.

son in command of the aircraft. It is not clear whether "person in command" means only an authorized agent of the owner. It seems doubtful that the lien would be enforced against the craft in the event that it were stolen and the thief violated the enactment, but this is possible under the terms of the *Act*. In creating the lien, the admiralty law is simulated, but it has not been applied to air commerce. Penalties may be enforced *in personam* or *in rem* by proceedings which shall correspond to admiralty proceedings, but a jury trial may be demanded in any suit involving \$20 or more, and the common law is to be followed on review. An aircraft subject to a lien is open to summary seizure and retention until released from custody by payment of the penalty, seizure under court process, failure to institute proceedings against the craft, or the deposit of bond.

Tampering with and counterfeiting certificates issued under the *Act* are punishable; and subject to the severest penalties prescribed by the enactment are offenses calculated to interfere with air navigation, such as the operation of false lights or signals, or hindering the operation of true ones. Imprisonment is provided for these offenses. Fines imposed as penalties may be remitted or mitigated at any time by the proper authority, and such action shall be final. The remaining clauses are applicable to all aircraft whether registered as "aircraft of the United States" or not. They provide for air traffic rules and for airspace reservations to be set aside by executive order for purposes of national defense and for public safety.³¹ Such reservations must, obviously, be closed to all civil air navigation if closed to any. The powers of the Executive clearly comprehend such action, as do the powers of the states which may also set aside such reservations.

Under the authority given him to "establish air traffic rules for the navigation, protection and identification of aircraft, including rules as to safe altitudes of flight and rules for the prevention of collisions between vessels and aircraft,"³² the powers of the Secretary presumably apply in this respect to all aircraft

³¹ 44 STAT. 570 (1926), U. S. C. (Supp. 1927) TIT. 49, § 174.

³² 44 STAT. 570 (1926), U. S. C. (Supp. 1927) TIT. 49, § 173(e).

so far as the federal jurisdiction extends to them. The extent of this jurisdiction is not definite. The statement of the managers, which accompanied the conference report on the *Act* declared: "In order to protect and prevent undue burdens upon interstate and foreign air commerce the air traffic rules are to apply whether the aircraft is engaged in commerce or non-commercial, or in foreign, interstate, or intrastate navigation in the United States, and whether or not the aircraft is registered or is navigating in a civil airway." Granting the power of Congress to prevent discrimination against and unjust burdens upon interstate commerce, the statement of the managers would seem to be unduly broad. The attempt to enforce against a pleasure aircraft landing on a private field, rules which may be necessary safety precautions in a busy airport, would scarcely be countenanced in a court. The principle which underlies the authority given to establish air traffic rules is unquestionable. It is a derivative from the general powers of Congress and has been repeatedly upheld.³³ The air traffic rules will doubtlessly be sustained on that principle as well as on the practical ground of the necessity of uniform regulations. Such rules as are established may be expected to deal only with the general aspects of flight, and the enforcement of them attempted only upon airways where interstate flight is largely conducted. No definite conclusion as to the validity of these rules can be drawn until some particular rule has been violated. The authority given the Secretary in respect to them is so broad, indicating no particular facet of the problem other than safety in a general way, that the circumstances of each infringement which occurs must determine the extent of the authority.

The regulations which have been issued are few and general in their scope. They include the licensing of aircraft and airmen, providing certain standards for qualification, and establish certain operating requirements. A system of marking aircraft is inaugurated and a few primary rules for safe flight are set forth as air traffic rules. They have been endorsed by the

³³ Houston, etc., R. R. v. U. S., 234 U. S. 342 (1914), and cases there cited.

industry and heartily supported since they became effective. Their aid to the development of civil air navigation is unquestioned.

The basis of legislation was thoroughly discussed before the enactment was drafted, and from that discussion came the resolve to rely upon the somewhat indefinite but concededly extensive power of Congress to regulate commerce with foreign nations and among the several states. Since Chief Justice Marshall defined commerce as commercial intercourse in all its branches, and the federal power over it one to prescribe the rule by which commerce is to be governed, acknowledging no limitations other than those prescribed in the Constitution,³⁴ the courts have consistently applied those limitations with latitude until today the ramifications of that power are multitudinous. Hence, the drafters chose to regulate not civil aeronautics but commerce by air. It would seem that this is a distinction well taken. The variety of ways in which valid resort has been had to the commerce power would indicate the immunity of this enactment from attack on constitutional grounds, especially since this is "the power to foster and protect interstate commerce and to take all measures necessary or appropriate to that end."³⁵

The appropriateness of the measure is clear, both from the practical standpoint of the advancement in the industry since its enactment, and from a review of its provisions. It is administrative in character rather than expressive of legal principles, and it would seem that this latter field has wisely been left to the states which are more competent to deal with matters of substantive law. The *Act* has been drafted with a view toward adequate but not restrictive regulation of the industry, and especially toward establishing commercial air navigation in the United States upon a basis sound in principle and method. That this end might the more readily be accomplished, there have been opened unusually abundant and reliable sources of aid, and there has been maintained an elasticity in the employment and coordination of these aids, and in the regulation of flight itself, which

³⁴ *Gibbons v. Ogden*, 9 Wheat. 1 (U. S. 1824).

³⁵ *Houston, etc., R. R. v. U. S.*, *supra* note 33, at 353.

permits the industry to expand freely and yet within limits which assure protection, not only to the industry itself, but also the persons interested in or coming into contact with it. The *Act* is limited to the commercial aspect of flight and particularly to the development and advancement of that phase of aeronautics. Such regulation and definition of limits were necessary before any real progress could be made in establishing aviation as a sound industry.