

THE UNITED STATES RADIO POLICY TO 1927,

Legislative History.

by

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A. B., University of Kansas, 1912.

Submitted to the Department of
History and the Faculty of the
Graduate School of the University
of Kansas in partial fulfillment
of the requirements for degree
of Master of Arts.

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I wish to express my indebtedness and appreciation
to Dr. J. C. Mallin of the University of Kansas for his
helpful suggestions and constructive criticism.

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August 10, 1927

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I. INTRODUCTION.

The various phases of wireless telegraphy, wireless telephony, and radio are attracting international thought and study to a greater extent to-day than at any previous period since the discovery of wireless communication.

Trans-Atlantic wireless telephone communication¹, Trans-Atlantic, Trans-Pacific, and Polar air flights as well as the demands from an industry of \$600,000,000 a year and from a listening public estimated at 20,000,000 who have invested² \$1,500,000,000 invested in radio are responsible in a large degree for the numerous newspaper and magazine articles, and the frequent comment by public speakers and intelligent Americans.

The scope of this thesis will be confined to the history of the policy of the United States government toward wireless. In the earlier history of this science the word radio does not appear, all reference is to wireless. To find the beginning of government regulation it is well to consider a little of the early history of wireless. Nearly a hundred years ago (1831) Michael Faraday discovered electromagnetic induction between two entirely separate circuits.³ A little later Samuel F. B. Morse carried on wireless experiments by electric conduction through the water across Washington Canal and across wide rivers⁴. In March 1882 a United States Patent was granted to Professor E. Dolbear of Tufts College, Massachusetts. This Patent made an approach

to the method Marconi finally developed, its frequency was very low and it was not of sufficient sensitiveness to be successful.⁵ Professor Dolbear in 1886 secured a second patent for establishing wireless communication by means of two insulated elevated plates. There is no evidence that his apparatus did or could transmit signals between separated stations⁶ but on May 7, 1902 a petition of the American Wireless Telephone and Telegraph Company of Philadelphia "praying for the extension for ten years of letters Patent No. 350, 299 being the basic patent for the art of Wireless Telegraphy and Telephony granted to Amos E. Dolbear in 1886" was referred to the Committee on Patents and ordered printed which indicates that the petitioner believed there was value in the patent. The petition stated that "the Dolbear patents would expire by limitation on or about October 4, 1903 and that the petitioner was sole owner by assignment and had expended large sums of money demonstrating the practical use in securing information, saving life and property and has received no profits whatever, and at its own cost, without assistance or encouragement in 1901 received, transmitted, and reported by its system the bulletins of the great international yacht races".⁷

The discovery of progressive propagation of electro-magnetic waves through space by Heinrich Hertz in 1887 and the measuring of the length and velocity of the electro-magnetic wave with the proof that these waves are in complete

accord with the waves of light and heat added a very important step.⁸ Marconi called the work of Hertz "the greatest discovery in electrical science in the latter half of the 19th century."⁹ The earliest reference to ariel wires and plates is in a patent granted to Thomas A. Edison under the date of December 29, 1891.¹⁰

Guglielmo Marconi carried the experiments on to success. In 1895 he was convinced that electrical action could be transmitted through the earth, air, or water by means of electrical oscillations of high frequency and in 1896 he constructed the first practical system for the generation and transmission of electric waves to a distance. He went to England immediately and on June 2, 1896 applied for a patent which the British Government issued July 2, 1897.¹¹ Many successful experiments were conducted in London and nearby, especially at Salisbury Plain. The first Marconi Station was erected on the Isle of Wight in November 1897 and the first floating station was built in December of the same year. On April 26, 1900 the British Government issued to Marconi the Patent No. 7,777 upon which all modern development is based.¹² Marconi went to St. Johns, Newfoundland in December 1901 and on December 12 received the letter "S", transmitted as a test signal from his station at Poldhu,¹³ Cornwall, which was 1,600 miles distant.

It certainly is interesting to find that Philadelphia, the home of the discoverer of electricity, continued to hold

her place in the development of that science. In 1899 the first tests in wireless telephony were made there and in 1900 words were sent by wireless across the Delaware River, a distance of one mile. By 1902 with improved apparatus, a distance of three miles was covered and during the same year the first complete wireless telephone system working in both directions, transmitting and receiving, was estab-
¹⁴lished.

Interest was immediately aroused in this novel science. Companies were incorporated in both England and the United States and here the problem of regulation has its real beginning.

II. EXPERIMENTATION.

March 26, 1902 marks the beginning of the legislative history of wireless in the United States. On that date Alexander S. Clay, Senator from Georgia, speaking for William E. Mason, Senator from Illinois, under title amendments to bills, submitted an amendment proposing to appropriate \$150,000 to provide for a wireless system of telegraphy to connect the post-offices of Washington, Baltimore, Wilmington, Philadelphia, New York, Albany, Buffalo, Cleveland, Detroit, Toledo, and Chicago. At his request the amendment was referred to the Committee on Post-Offices and Post Roads from which it did not return.¹ The first law recognizing wireless appeared in the United States Statutes of June 3, 1902. It carried in a list of expenses for which \$486,000 was appropriated the statement "for experiments in wireless telegraphy, including all necessary expenses" and later in the act the clause "for the purchase and construction of cables and land lines to connect the Farallone Islands, California with the mainland and Woman's Key or Sand Key, Florida with Key West, \$40,000, including labor and all necessary material and supplies: Provided, that in the discretion of the Secretary of Agriculture wireless communication may be installed in place of cables in which case and for which purpose not more than \$5000 of this sum shall be expended."²

The single wireless bill of 1902 was followed by one wireless bill in each of the following years 1903, 1904

and 1905. Growing interest was shown in 1908 when four bills were introduced and President Roosevelt sent a message to Congress February 13 indorsing and containing a letter from the Secretary of the Navy requesting legislation that will "insure noninterference with official messages", stating that "the Navy Department has by order of the President the control of government coast stations" but either "commercial companies or irresponsible persons may interfere with messages," and advising legislation that will provide "punishment for ^{a)} originating or transmitting false messages purporting to be official, ^{b)} interfering with any wireless station while it is transmitting an official message, and ^{c)} failing to cease sending a private wireless message when called upon to do so by an operator having an official message to be sent". The letter also stated that those restrictions were intended for peace time, that in war time more extreme prohibitions would be exercised by Executive Proclamation as a belligerent right.
³

During the period 1902 to 1912 inclusive there were thirty-five bills introduced into Congress asking for investigation of wireless, providing penalties for interfering with messages, placing wireless on revenue cutter service, requiring steamships to be equipped with wireless, asking for government ownership of wireless telegraphy, investigation of wireless telegraph companies and corporations, and for regulation of radio communication. The bills

introduced in the House of Representatives were referred to the Committees on Naval Affairs, Judiciary, Interstate and Foreign Commerce, Appropriations, Rules and Merchant Marine and Fisheries, while those of the Senate were referred to the Committees on Post Offices and Post Roads, Interstate and Foreign Commerce, Naval Affairs, Commerce, Appropriations, and the Philippine Islands.

There were two messages to Congress from President Roosevelt in addition to the one previously quoted one on April 25, 1908 dealing with the subject of the confirmation of the Wireless Telegraph Convention signed at Berlin on November 3, 1906⁴ and the other dated February 8, 1909 stating that "through the liberality of Congress and the intelligence and industry of the Navy department our Atlantic, Gulf, and Pacific Coasts are equipped with a chain of stations designed for national defense. Even our Insular territories and Alaska are equipped. In our country steps have thus been taken effectually to prevent the establishment of a monopoly in the use of the new art. I deem it highly desirable that Congress enact a law that all ocean going steamships carrying considerable passengers be required to carry efficient radio-telegraphic installation and competent operators.

What we have already done along practical business lines warrents the United States in being first among nations to enact a statute requiring the use of this safeguard of human life."⁵ Letters from the secretaries of Commerce and Labor, Navy, War and Treasury and the Governor of the Philippine

Islands containing requests similar to those incorporated in the bills were also submitted to Congress.

Of the many wireless bills, or radio as they are more frequently called after 1909, introduced preceding 1913, three were enacted into the laws. These became the basis of the United States radio regulation. In 1908, 9, and 10 there were measures introduced in the House of Representatives by Beal of Texas, Burke of Pa., Peters, McCall, and O'Connell of Mass., and Douglas of Ohio requiring radio-telegraphic installations and radio telegraphers on certain ocean steamers. These bills were referred to the Committees on Interstate and Foreign Commerce and the Merchant Marine and Fisheries. The bill (H. R. 27672) introduced by Mr. Burke was reported back by Mr. Greene of Mass. from the Committee on Merchant Marine and Fisheries, who asked that it be passed. Mr. Humphrey of Washington objected to the bill because he feared it would become the basis of monopoly and because of the cost to the owner of the vessel for equipment and the inequality since the Great Lakes were not included and the Florida Keys and Alaskan inland passage were. Mr. Goulden of New York answered that "of 110 foreign vessels one half were equipped with wireless and that 127 American vessels were equipped." Also ships on the Great Lakes were not included because there were very few stations on the Lakes. Burke of Pa. asserted there was not a monopoly be-

cause seven companies then existed. The bill passed the
House February 16, 1909⁶ and in the Senate on February 17⁷
was referred to the Committee on Commerce. Frye of Maine
and Bourne of Oregon acting for Frye, introduced similar
bills in the Senate, which were referred to the Committee
on Commerce. The bill (S7021) was reported, read, and passed
in the Senate.⁸ In the House Mann of Ill. asked to amend
by striking out the words "relating to the safety of the
vessel or those on board, the ship's position, weather, and
information to aid navigation". There was no objection to
the amendment,⁹ the amended bill passed the House,¹⁰ the
Senate concurred,¹⁰ and on June 24, 1910 on receiving the
signature of the President the United States had its first
radio law, which reads:

"After July 1, 1911 it shall be unlawful for any ocean-going steamer of the United States or any foreign country, carrying passengers and carrying 50 or more persons, including passengers and crew to leave or attempt to leave any port of the United States unless such steamer shall be equipped with an efficient apparatus for radio communication in good working order in charge of a person skilled in the use of such apparatus. It must be capable of transmitting or receiving for a distance of 100 miles day or night. This does not apply to steamers plying between ports less than 200 miles apart. Messages must be exchanged between shore

and ship. The Master of the ship is responsible--fine not more than \$5000--fine to be a lien on the vessel and such vessel may be libeled therefore in any District Court of the United States, leaving or attempting to leave each and every port of the United States shall constitute a separate offense.

The Secretary of Commerce and Labor shall make necessary regulations for proper execution of this act by collectors ¹¹ of customs and other officers of the government."

On December 14, 1911 Mr. Hitchcock of Nebraska introduced in the Senate a bill to amend the act of June 24, 1910 which required "apparatus and operators for radio communication on certain ocean steamers." ¹² He stated that vessels equipped with radio were not ready at all times to receive messages because the law required only one operator and cited a recent wreck of a vessel on which W. J. Bryan and his family were passengers. The bill was referred to the Committee on Commerce. On April 25, 1912 Senator Hitchcock urged action on the bill because of the Titanic disaster of April 15. "The Titanic had two operators but the Carpathia which came to her assistance only one, who was on the point of retiring from the apparatus. This wreck added to that of the Prince Joachim earlier in the season ¹³ demonstrates need of early action on this bill." The bill was reported by the Committee on April 29 and passed

the Senate on April 30.¹⁴

In the House the Committee on Merchant Marine and Fisheries reported the bill on May 17¹⁵ but on June 3 this Committee proposed a substitute bill which passed the House on that day.¹⁶ The Senate refused to concur, requested a conference, and the Chair appointed Smith of Mich., Burton of Ohio, and Newlands of Nevada as Conferees on the part of the Senate.¹⁷ On June 7 the House agreed to the Conference and the Speaker announced Alexander of Missouri, Hardy of Texas, and Humphry of Washington as Conferees.¹⁸ On July 17 the House agreed to the Conference report,¹⁹ on the 18 the Senate agreed,²⁰ and on the 23 the President approved the act which was to amend Section I of "an act to require apparatus and operators for radio communication" to include steamers on the Great Lakes and "an auxiliary power supply independent of the vessel's main electric power plant, must be provided which will enable the sending set for at least 4 hours to send messages over a distance of at least 100 miles, day or night; and efficient communication between the operator in the radio room and the bridge shall be maintained at all times."

The radio equipment must be in charge of two or more persons skilled in the use of such apparatus, one or the other of whom shall be on duty at all times while the vessel is being navigated. Such equipment, operators, the regu-

lation of their watches, and the transmission and receipt of messages, except as may be regulated by law or international agreement shall be under the control of the Master, in the case of a vessel of the United States: and every willful failure on the part of the Master to enforce the provisions of this paragraph as to equipment, operators, and watches shall subject him to a penalty of \$100.

Section II. That this act, so far as it relates to the Great Lakes shall take effect on and after April 1, 1913 and so far as it relates to ocean cargo steamers shall take effect on and after July 1, 1913: Provided, That on cargo steamers in lieu of the second operator provided for in this act, there may be substituted a member of the crew or other person who shall be duly certified and entered in the ships log as competent to receive and understand distress calls or other usual calls indicating danger, and to aid in maintaining a constant wireless watch so far as required for the safety of life."

Alexander of Missouri introduced a measure in the House of Representatives on May 1 that was very similar to the Senate bill.²² It passed the House, was referred to the Senate where on August 12 it was referred to the Committee on Commerce from which it did not return.²³

The law known as the Mann-Elkins Act of June 18, 1910 which amended the law of February 4, 1887 which was an act

to regulate commerce and created a commerce court provided that,

"the provisions of this act shall apply to----- telegraph, telephone, and cable companies (whether wire or wireless) engaged in sending messages from one State, Territory, or District of the United States to any other State, Territory, or District of the United States, or to any foreign country, who shall be considered and held to be common carriers within the meaning and purpose of this act, intrastate not included in this act, does not apply.

All charges made-----for the transmission of messages by telegraph, telephone, or cable, as aforesaid, or in connection therewith shall be just and reasonable; and every unjust and unreasonable charge for such service or any part thereof is prohibited and declared to be unlawful: Provided, That messages by telegraph, telephone, or cable, subject to the provision of this act, may be classified into day, night, repeated, unrepeated, letter, commercial, press, Government, and such other classes as are just and reasonable, and different rates may be charged for different classes of messages: and provided further, that nothing in this shall be construed to prevent telephone, telegraph, and cable companies from entering into contracts with common carriers for the exchange of services."²⁴

From 1910 to 1912 inclusive there were eleven bills in-

roduced in the House and four in the Senate to regulate radio communication or to regulate and control or to provide for government ownership of wireless telegraphy and wireless telephony. In the House these bills were introduced by Sheppard of Texas, Peters, Roberts, and Greene of Massachusetts, Burke of Pennsylvania, Evans of Illinois, Berger of Wisconsin, and Alexander of Missouri, and in the Senate by Depew of New York, Hale of Tennessee, and by Bourne of Oregon from the Committee on Commerce. One of the Depew bills (S. 7243) passed the Senate without debate June 16, 1910²⁵ and in the House was referred to the Committee on Merchant Marine and Fisheries from which it did not reappear. Mr. Bourne stated that Senate bill S. 6412 which was introduced by the Committee on Commerce was substantially the same as H. R. 15357 introduced by Mr. Alexander and that it was "a department bill and contained authorization for such rules and regulations as the Department, President, or Secretary of Commerce and Labor might think best. It specifies what private interest can and can not do. It is a corollary to the treaty the Senate has just signed and is necessary to carry out the treaty. Under the licensing of instruments all activities are shown, operators are also licensed, and it is compulsory with the Secretary of Commerce and Labor that upon application licenses shall be issued. Under present development there are wave lengths up to 6,600 meters, equivalent to 34 tele-

phone lines. The government has exclusive use of eight of these, 600 to 1,600 meters and amateurs may use up to 200 meters. The Commercial interests are given the use of 26 telephones, using the simile and government stations may give public service."²⁷ Burton of Ohio informed the Senate that the United States was prepared to take part in the London Conference in June and that the Titanic disaster emphasized the need of action.²⁸ Hitchcock of Nebraska offered an amendment to the bill "every coastal station opened to general public service shall at all times be ready to receive messages of such wave lengths as are required by the Berlin Conference." The amendment was agreed to and the bill passed the Senate on May 7, 1912.²⁹ On May 8 it was referred to the Committee on Merchant Marine and Fisheries in the House from which it was reported May 20 but was not debated until August 8 and 9 because of requests for delay from Mann of Illinois and Alexander of Missouri. Many amendments were offered to the measure of which thirteen by Alexander, two by Myers, and one each by Mann, Burke, Cullop, Moore, and McCall were agreed to and two by Mann refused.³⁰ The House passed the bill August 9, on the 10 the Senate concurred in the House amendments, and on the 13 the President signed the act.³¹

The law to regulate radio communication provided: "That a person, company, or corporation within the jurisdiction of the United States shall not use or operate any

apparatus for radio communication as a means of commercial intercourse among the several States, or with foreign nations, or upon any vessel of the United States engaged in interstate or foreign commerce, or for the transmission of radiograms or signals the effect of which extends beyond the jurisdiction of the state or Territory in which the same are made, or where interference would be caused thereby with the receipt of messages or signals from beyond the jurisdiction of the said state or territory, except under and in accordance with a license, revocable for cause, in that behalf granted by the Secretary of Commerce and Labor upon application therefor; but nothing in this act shall be construed to apply to the transmission and exchange of radiograms or signals between points situated in the same state: Provided, That the effect thereof shall not extend beyond the jurisdiction of the said state or interfere with the reception of radiograms or signals from beyond said jurisdiction; and a license shall not be required for the transmission or exchange of radiograms or signals by or on behalf of the Government of the United States but every Government station on land or sea shall have special call letters designated and published in the list of radio stations of the United States by the Department of Commerce and Labor. Any person, company or corporation that shall use or operate any apparatus for radio communication in violation of this section, or knowingly aid

or abet another person, company, or corporation in so doing shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding \$500, and the apparatus or device so unlawfully used and operated may be adjudged forfeited to the United States.

Section 2. The license form issued by the Secretary of Commerce and issued to citizens of the United States or Porto Rico or a Company incorporated under the laws of a state, territory or Porto Rico shall give details of ownership, location and range, purpose, wave length or lengths, hours licensed to work. The President may close or use or control a station or apparatus in time of war or peril or disaster upon just compensation to the owner.

Section 3. Licensed operator required, and if operator and his unlicensed assistants do not obey acts and treaties he shall be suspended not exceeding one year in addition to other punishment."

Also included in this act were regulations for unlicensed operators, temporary permits, furthering prompt receipt of distress signals, defining the distress call and normal wave length, forbidding private and commercial stations to use the first fifteen minutes of each hour, restricting private stations to a wave length less than 200 meters, forbidding new stations to be licensed within fifteen miles of naval and military stations, and providing for secrecy of messages.

In addition to these three radio bills that were enacted into laws in this period there were twenty-one Congressional enactments that carried radio provisions in them, usually appropriations for investigation and research, and for enforcement of laws. Provisions were made for the expenses of delegates to the International Conference at London in June 1912 and the United States share of the expenses of the International Telegraph Bureau at Berne. Appropriations for establishing and maintaining radio in the revenue-cutter service, the coast signal service and the signal service of the army were provided for in departmental appropriations. The policy of annually providing for its radio interest was continued by the Departments of State, War, Navy, and Commerce. The Treasury and Postal Departments and numerous bureaus secured money from time to time down to 1927, for research, standardization, and enforcement of powers in which radio is a part.

On June 29, 1906 Congress in the appropriation law for Naval Service included the provision "for naval wireless telegraph stations on the Pacific Coast in the States of Washington, Oregon, and California, \$65,000." The law of August 13, 1912 regulating radio communication stated "no station on shore not in actual operation at the passage of this act shall be licensed for the transaction of commercial business by radio communication within fifteen nautical

miles of the following Naval or military stations: Arlington, Virginia; Key West, Florida; San Juan, Porto Rico; North Head and Taloosh Islands, Washington; San Diego, California; and those established or which may be established in Alaska and in the Canal Zone" the measure also provided that these stations might handle commercial radio-
³⁴grams.

The laws supporting the Naval Service from 1913 to 1917 inclusive carried appropriations varying from \$5,000 to \$50,000 for land sites, instruments, apparatus, supplies, technical books, and periodicals. Usually the sum for land sites was fixed not to exceed \$10,000 and in 1916 the law provided that the land "already owned by the government selected for naval radio stations may be transferred to the
³⁵Naval Department."

A few bills were introduced in Congress asking for the erection of government stations in the United States, one by Moss of Indiana for a station on the Ohio River
³⁶ and two by Sheppard of Texas for a station at Galveston.
³⁷ Several bills were introduced asking for stations in the territorial possessions of the United States, two for Porto Rico, one for Seward Alaska and four for Unga Island Alaska, and two for the Philippine Islands. Previous to the introduction of the Philippine Island bills, President Taft in a message to Congress had stated that there were no commercial stations in the Islands, that the needs of the Insular Government,

Commerce, Army, and Navy for a station were urgent and increasing, and that a station "would add to the safety of shipping in the China Sea, and it is advisable that an official system be installed without delay and without difficulties with commercial companies."³⁸ Both of the Philippine Island bills were introduced by McLean of Connecticut, referred to the Committee on the Philippine Islands and one of the bills (S 5455) was reported but when it came up for debate Overman of North Carolina objected to appropriating \$150,000 for a Philippine station because the Philippine government had \$14,000,000 a year and he felt they should erect their own station.³⁹ Three of the Unga Island bills were introduced in the Senate by Jones of Washington, one (S 3776) appropriating \$45,000 for a radio station was reported from the Committee on Naval Affairs to which it had been referred, passed by the Senate and on August 22, 1916 referred to the Committee on Naval Affairs in the House from which it did not return.⁴⁰ The Territorial Legislature of Alaska petitioned June 1, 1921 for stations "to encourage, aid, and support the people of Alaska in their efforts."⁴¹

Despite the fact that not one of these bills for the erection of stations passed Congress, provisions are found in other laws authorizing and making appropriations for stations. On August 22, 1912 not to exceed \$1,000,000 of which \$400,000 was available, was allowed for one station each

on Isthmian Canal Zone, California Coast, Hawaiian Islands,
⁴²
Samoa, Guam, and Philippine Islands. In 1915 these
stations were voted \$1,500,000 but only \$400,000 available,
⁴³
⁴⁴
and \$300,000 was made available in 1916. In 1912 Congress
authorized the President to establish radio communication along
⁴⁵
the Panama Canal. The sum of \$350 was allowed in 1917 for
the "purchase and maintenance of a native pony and a two-
wheeled rig for the use of the commanding officer of the
high-power radio station at Sangley Point, Philippine
⁴⁶
Islands. In 1919 the sum of \$32,500 was allowed for a
radio shore station at Otter Cliffs Maine. In the 1917
deficiencies law \$200,000 was allowed the high-power radio
⁴⁷
station on the island of Porto Rico and in 1921 the Sec-
retary of Navy was given power to exchange or lease land
under Navy control in Porto Rico for a site for a receiving
and distant control radio station but "in time of war or
emergency the Navy Department shall have free and unlimited
⁴⁸
⁴⁹
use of such land."

A letter to the Honorable Lemuel P. Padgett, Chairman
of the Committee on Naval Affairs on May 7, 1914 from
R. S. Griffin, Engineer in Chief, U. S. Navy states that the
Arlington station cost \$267,304, and that six stations can
not be erected for a million dollars but that they hope to
build about five stations and establish long distance com-
munication between Honolulu and Manila making unnecessary

a high-power station at Guam, and not erecting a high-
power station in Samoa.⁵⁰

The question of the manner by which the United States government secured these stations was pretty well brought out on January 29 and February 7, 1919 during the debates on the appropriations requested by the Bureau of Steam Engineering. In discussing a cut of \$3,000,000, Rowe of New York asks whether it is understood that \$1,450,000 of this amount had been paid to the Marconi Company for their ship to shore stations and during the debate on whether the Navy Department had the right to make the purchase Mann of Illinois asserts "the Secretary of the Navy without authority, in violation of law for which he ought to be impeached and removed from office-----has spent money for radio stations. We will give them all the money they can legitimately use. I never-----have seen such wanton contempt of Congress as is exhibited in this transaction."⁵¹ Walsh of Massachusetts wanted to know whether it was under the clause allowing \$10,000 for land sites, that the Secretary of Navy purchased the radio stations. Padgett of Tennessee informed the House that that was the source of authority for "shore stations but that the high-power stations were secured under the general power given to the President and lump-sum appropriations in connection with the Shipping Board, Railroad Administration, and deficiency bill."

Lehlback of New Jersey brought out the information that although the Committee on Merchant Marine and Fisheries had refused support to a bill giving the government a monopoly of radio business and stations in 1917, they "learned in 1918 to their amazement that the Secretary of the Navy had expended \$1,600,000 in the purchase of nine stations on the Pacific Coast belonging to the Federal System and ship-to-shore stations of the Marconi Company on the Atlantic, paying for the Marconi stations \$1,450,000 and that the money came from a lump-sum appropriation of \$35,000,000 to the Bureau of Steam Engineering." In order to "prevent the government taking over other stations which they are very anxious to get and which they intend coercing the present owners to sell", he offered an amendment "that no part of this appropriation shall be expended for the acquisition of radio stations, in whole or in part, for the transmission or reception of commercial messages." The House
52 agreed to the amendment.

A letter from Josephus Daniels, Secretary of the Navy, to L. P. Padgett, Chairman of the Committee on Naval Affairs was given to the House by the latter. In the letter Secretary Daniels said he did not ask Congress for the authority to purchase because the matter was entirely under his jurisdiction. "Under authority vested in the President for the prosecution of the war all radio stations were placed under

control of the Navy Department and rental paid. This control was necessary to insure reliable communication. A German Company remained in control of the powerful high-power station at Sayville and sent unneutral messages to German Cruisers operating in the Atlantic." Marconi stations proved of great military value during the war and even more valuable to our enlarged Merchant Marine in peace. The policy of purchasing the Marconi Company stations was adopted by the Shipping Board, who paid \$519,000, the Railroad Administration \$141,200, and the Navy Department \$789,500. The three had been paying a total annual rental of \$597,887.24. "Radio telegraphy, on account of unavoidable interference must have centralized and unified control, which in the opinion of the Department can be attained only by government ownership. The Department desires to prevent the erection of stations by companies incorporated in this country, but secretly under foreign control, as happened in case of the Sayville and Tuckerton stations."⁵³

Fearing a British monopoly in the field of wireless Germany invited the nations of the world to meet in Berlin in 1903 to draw up an "international agreement for the regulation of wireless."⁵⁴ Little was accomplished but three years later the delegates from twenty-seven powers signed a Wireless Telegraph Convention at Berlin on November 3, which

was approved by the Senate of the United States on April 3, 1912 and by the President on April 22, 1912. The Convention made regulations that applied to all wireless telegraph stations open to the public between the coast and vessels at sea. Reciprocal exchange of telegrams was required and a limited public service might be given. Each power promised to give information necessary to facilitate transmission of messages, to avoid interference, and to give priority to calls of distress from ships. Provisions were made defining rates, authorizing future Conferences, and for the arbitration of disputes. Many sections of the International Telegraph Convention of St. Petersburg of July 10-22, 1875 were adopted as applicable to international wireless telegraphy. The plenipotentiaries signing for the United States were Charlemagne Tower, H. N. Manney, James Allen, and John I. Waterbury.
55

A second International Radiotelegraphic Convention was held in London in 1912 in which fifty-six powers participated. Most of the provisions were similar to those of the Berlin Convention but greater efforts were made to secure cooperation of the nations and the work of the International Bureau was more carefully defined. Twelve plenipotentiaries signed the Convention for the United States at London on July 5, 1912, the Senate agreed to it on January 22, 1913,
56 and the President ratified it February 5, 1913.

The subject of an interallied radio conference was introduced in the House of Representatives by Greene of Massachusetts on February 14 and 25, 1919 in the form of resolutions asking that the delegates to such a conference shall not commit the United States to any policy of government ownership or operation and directing the Secretary of the Navy to furnish the House of Representatives with all papers relating to such a conference, "together with specific information showing the origin, if a matter of record, and the stated purpose of such conference, what countries have agreed to be represented thereat, what naval officers or other persons have been appointed as representatives of the United States thereto, whether any radio companies in the United States are represented in the American delegation, and what instructions, if any, have been given to said representatives." The House agreed to the resolution
⁵⁷
(H. R. 577).

A message from President Wilson on September 10, 1919 asking Congress whether in view of the act of March 4, 1913 which forbade "the Executive to extend or accept any invitation to participate in any international Congree without the specific authority of the law to do so," they would authorize the extension of an invitation and the appropriations necessary to defray the expenses of an international conference to be held in Washington "to consider all inter-

national aspects of communication by land telegraph, cables, and wireless telegraphy and to make recommendations to provide the entire world with facilities of this nature."⁵⁸

Lodge and Rogers of Massachusetts introduced in the Senate and House respectively in October 1919 bills authorizing the President to arrange and participate in an international conference to consider international communication. The Rogers bill (H. R. 9822) was reported in the House from the Committee on Foreign Affairs October 16 and during the debate on October 22 it came out that there was a conviction that the President should submit the names of the United States conference representatives to the Senate for confirmation, that the chief question before the conference would be the disposal of the captured German Cables, that there were innumerable questions relating to radio operations, and that four news agencies control the gathering and disseminating of the worlds news, Associated Press for the United States and Canada, Wolff for Germany, Scandinavia, and Russia, Renter for Great Britian and Asia, and Havas for Latin Europe and Latin America. The bill passed the House ⁵⁹ October 22. On October 23 it was referred to the Senate Committee on Foreign Relations from which it was reported and passed by the Senate without debate on December 8,⁶⁰ and signed by the President December 17, 1919.⁶¹

The law authorized the President to call "an international conference to assemble in Washington and appoint with the consent of the Senate, representatives to participate therein, to consider all international aspects of communication." The sum of \$75,000 was appropriated for expenses but no part of the sum was to be used "in entertainment or for purchase of medals and badges."⁶² On March 4, 1925 an additional sum of \$75,000 was appropriated "for the Conference on International Communication authorized by act of December 17, 1919."⁶³

III. RELATION TO THE WORLD WAR.

The importance of wireless telegraphy and telephony, which had been experiencing a steady growth since 1896 was emphasized during the World War. The cutting of cables, the destruction of telegraph and telephone lines, and the use of the airplane and dirigible proved the value of radio in time of war. After President Wilson declared the United States a neutral on August 4, 1914¹ and issued on November 13, 1914 a proclamation of "rules and regulations governing the use of the Panama Canal". One of which provided, that "the radio installation of any vessel of a belligerent power, public or private, or any vessel-----in the service of a belligerent shall be used only in connection with Canal business to the exclusion of all other business while within the waters of the Canal Zone, including the waters of Colon and Panama Harbors."²

The influence of the War was seen in three bills introduced by Nolan of California in the years 1916, 1917, and 1919. As far as the title gives information the bills seem identical. Each title stated that it was "a bill to prohibit the employment of any person who is not a citizen of the United States, as a radio operator or telegrapher on any vessel of the United States engaged in interstate or foreign commerce and to establish the age of radio operators." Each bill was referred to the Committee on the Merchant Marine

and Fisheries and there met its death.

In the "act to defray war expenses" of October 3, 1917 was included "a tax of five cents on each telegraph, telephone, or radio dispatch, message, or conversation originating in the United States and for the transmission of which a charge of fifteen cents or more" was levied.⁴ In addition to this the revenue Act of February 24, 1919⁵ and November 23, 1921⁶ added the clause "and if the charge is more than fifty cents, a tax of ten cents" shall be levied.

On October 6, 1917 in "an act to define, regulate, and punish trading with the enemy", the President was given the power during the war to censor "communications by mail, radio, or other means of transmission between the United States and any foreign country."⁷ Aswell of Louisiana introduced in the House on June 27, 1918 a joint resolution (H.J.309) "to insure the continuous operation of electrical communicating systems, to guard the secrecy of war dispatches and to prevent communication between public enemies."⁸ The bill was referred to the Committee on Interstate and Foreign Commerce from which it was reported on July 4. During the debate of July 5 Fan of North Carolina informed the House that the President felt that action should be taken as early as possible. Campbell of Kansas and Madden of Illinois expressed doubts about the emergency and strike but Madden said he would do anything the President wanted done if he

would send a message of emergency saying it is necessary to successfully conduct the war. Fess of Ohio stated that he was opposed to government ownership but "if in a strike the employer and employee can not agree to operate" then the President should have the power to take over and operate. Sims of Tennessee presented letters from the President, the Post Master General, and the Secretaries of the Army and Navy saying that such power was imperative to safeguard the public interests.⁹ The House passed the resolution on July 5, the Senate on July 6, and the President signed it on July 16,¹⁰ 1918. This act was known as the wire control law and provided that, "the President during war is authorized whenever he deem it necessary for national security or defense to supervise or take possession and assume control of any telegraph, telephone, marine cable, or radio system or any part thereof and to operate for the duration of the war. Supervision, possession, control, or operation shall not extend beyond the date of the proclamation by the President of the exchange of ratification of the treaty of peace. Just compensation shall be given for such supervision."¹¹

Bills to repeal the wire control law and restore radio stations to private ownership and operation were introduced in the House by Esch of Wisconsin and in the Senate by King of Utah, White of Maine, and Kellogg of Minnesota. The Kellogg bill (120) was referred to the Committee on Inter-

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state Commerce and was the only one of this group to be
13 reported. Cummins of Iowa argued that the people, the
President, and the Post Master General desired the repeal
14 of the law and Watson of Indiana expressed in a lengthy
speech the uselessness of the government taking over control.
15 The Senate passed the bill June 10, 1919. The House
Committee on Interstate and Foreign Commerce received and
reported the bill which was debated and was amended by Moon
16 of Tennessee, Madden of Illinois, and Esch of Wisconsin.
The amended bill passed the House June 19, the Senate dis-
agreed with the House amendments and asked for a conference.
Cummins, La Follette, and Pomerene were appointed Senate
17 conferees and Esch, Hamilton and Sims were appointed as
18 conferees by the House which agreed to the Conference.
On June 25 Esch filed the Conference report with the House
19 and it was agreed to on the 27. Cummins presented the re-
port to the Senate and it agreed to the measure on the 27.
20 The President signed the bill on July 11. The act which re-
pealed the wire control law, provided for the return of the
property taken under that act, and provided that compensation
21 be paid for use of that property.

The President by Executive Order authorized the return
at midnight February 29, 1920 of all radio stations, which
had been under the control of the government, to their res-
pective owners and stated that they were now subject to the

act to regulate radio communication of August 13, 1912.

The law of February 28, 1920 which was "an act to provide for termination of Federal control of railroads and systems of transportation, to provide for settlement of disputed between carriers and their employees; to further amend an act entitled 'an act to regulate commerce' approved February 4, 1887" defined common carrier as including "pipe-line companies, telegraph, telephone, and cable companies operating by wire or wireless." The law also stated that all charges made for "the transmission of intelligence by wire or wireless----shall be just and reasonable, and every unjust or unreasonable charge-----is prohibited and declared to be unlawful: Provided, That messages by wire or wireless-----may be classified into day, night, repeated, unpeated, letter, commercial, press, government, and such other classes as are just and reasonable, and different rates may be charged for the different classes of messages.

23

In carrying out the provisions of the foregoing wire control laws an appropriation of "\$14,000,000 to compensate the owners for the deficit incurred in operation of telegraph and telephone under the government" was granted June 5, 1920.

24

In the debate on a bill (H. R. 7111) introduced in the House by Kahn of California "to make settlement of damages and compensation due by the United States for infringement of radio patents connected with the prosecution of the War"

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it developed that the government had seized many patented devices which were used in radio, and that claims believed to be about \$30,000,000 on 2,500 patents were involved. Blanton of Texas opposed the bill on the conviction that the claims should come through the Court of Claims. Goodykoontz of West Virginia moved to strike out the enacting clause.
26

The House agreed to strike it out.

The demand for the opening of government radio stations for commercial purposes was first expressed in Congress on May 4, 1917 when Gould of New York introduced a bill in the House providing for such use between the United States and
27 Hawaii, Guam, and the Philippine Islands. Similar bills were introduced in 1919 by Curry of California, Greene of Massachusetts, Poindexter of Washington, and McNary of Oregon.

Two Executive communications from the Secretary of the Navy were referred to the Committee on the Merchant Marine and Fisheries in the House. One of these transmitted a proposed bill authorizing the use of radio stations under the control of the Navy Department for commercial purposes. It was not until 1920 that action was taken on that proposition. Greene of Massachusetts introduced such a bill in the House and Poindexter of Washington in the Senate. The Senate bill (J. Res. 170) was referred to the Committee on Naval Affairs March 4, 1920,
28 reported favorably, debated and

passed on March 10. In commenting on the return of private radio stations to their owners Poindexter stated that the "Navy has been furnishing to the Orient a low rate service, giving in some localities commercial service," and that it was necessary that this service be continued. A letter from Secretary of the Navy Daniels informed Congress that with the return of the "privately owned radio stations at midnight February 29, 1920 commercial and press service will not be handled between San Francisco and Manila, United States and Norway, and that commercial service between the United States and Germany, Constantinople, and Vladivostok" would cease but the Navy would continue temporarily to give service. He suggested early action. Phelan of California argued that the understanding with the Orient would be better if accurate information might be secured. An editorial by V. S. McClatchy in the Sacramento Bee states "our commercial interests and prestige as a nation in the Far East are suffering serious injury from unfriendly propaganda made possible by the agencies now controlling news communication in that section of the globe. Independent news service is necessary for
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peace."

The bill was referred to the House Committee on the Merchant Marine and Fisheries on March 12, 1920, reported
30
31 May 19, and debated May 26. After the Clerk read the bill the Committee moved to strike out all after the enacting clause and insert their amendment. The amendment and the

amended bill were agreed to.³² The Senate concurred in the
House amendment on May 29³³ and the President signed the
measure June 5, 1920.³⁴

This law of June 5, 1920 authorized the Secretary of the Navy "under terms and conditions and at rates prescribed by him, which rates shall be just and reasonable and which upon complaint, shall be subject to review and revision by the Interstate Commerce Commission to use all radio stations and apparatus owned by the United States and under the control of the Navy Department for press messages of any newspaper published in the United States, its territories, or possessions, or published by citizens of the United States in foreign countries, or by any press association of the United States, and for----private commercial messages,-----the rates-----for which shall not be less than the rates charged by privately owned and operated stations for like service.-----Such use shall terminate and cease-----when ever privately owned and operated stations are capable of meeting the normal communication-----all rights-----shall terminate and cease in any event two years from the date this resolution take effect. All stations-----shall be used and operated in accordance with the provisions of the act of Congress of August 13, 1912."³⁵ On April 14, 1922 the final termination for the preceeding act was fixed at "June 30, 1925 except China which shall cease January 1,³⁶ 1924." On February 28, 1925 the final termination was

again extended. This act extended the rights until June 30,
³⁷
1927, "except in China which terminated January 1, 1924."

The fortifications appropriation law of July 6, 1916 provided that John Hays Hammond, Jr. and the Radio Engineering Company of New York should be paid \$750,000 for "their discoveries and inventions in the art of control by radio-dynamic energy of the movement of water-borne carriers of high explosives" if a "board consisting of three Army and three Navy Officers to be appointed by the President shall be favorable to the acquisition after observing a demonstration of such control of torpedoes. The patents in case of purchase to be issued to the United States and to be kept
³⁸
secret." Again in 1919 money was appropriated for the investigation of the radiodynamic torpedo unit of John Hays
³⁹
Hammond, Jr. But a law of June 30, 1922 provided that the unexpended portion on January 1, 1923 of the \$750,000 should be "carried to the surplus fund and covered into
⁴⁰
the Treasury."

IV. BROADCASTING.

Telegraphic broadcasting in the years it had been serving the people had not aroused general public interest as did wireless telephony by the broadcasting of election returns on election night in 1920. Telephonic broadcasting was not new having been used in 1908 by De Forest and Fessenden, and about the same time a few listeners had heard Caruso over the radio but by 1920 the War had prepared the way for great ¹ public interest.

The first authentic list of wireless stations in the world was made in 1913 and recorded 2,412 stations. Except for the years 1917, 1918, and 1919 when amateur and special land stations were closed in the United States there was a steady growth in the number of stations. There were 8,868 stations in 1919, 17,404 in 1920, 23,848 in 1921, and 32,309 ² in 1922.

Many questions appeared paralleling the growth of wireless stations and some of them demanded long and serious consideration by Congress. The problem of regulating radio communication and amending the law of 1912 so as to provide for the licensing and controlling of the many stations was an urgent one. The question of the ownership of the air, which had under old English law been considered the property of the man who owned the land below it, now demanded more careful consideration because of its use both for radio communication and for air transportation. The problem of the owner-

ship of the air brought up for consideration the question of vested interests, whether an individual or company through use of a given wave length acquired a monopoly of that wave length. Monopoly might also be established in sending and receiving messages, manufacture and sale of apparatus, Federal government ownership or control to the exclusion of the States, and exclusive control of radio parts through patents.

The protection of the right of freedom of speech and of copyrights as well as the regulation of advertising and placing of radio in the capitol building demanded and received the attention of Congress. A bill providing for the placing of radio in the Capitol building was first introduced by Brennan of Michigan in 1922 in the House of Representatives which provided "for the installation and operation of radio-telephone transmitting apparatus for the purpose of transmitting the proceedings and debates of the Senate and the ³ House of Representatives." This bill was referred to the Committee on the Merchant Marine and Fisheries and was not reported. On March 27, 1924 Howell of Nebraska introduced a resolution (S. Res. 197) requesting that a "commission of experts from the War and Navy Departments be appointed to investigate and report to the Senate on the equipment of the Senate Chamber with electrical transmission and receiving apparatus, without defacing the Senate Chamber, each Senator at his desk may clearly hear, without the use of a head

receiver the proceedings of the Senate at all times in whatever tone of voice conducted, and additional equipment necessary for broadcasting by radio the proceedings of the Senate and the House of Representatives throughout the country, utilizing the radio stations of the War and Navy Departments. Such report to include the cost of such experimental installation together with the expense of maintenance and operation thereof." Harrison of Mississippi asked the Senator to amend his bill by "providing that a radio outfit shall be placed in the Attorney-General's office as well as the White House so that we can hear what is going on down there". Heflin of Alabama believed such action a good thing and that it would stimulate the attendance of the Republican Senators. Lodge of Massachusetts asked that the resolution be referred to the Committee on Rules because it concerned the Capitol Building itself.⁴ On the 28 when the question of reference to the Rules Committee was under consideration Howell stated that the resolution "merely asked for information,-----that the United States Navy has \$25,000,000 invested in radio appliances, the Army \$15,000,000 and each has some of the best radio experts in the United States." He also stated that two representatives of the Radio Corporation of America had called on him that morning and "intimated that their Corporation would be willing at no expense to broadcast the proceedings of Congress." Lodge questioned

whether the Senate wanted everything said there broadcast.
The resolution was referred to the Committee on Rules,
reported on April 30,⁶ debated, amended, and agreed to by the
Senate on May 2.⁷

A letter from John W. Weeks, Secretary of War dated May 17, 1924 acknowledged the receipt of Senate Resolution 197 and stated that Major Joseph O. Manborgue of the Signal Corps was appointed to act for the War Department.⁸ On May 27 a letter from Secretary Weeks informed the Senate that because of the absence of Major Manborgue, Captain Fred P. Andrews had been asked to act.⁹ On February 28, 1927 Dill of Washington called the attention of Curtis of Kansas to the fact that no report had ever been received in pursuance to the request contained in S. Res. 197. Curtis knew of no report having been made and promised information as soon as he received it. Dill felt that they should "have the information" and while he had "no desire to press for any action in this session of Congress" he did "not want the next session to meet without having the information. Many of the debates which are now going on in Congress might well be considered as being suitable to put over the radio."¹⁰

Two bills were introduced in 1926 asking that the copyright law of 1909 be amended with respect to radio and broadcasting. Both bills were referred to the Committee on Patents but neither one was reported from the Committee.¹¹

Two bills were introduced by White of Maine in 1923 "requesting the Federal Trade Commission to investigate and to report to the House the facts relating to the ownership of radio patents." Both were referred to the Committee on the Merchant Marine and Fisheries, ¹² one of them (H. R. 548) was reported from the Committee, and was agreed to by the House on March 3, ¹³ 1923. Of the six bills introduced in the House between 1917 and 1923 dealing with the subject of monopoly three wished "to secure to the United States a monopoly of electrical communication for hire, to provide for the acquisition by the Postal Department of the telephone and telegraph networks, and to license certain telephone lines, radio, and telegraph agencies." Two of these were referred to the Committee on the Post Office and Post Roads ¹⁴ and one to the Committee on Interstate and Foreign Commerce. ¹⁵ A fourth bill wished to place electrical communication under military control and was referred to the Committee on Military Affairs. ¹⁶ The fifth bill wanted "to regulate and control the manufacture, distribution, storage, use and possession in time of war, of apparatus used in radio communication. It was referred to the Committee on Naval Affairs. ¹⁷ The sixth bill asked for an investigation into the operations and accounts of the Radio Corporation of America, the American Telephone and Telegraph Company, the Westinghouse Electric and Manufacturing Company, the General Electric Company, and the United Fruit Company"

and was referred to the Committee on the Judiciary. None of these bills was reported but frequently the question of monopoly arose during the debates especially in the debates on regulation of radio. In the Senate debate on the tax reduction bill of 1924 Wadsworth of New York asked for the Committee's attitude on taxing radio sets. Smoot replied that "the Committee was advised that radio sets in America are made by one great concern in the United States, a monopoly pure and simple. Every dollar the trade will bear is being charged for them now and any tax that is imposed will not make a single penny of difference in the price at which they will be sold." Dill would not accept this idea. Wadsworth not only doubted the tax idea but also questioned the monopoly. He believed that an infant industry should not be taxed. Smith of South Carolina and Smoot were positive it was not an infant industry. Swanson of Virginia insisted that "this is a tax reduction bill and as such new taxes should not be levied." Dill believed radio a necessity to the farmer and that this tax was a nuisance tax, and unworkable. Doctor Capeland maintained the value of radio to isolated families in disseminating education and "knowledge of health, chemistry, soil, weather, marketing, literature, and music"-----and that "this invention adds not alone to their happiness but to their length of life" and Smith of South Carolina declared the radio superior to both telephone and telegraph, even in its infancy, because of its use in the

terrific tornado which except for the radio shut off the outside world for hours. The tax was voted down but the monopoly question remained for future debate.

This increased interest in radio was indicated by the bills introduced in Congress. From 1915 to 1920 there were eleven bills introduced having as their general title the statement "to further regulate radio communication." The three House bills were referred to the Committee on the Merchant Marine and Fisheries, seven of the Senate bills were referred to the Commerce Committee and one to the Committee on Naval Affairs. Not one of these bills was reported from the Committee to which it had been referred. There were thirty-one bills introduced during the period 1921 to 1927 inclusive, having as their object the regulation of radio.

The titles of these bills indicated that there was a desire to amend the "act to regulate radio communication of August 13, 1921," to encourage the development of radio, to authorize the Secretary of Commerce to regulate radio-broadcasting stations, and to reaffirm the use of the ether for radio communication. All of the House bills of this period, of which nine were introduced by White of Maine, were referred to the Committee on the Merchant Marine and Fisheries. Five of the Senate bills were introduced by Dill of Washington, three by Howell of Nebraska, three by Kellogg of Minnesota, two by Capeland of New York, and one each by

Borah of Idaho, Poindexter of Washington, McNary of Oregon, and Calder of New York. Twelve of the Senate bills were referred to the Interstate Commerce Committee, three to the Commerce Committee, one to the Committee on Naval Affairs, and one of the Senate bills (S. 125) was acted upon in each house without having been referred to a committee.

Of the thirty bills referred to various committees, one Senate and three House bills were reported. The first one to be reported was the House "bill (H. R. 13773) to amend an act to regulate radio communication, approved August 13, 1912, and for other purposes" which had been introduced January 11,
20 21
1923 by White of Maine, reported January 16, debated
22 January 24 and 31, agreed to on January 31 by the House, and on February 8, 1923 referred to the Senate Committee on Inter-
23 state Commerce from which it was not reported. This bill required of all who used or operated for radio communication, a license granted by the Secretary of Commerce, who had the power to classify stations and operators, to prescribe the service to be rendered, to assign wave lengths, to make, alter, or revoke regulations applicable to all licensed stations not inconsistent with Act of Congress or radio conventions, to designate location of stations, wave lengths, kinds of instruments and apparatus, area served and time and method of operating, and to make such other regulations as he deemed necessary. Each license had to provide that the President in

time of war or disaster might close, use, or control such station upon just compensation to the owners. Government stations were not placed under the above rules but received their wave lengths from the President. Aliens and foreign governments were prohibited from owning or controlling radio stations. Station licenses, wave lengths, and rights granted could not be transferred without the consent in writing of the Secretary of Commerce.

The Secretary of Commerce had the power to grant a license, the term of which was limited to ten years, which could be revoked or renewed, and he could refuse a license if there was evidence of a monopoly of radio communication or of the manufacture or sale of apparatus.

Applications for licenses were required to give in writing facts as to citizenship, character, financial, technical, and other ability of the operator to operate the station. Station licences must state ownership. They shall not be transferred in violation of this act and no vested property right is granted in the license granted. Licenses may be revoked on failure to comply with regulations or when the Interstate Commerce Commission finds any licensee has made unjust or unreasonable charge or whenever the Secretary of Commerce shall deem such revocation to be in the public interest.

Apparatus could be operated only by a licensed operator except in emergencies when the Secretary of Commerce could grant temporary licenses, which could not be granted to an

alien nor to a representative of a foreign country.

The act provided for an advisory committee to aid the Secretary of Commerce in administrating laws, regulations, and treaties, and to study scientific problems. The committee was to consist of fifteen members, one appointed by each of the following: Secretary of State, Secretary of Treasury, Secretary of War, Secretary of Navy, Secretary of Agriculture, Postmaster General, Secretary of Commerce, the Chairman of the United States Shipping Board and seven members of attainment in radio to be designated by the Secretary of Commerce.

Those not in the government service were to receive \$25 per
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diem.

After the reading of the bill White of Maine gave a history of radio in which he informed the House that on January 1, 1923 every state in the union had at least one broadcasting station except Mississippi, that there were 17,000 private stations with only 69 wave lengths, and that regulations were essential. He informed them that the bill before the House had been framed by the Radio Conference of
25
the Summer of 1922 and had the unanimous recommendation of the Committee on the Merchant Marine and Fisheries. Jones, Blanton, and Hardy, all of Texas, objected to the bill on the basis of too much regulation by the federal government, too much power given to the Secretary of Commerce, and too many federal employees now to create a new bureau of fifteen.

Blanton wanted the rights of the States protected and recognizing the need of supervision said he would agree to the bill if some limitations were included. Dickinson of Iowa objected to the connection of General Harbord with the Radio Corporation of America. The chief friends of the bill were White of Maine, McKenzie and Chindblom of Illinois, and Crowther of New York. Connally of Texas, Strong of Kansas, Barbour of California, Abernethy of North Carolina, Fess of Ohio, Evans of Nebraska, Butler of Pennsylvania, Davis of Tennessee, Roach of Missouri, London of New York, and Tilson of Connecticut had questions for information or comments to make. ²⁶

Only one of the Senate bills was reported and that was the bill by Howell of Nebraska "reaffirming the use of the ether for radio communication or otherwise to be the inalienable possession of the people of the United States and their Government" introduced on March 25, 1924, referred to the Committee on Interstate Commerce, ²⁷ and reported on March 28. This bill provided that although the ether was the inalienable possession of the people of the United States the right to use it might be granted by law for terms of not to exceed two years but in case of war or national emergency the President without liability for damages could terminate any or all licenses. "All licenses heretofore granted shall terminate in two years but may be renewed upon filing with the Secretary of Commerce an application that agrees to accept

the provisions of that act." There was very little debate on the bill but Howell of Nebraska, Robinson of Arkansas,²⁹ King of Utah, and Bruce of Maryland made a few remarks.³⁰ The bill passed the Senate April 7, 1924, was referred by the House to the Committee on the Merchant Marine and Fisheries,³¹ on April 8, and was reported on May 13. On January 23, 1925 Edmonds of Pennsylvania asked that the Senate bill be referred back to the Committee on the Merchant Marine and Fisheries and that was the last that was heard of it.³²

White of Maine introduced two bills in the House of Representatives in March 1926 "for the regulation of radio communication," both were referred to the Committee on the Merchant Marine and Fisheries³³ and reported from it.³⁴ The one reported first was laid without objection on the table.³⁵ The bill (H. R. 9971) introduced on March 3 and reported from the Committee on March 5 was known as the White bill. It was called for debate by Scott of Michigan and was the subject of long debates in the Committee of the Whole House on the State of the Union on March 12 and 13.³⁶ Davis of Tennessee, who filed the minority views, argued that the bill did not deal with monopolies and since a report from the Federal Trade Commission showed "conclusively, by admitted contracts that there was a radio monopoly" and that it had filed complaints, which were still pending against the members of this monopoly³⁷ he felt that such regulation should be in the bill. He stated "that the Radio Corporation

of America, the General Electric Company, the American Telephone and Telegraph Company, the Western Electric Company, Westinghouse Electric and Manufacturing Company, the International Radio Telegraph Company, the United Fruit Company and the Wireless Specialty Apparatus Company are named as respondents and are alleged to have violated the law against "unfair competition" and that they hold a "monopoly in radio apparatus and communication both domestic and transoceanic," that the Radio Corporation controlled "all high-powered stations in this country except those owned by the United States Government and held exclusive agreements with Norway, Germany, France, Poland, Sweden, Netherlands, South America, Japan, and China." Davis also stated equal rights had not been given political candidates by the broadcasting companies, that they were "arbitrary and tyrannical."

Blanton, Johnson, Black, and Jones all of Texas, McKeown of Oklahoma, Moore and Bland of Virginia, Larsen of Georgia, Bankhead of Alabama, Hill of Maryland, Cellar of New York, O'Connell of Rhode Island, Griffin of New York, and Cooper of Wisconsin argued against the bill, most of them agreeing with Davis of Tennessee in demanding legislation to secure protection against monopoly. Cellar objected to the advertising menace and wanted all paid advertisements announced as such. Black was opposed to so much government regulation and Cooper wanted a permanent commission that could

be freed from political control. Blanton was opposed to having a retired army officer who was receiving a salary for life from the government, paid \$50,000 a year by the Radio Corporation for services rendered them. He tried to amend the bill to provide for the punishment of slander by the Federal Courts. His amendment was accepted by the Committee on the Whole House but was rejected by the House later. Many other amendments were offered most of them failed to be accepted. Davis offered about ten amendments the great majority of which were directed against monopolies and failed, but one permitting the majority of the Commission to determine the meeting place of the commission was accepted as was one by Larsen permitting the President to designate the Chairman of the Commission. A Johnson amendment "to prevent discrimination either as to charge or service" was accepted but another of his to grant "equal facilities and rates to all political parties and candidates" was opposed by White on the principle that it was not germane and the Chair sustained the point. Moore offered an amendment making "it a civil procedure rather than criminal," which was accepted. Amendments by Moore, Hill, and Bankhead correcting the language of the bill were accepted.

Scott of Michigan, White of Maine, Free of California, Lehlback of New Jersey, and Crowther of New York defended the bill. Crowther and Free maintained there was no mono-

poly. Free said there were thirty-five concerns making tubes, if the rates were unjust the Interstate Commerce Commission should investigate, and if there was a monopoly the courts or the Federal Trade Commission should hear the cases.

Lehlback was opposed to a Commission but believed legislation necessary so supported the bill. The provisions of this bill were similar to those of the White bill of 1923.

The bill carried the House by a vote of 218 yeas to 125
38 nays on March 15, 1926, was reported in the Senate on March
39 16, and referred to the Committee on Interstate Commerce
40 from which it was reported on May 8 with an amendment. Dill
of Washington on June 11 and 26 submitted amendments intended
to be proposed by him to the bill (H. R. 9971), which were
41 ordered to lie on the table and to be printed. On June 23
he asked the Senators to await discussion of the White bill
until the bill which was "sometimes called the Dill bill but
42 is in reality a Committee bill is reported." On June 28
and 30 amendments to the bill (H. R. 9971) were submitted by
Edge and Robinson and were ordered to lie on the table and
43 be printed. In the Senate Committee of the Whole House on
44 June 30, the bill H. R. 9971 was considered. Dill of
Washington reviewed the existing conditions regarding radio.
He stated that "radio is free in the United States and that
while only six per cent of the people live in the United
States, it has eighty per cent of all receiving sets and five

times as many broadcasting stations as all the rest of the world combined," that there were "only 95 broadcasting channels in the United States available for broadcasting purposes and in order to avoid interference with Canadian broadcasters the Department of Commerce had made a tacit agreement with Canadian Government Officials that the United States would not grant six of these 95 wave lengths and Canada would not grant licenses for 89 of these channels"-----to which 528 stations are assigned. "The supreme use of radio is for ships at sea"-----and in 1924 there were 2,741 ships equipped with radio. "As broadcasting developed and the Secretary of Commerce found he was without power to regulate it, he began calling annual Conferences of those interested in radio broadcasting, including broadcasters, manufacturers, and distributors of radio apparatus."

The first Conference held in 1922 recommended that Congress give the Secretary of Commerce the power to control transmitting stations and advised the Secretary to arrange bands of sixteen wave lengths each for different kinds of radio transmission. These suggestions were not followed. The Conference of 1923 allocated wave lengths, classified stations, and limited their power. The 1924 Conference broadened the broadcasting band, raised the limitation on power, opposed censorship by the Department of Commerce, and encouraged chain broadcasting. The Secretary of Commerce

adopted practically all of these recommendations. The 1925 Conference made a few minor changes in wave lengths and "passed resolutions urging legislation as to advertising and fees, and that no more licenses be issued until the number of stations had been reduced." As a result of these conferences according to Dill radio broadcasters by voluntary agreement have controlled broadcasting by permitting the Secretary of Commerce to exercise most of the power that he does.⁴⁵

Present conditions made legislation imperative if the Government is to retain jurisdiction over radio transmission."

In the case of Hoover v. Intercity Radio Company the Court granted the writ of mandamus the Intercity Company requested. "The only other case testing the law "was the suit of the Department of Commerce against the Zenith Radio Corporation in the District Court of the United States for the Northern District of Illinois. The suit was started because the Zenith people when "refused a license for the use of wave length more than two hours per week" proceeded to use a Canadian wave length. Judge Wilkerson decided "owing to the ambiguity of the statute the defendant Company must be found not guilty. Wave piracy is expected to follow" this decision.⁴⁶

The law provided no limit of time to a license but the Secretary of Commerce has limited them to ninety days, thus preventing a corporation or an individual to secure a "vested right or long time lease on any wave length."

Dill thought the "House and Senate bills very similar." The House bill declared "that the United States owns the ether and the Senate Bill uses the term rights of way." The chief "difference in the bills is that the Senate bill provides licenses to be granted by Federal authority and the House bill for a radio commission---of five members representing different regions of the country. The commission is an appellate body to which the Secretary of Commerce may refer any question over which he is given authority and to which any person aggrieved may appeal and from which an appeal to the courts is permitted. The Senate bill strikes out all of the powers of the Secretary of Commerce and grants all of these powers to the Commission. The bills also differ on the length of time the Commissioners were to serve, the House Commission met on the call of the Chairman or when a majority of the Commission so decided, or when the Secretary shall refer a matter to them but not to exceed 120 days, but the Senate Commission was to be permanent." Dill explained that the Interstate Commerce Commission already had more than it could do and since the President assigned the wave lengths for the Army and Navy no Commission could override their needs, he also stated the Committee believed the bill should be amended to protect advertisers from discrimination and guaranteeing equal service to candidates for public office.

In answer to a question by McKellar of Tennessee Dill

informed the Senate that this Committee did not go into the question of copyrights because such a bill was pending before the Committee on Patents.

47
During the debates of June 30, July 1, and 2 the bill was defended by Dill of Washington, Bratton of New Mexico, and Watson of Indiana. Watson and Dill maintained legislation was needed and that it was the best measure they could work out at that time. Bratton insisted that the operation of radio intrastate interferred with radio interstate and therefore legislation was justified. Dill added support by stating that "radio signals can not be stopped at a state line" and that they were trying to prevent a monopoly by limiting leases to two years.

King of Utah, Bingham of Connecticut, Fess of Ohio, Blease of South Carolina, and Cummins of Iowa objected to the bill. Bingham believed there were too many laws and too many commissions and that the Secretary of Commerce could regulate the licensing. He introduced letters from his constituents asking for the White bill. Fess feared the owners of stations would lose them to individual users to prevent damage suits. Cummins objected to an appeal from the decision of the Commission because it would mean delay and because "we can not appeal from an administrative body to a judicial body." King objected to five commissioners, he considered three sufficient and offered an amendment to that effect, which also

provided a reduction in the salaries of the commissioners.

48

The Senate agreed to the amendment. An amendment by McKellar of Tennessee with regard to Copyrighted music lost as did one by Blease providing for the censoring of dis-
49 courses on evolution.

The Senate accepted amendments of Edwards of New Jersey, giving a state the right to have a hearing in case a high-power station was to be located within its borders, of Robinson of Arkansas permitting an aggrieved party to notify the Commission of a desire to appeal from their decision and requiring the Commission in that case to file a certified record of all evidence, 50 a second Robinson amendment providing for the appointment of commissioners by regional districts, 51 and amendments offered by Dill permitting the President to name an Officer from the Army and one from the Navy to sit on the Commission, securing equal services to advertisers, and granting equal privileges to political candidates. 52 The Senate passed the amended bill on July 2 and asked for a conference with the House. 53 The House disagreed with the Senate amendments and agreed to a conference. 54 The Chair appointed Scott, White, Lehlback, Lazaro and Davis as House Conferees to confer with Watson, Cummins, and Dill the Senate Conferees.

On July 3 Scott explained to the House that the Conference could not reach a compromise on the bills and prepare

it intelligently in less than twenty-four hours and had agreed to a bill "to keep matters status quo during the recess of Congress in order that when Congress reconvened they could take up the subject of radio legislation without being hampered by any unfortunate intervention." White added that under this resolution (S. J. Res. 125) "the existing practice of the Department is made a matter of law and that the applicant must execute a waiver of any claim as to a particular wave length or the right to use it." The House agreed to the ⁵⁵ resolution. Dill gave a similar explanation to the Senate stating in addition that this resolution prohibited the granting of licenses to broadcasting stations for more than ninety days. Simmons of North Carolina raised the question "is not the vital difference between the Senate bill and the House bill as to whether this system should be operated under the control of a Commission or under the control of Mr. Hoover and the Department of Commerce?" Dill agreed that that was the difference. The Senate passed the resolution July 3, ⁵⁶ 1926. When Congress convened in December messages from the Senate and the House dated December 7 announced that the Vice President and the speaker had signed the bill (S. J. Res. 125) ⁵⁷ and a message from the President announced that the President had approved and signed the joint resolution ⁵⁸ December 8.

This law provided "that until otherwise provided by law, no original license for the operation of any radio broadcasting station and no renewal of a license of an existing broadcasting station, shall be granted for longer periods than ninety days and no original license for the operation of any other class of radio station and no renewal of the license for an existing station of any other class than a broadcasting, shall be granted for longer periods than two years; and that no original radio license or the renewal of an existing license shall be granted after the date of the passage of this resolution, unless the applicant therefor shall execute in writing a waiver of any right or of any claim to any right, as against the United States, to any wave length or to the use of the ether in radio transmission because of previous license to use the same or because of the use thereof."⁵⁹

Not long after the convening of the second session of the sixty-ninth Congress Watson of Indiana asked that Gooding of Idaho "be substituted for the late Senator Cummins as a member of the Conference Committee on the part of the Senate on the disagreeing votes of the two Houses on the measure proposing to regulate radio communication." The Vice President made the appointment on December 9.⁶⁰ Borah asked for the return of the bill for consideration but Dill informed the Senate that the Conference Committee had met only three hours before the close of the session in July.

On January 3, 1927 Bingham of Connecticut asked information concerning the radio bill in which so many of his constituents were interested and regarding which he was receiving many letters and telegrams. Dill replied that the Conference Committee had had many meetings and had reached a tentative agreement the day before on the principal difference between the two bills, the House bill giving the control of radio to the Department of Commerce and the Senate bill giving the entire control to a commission.⁶¹ On January 4 and 11 Walsh of Massachusetts, in presenting letters and petitions from his constituents requesting radio regulation, stated that he had 1000 more on his desk, and that "the situation has become acute and immediate action is imperative."⁶² Greene of Vermont presented a joint resolution from the Legislature of Vermont asking immediate protection of radio owners and users.⁶³

On January 28 Dill submitted an amendment intended to be proposed by him to House bill 15641, the Naval Appropriation bill, which was ordered to lie on the table and be printed.⁶⁴ It provided "that no part of said appropriation shall be used to operate any naval radio station for the purpose of broadcasting any address on any public question." Dill stated that the conferees felt there was no way by which the radio bill could place control over the practice which was developing of using the naval radio station at Arlington

for the broadcasting of public speeches and that the appropriation bill seemed to offer the best opportunity for that control. He said Admiral Halligan estimated the value of the radio service to the government at \$2,370,000 a year and stated that "during the fiscal year 1926 \$200,000 was turned into the Treasury from receipts for commercial and press traffic" and that this amendment would not hinder that service. King stated "too many of the executive departments of the government have propagandists within them who travel over the country and spend considerable time advocating measures favored by the particular bureau or department with which they are identified. Most extraordinary propaganda is given out by the War and Navy Departments or at least by officers and officials within these departments. Kiwanis Clubs, Chambers of Commerce, Rotarians, Charitable organizations, Women's organizations, and Prohibition organizations have all used the broadcasting facilities of the radio and wherever a forum may be found during the past year----there have been officials-----ready to advocate a larger army and a larger navy. If we permit propaganda to be carried on by radio stations that are maintained by the government we will soon have the party in power, whether it be Democratic or Republican, utilizing the instrumentalities of the government for its perpetuation in power. I favor this amendment and

general legislation providing that executive employees shall not devote their time to advocating measures which their departments desire."⁶⁵

Dill submitted to the Senate on January 31, 1927 the Conference Report on the radio bill (H.R. 9971) and a statement on the part of the Conferees, which he asked to have printed. The conferees Watson, Gooding, and Dill reported that the conference bill continued original jurisdiction over radio communication in the Department of Commerce but set up a Commission of five to which the Secretary of Commerce was to refer. This Commission was to have original jurisdiction for one year and after that the Secretary of Commerce was to exercise the power of control. The term of licenses was limited to three years for broadcasting and to five years for any other class. That equitable radio service was provided throughout the United States and for politicians.⁶⁶

There were only six days between January 31 and February 18 on which there was no consideration given by the Senate to this radio bill. During the debates the bill was opposed by Pittman of Nevada, Howell of Nebraska, Borah of Idaho, Walsh of Montana, Walsh of Massachusetts, Heflin of Alabama, Blease of South Carolina, Copeland of New York, and King of Utah. Borah, King, Howell, Heflin, and Pittman expressed fear of a monopoly and demanded protection from it.⁶⁷ The fear of a claim of vested rights by the great stations was discussed by Howell, Borah, Copeland, Heflin,

and Pittman and they demanded that the government assert its ownership of the ether. The sale of W. E. A. F. in New York for \$1,000,000 indicated the belief of a vested right according to Howell. He wanted candidates of opposing parties protected in equal opportunity in radio service and asserted he had been subjected to intolerable attacks because of his stand against this bill. Pittman charged the bill discriminated against localities and politicians and that it permitted discrimination in rates. He protested that he was not filibustering. Walsh of Montana wanted provision made to prevent damages in case the government took over control of radio in time of war. Walsh of Massachusetts felt that the bill did not safeguard free speech, that the licensing was not satisfactory, and although the bill was not perfect he was going to vote for it. Bleaso stated "it steals my State's right to control its own and I object." Copeland insisted that "the American people are sick and tired of Commissions" and proposed resolutions providing control of the air until effective legislation could be passed. Howell and Pittman wanted the bill to go back to the Conference Committee. Pittman made two different motions to send the bill back to the Committee but lost each time. Pittman demanded that the bill assert government use and control of the air and prohibit all unjust and unreasonable charges. He stated that when protests finally reach the Interstate Commerce Commission

they would not be heard because the Commission was ten years
75 behind on its cases. Wheeler of Montana expressed the belief that "the real reason the House did not want a commission was because Mr. Hoover wanted to handle the whole radio
76 proposition himself."

The Conference Report was defended by Dill of Washington, Watson of Indiana, Willis of Ohio, and Bruce of Maryland. Willis stated he had received many telegrams from his constituents who wanted legislation and he hoped the Senate would
77 get an opportunity to vote for the bill. Watson insisted the government ownership of the air was protected but that
78 many lawsuits would arise to test the vested right question. Dill was the chief defender of the measure. In reply to Senator Borah he said the bill in three places protected the
79 public against vested rights of any licensee. "One of the special powers given to the commission was the right to make specific regulations for governing chain broadcasting and through the power to refuse licenses the commission may absolutely prevent monopolies."⁸⁰ This power was not previously given to the Secretary of Commerce according to the decision in the Zenith case and the opinion of the Attorney-General, and when the Attorney-General so informed the Secretary of Commerce he refused to attempt to regulate and control the
81 situation and that brought on chaos. The commission has the power to make such distribution of licenses as would give

fair, efficient, and equitable service to the different states and communities. Dill further stated "the Radio Corporation, through its President said it does not want any legislation on radio. If those who oppose the Conference Report have their way the Radio Corporation of America will win, because there would be no legislation.⁸² Today there are 721 stations now licensed, 160 in process of construction, and 328 more contemplated so that in the natural development of events there will be approximately 1,200 stations on the air July 1-----which means that the ordinary radio set in this country will be practically worthless except for mere local reception."⁸³ The Conference Report finally came to a vote on February 18 and was agreed to by the Senate.⁸⁴

The Conference Report and the Statement of the Conference were given to the House of Representatives on January 27 and the Report was debated on January 29.⁸⁵ Scott of Michigan stated "during the last session of Congress the House adopted H. R. 9971 and the Senate amended the bill by striking out everything after the enacting clause and inserting in lieu thereof a new bill similar but in some respects substantially different." A compromise bill was the result "the best we were able to obtain." Green of Florida, Hudson of Michigan, and Lehlback of New Jersey were opposed to the creation of another commission, Lehlback asserting that these

commissions are "directly responsible to no one in the government." Hudson, Lehlback, and White of Maine agree that they will vote for the bill because it is the best compromise possible. Blanton of Texas was opposed to the bill because freedom of speech was not protected and excessive rates and libel prohibited. McKeown of Oklahoma felt that the bill did not guarantee to each state at least one station. Davis of Tennessee refused to sign the report because it contained "misleading propaganda-----and was very dangerous and very vicious." He Believed the radio monopoly had complete control of broadcasting apparatus and could thus control broadcasting stations. He stated that one candidate had said he tired to secure broadcasting privileges from the Radio Corporation and they proposed to charge him \$1,500 an hour and that the Interstate Commerce Commission had never endeavored to exercise any jurisdiction over radio. Scott insisted that the bill gave equal opportunities to candidates, Lazaro that the anti-trust laws had been made applicable, Larsen of Georgia that the regulation of radio was not merely national but also an international question, White informed the House that the bill was the work of seven of the eight conferees and with Crowther of New York urged immediate legislation. Crowther stated "pirating and bootlegging" had been the result of the Zenith Decision and that "radio has been a perfect godsend to the blind, the crippled, and those who are confined to

their homes or in hospitals. It cheers the lighthouse keeper, and gives the sailing master confidence." He expressed hope for immediate action and relief.⁸⁹ The House agreed to the Conference Report on January 29. The speaker and the Vice President signed the bill on February 21,⁹⁰ and the President approved on February 23.⁹¹ The law is known as the Radio Act of 1927.⁹² It provides "that this act is intended to regulate all forms of interstate and foreign radio transmissions and communications within the United States, its territories and possessions; to maintain the control of the United States over all channels of interstate and foreign radio transmission; and to provide for the use of such channels, but not the ownership thereof, by individuals, firms, or corporations, for limited periods of time, under licenses granted by Federal Authority, and no such license shall be construed to create any right, beyond the terms, conditions, and periods of the license. That no person, firm, company, or corporation shall use or operate any apparatus for the transmission of energy or communications or signals by radio-----except under and in accordance with this act and with a license in that behalf granted under the provisions of this act."

For the purposes of this act the United States is divided into five zones and a commission known as the Federal Radio Commission consisting of five members appointed

by the President is created. Each member of the commission shall be a citizen of the United States and an actual resident citizen of the zone from which appointed. Not more than one commissioner shall be appointed from any zone, no commissioner shall be financially interested in any branch of the radio business, and not more than three commissioners shall be members of the same political party. The terms of the commissioners varied from two to six years but their successors shall be appointed for terms of six years. Compensation of \$10,000 was provided for the first year and thereafter \$30 per day for each day devoted to the work of the commission.

The commission had the power to appoint a secretary, clerks, counsel, experts, and other employees necessary for the performance of its duties.

The commission was given the power to classify radio stations, prescribe the nature of the service to be rendered by each station, assign bands of frequencies or wave lengths, determine the power and time for each station, determine the location, regulate the kind of apparatus, establish the area to be served, make regulations for chain broadcasting, and "have authority to hold hearings, summon witnesses, administer oaths, compel the production of books, documents, and papers and to make such investigations as may be necessary in the performance of its duties."

After one year the powers and authority vested in the commission, except the power of revocation of licenses, shall be excercise by the Secretary of Commerce; except that the commission shall have jurisdiction over matters brought before it. In case of dispute over the granting of a station license if a protest is filed within ten days the case may be reviewed by the commission.

The Secretary of Commerce was given the power to prescribe the qualifications of station operators, to suspend the license of an operator, to inspect all transmitting apparatus, to report violations of this act to the commissioners, to designate call letters of all stations, and to publish such call letters and other information that will aid in efficient radio operation.

The right of appeal from the decisions and regulations of the Secretary of Commerce is granted to any person, firm, company or corporation and to any State or political division thereof to the Commission provided notice of such appeal is given to the Secretary of Commerce within thirty days after his ruling.

"No station license shall be granted by the Commission or the Secretary of Commerce until the applicant therefor shall have signed a waiver of any claim to the use of any particular frequency or wave length or of the ether as against the regulatory power of the United States because of the pre-

vious use of the same, whether by license or otherwise."

Government stations are not subject to the regulations of this act. In time of war, disaster or peril the President was given the power to control, use, or close any station upon just compensation to the owners.

Licenses for broadcasting stations were limited to a term of three years and for other stations not longer than five years. The power of revocation was asserted. The application for a station license must state "citizenship, character, and financial, technical, and other qualifications of the applicant to operate the station". A station license shall be refused "to any person, firm, company or corporation which has been adjudged guilty by a Federal Court of unlawfully monopolizing or attempting unlawfully to monopolize, after this act takes effect, radio communication, through the control of the manufacture or sale of radio apparatus,---or by any other means or to have been using unfair methods of competition."

"All laws of the United States relating to unlawful restraints and monopolies and to combinations, contracts, or agreements in restraint of trade are hereby declared to be applicable to the manufacture and sale of and to trade in radio apparatus and devices entering into or affecting interstate or foreign commerce and to interstate or foreign radio communications."

Any applicant for a construction permit, for a station license, or for the renewal----if an existing station license whose application is refused-----shall have the right to appeal to the Court of Appeals of the District of Columbia and any licensee whose license is revoked by the commission shall have the right to appeal "to said court" or to the district court of the United States in which the apparatus license is operated, by filing with said court, within twenty days---notice in writing of said appeal and of the reasons therefor."

If any licensee permits a candidate for a public office to use a broadcasting station he must afford equal opportunities to all other candidates for that office. The licensee is not under obligation to permit such use of his station and has no power of censorship over such material. All material for which payment is received shall at the time it is broadcast be announced as paid for or furnished by such person, firm, company or corporation.

The act provides for priority of distress signals, safeguarding of ships, secrecy of messages, protection from fraud, opening government stations for press and commercial messages for which just and reasonable rates shall be made and which upon complaint may be reviewed by the Interstate Commerce Commission, and forbids the licensing authority to place any regulation that shall interfere with the right of freedom of speech. Penalties for violation of the act are authorized and the statement made that if any part of the act is declared invalid the remainder of the act shall not

be affected thereby.

The laws of August 13, 1912, June 5, 1920, and December 8, 1926 are repealed by the Radio Act of 1927.

The bills from 1915 to 1927 inclusive and the debates they incurred indicate a demand on the part of Congress and the people for more legislation on the question of radio.

The Radio Act of 1927 marks the culmination of those demands. The act has provided a basis for the settlement of the licensing problem both of stations and operators, it has in several places asserted government ownership of the ether by requiring waiver of any claim of vested right, it has applied all the laws and machinery that operate against monopoly in general to the radio industry, it has required announcement of advertising material, in so far as the regulations by the Federal Government go it has protected freedom of speech, and has made the "pirating" of waves unlawful.

No law has yet been enacted that forbids the issuing of a license to an alien, although alien ownership is forbidden, and while advertising material must be announced as such there is no law to keep the air from being filled with it. Blasphemy has not secured protection from libel nor Blasphemy restriction on the broadcasting of the doctrine of evolution. Although the Commission and the Secretary of the Navy can not place any limitation on freedom of speech, the

licensee of a station may place such restriction except on candidates for public office.

The patent and copyright problems remain unsolved and there is no law against charging for "listening in." Congress has not yet given to the country at large the privilege of listening to their debates by placing radio in the Capitol Building. Senator Dill has called the law of 1927 the "Magna Charta of the radio listeners."⁹³

FOOTNOTES.

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36. C. R. 2 S. 63 C. 939.
37. (C. R. 1 S. 64 C. 312.
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38. C. R. 2 S. 62 C. 1838, 1868.
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51. C. R. 3 S. 65 C. 2300-8.
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