

# The American Radio Relay League: How it came to be

Adapted from [200 Meters & Down](#) by Clinton B. DeSoto.

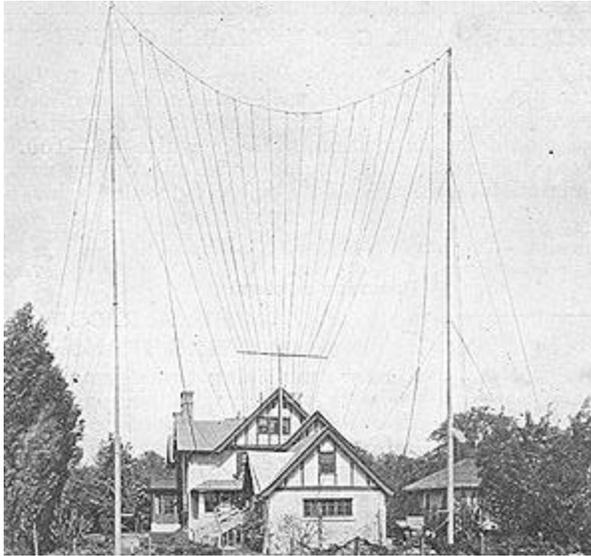
Published 1936, American Radio Relay League

On January 14<sup>th</sup>, 1914 there was held the first meeting of the Radio Club of Hartford, at that time just another of the large group of radio clubs that had been springing up throughout the country for the past four years. In the chair at this first meeting was Hiram Percy Maxim, the brilliant engineer who had already achieved lasting fame through his pioneer work in the development of the automobile, and for his invention of the Maxim silencer. He had become interested in amateur radio through the activities of his son in 1907, and soon developed one of the dominant stations of all New England.

Temporary secretary of this first meeting of the Radio Club of Hartford was an eighteen-year old Hartford amateur named Clarence D. Tuska. Before the meeting was over, David L. Moore had been elected president of the club, while Tuska continued as secretary. Bi-monthly meetings were scheduled. A constitution was drawn up and adopted at the next meeting. Twenty-three charter members were on the rolls. By March 9<sup>th</sup> the attendance had mounted to 35

Then Destiny encamped. At that time, the demand for vacuum tubes had reached a peak as a result of publication of the wonderful Armstrong regenerative circuit. Production could not keep up with the demand. No longer was it possible to go up to the Metropolitan Tower in New York, leave five dollars with the deForest Radio Telephone Co., and depart with the precious audion. H. P. Maxim was very anxious to secure one of these vacuum tubes, but he had been unsuccessful in his attempts to purchase one. Sometime during the four week period between March 9<sup>th</sup> and April 6<sup>th</sup>, however, he learned that an amateur in Springfield, Massachusetts, had an audion for sale. That night he sat down at his transmitter and attempted to send a message to Springfield opening negotiations for its purchase.

Maxim's one-kilowatt station, 1WH at that time had a maximum sending range of about 100 miles under favorable conditions. Springfield was only thirty miles north of Hartford. Yet it so happens that from time immemorial right up to the present day some peculiar transmission condition has made direct ground-wave radio communication between Springfield and Hartford difficult if not an impossibility. Maxim could not "raise" Springfield.



Hiram Percy Maxim's house in West Hartford, Connecticut, ca. 1920

Pondering the problem, with characteristic insight he divined the solution. To one of the early meetings of the Radio Club of Hartford there had come a young lad from Windsor Locks, a small town intermediate between Hartford and Springfield, who said he had a transmitter on the air. The topography of the intervening region was such that he could work both Hartford and Springfield with ease.

Maxim solved his problem by calling this Windsor Locks amateur and asking him to relay the message to Springfield. The feat done, he sat back in his operating

chair, puffing his familiar pipe, and pondered more. Driving from his home downtown to his office behind the wheel of his huge automobile the next morning, he continued to think about the incident of the night before, and an inspiration was born.

He has always been careful, since that time, to explain that no significance attached to that particular relay. It was not the first time that relaying had been accomplished. Ships at sea were using the relay principle to get messages from mid-ocean to shore. Amateurs themselves had probably relayed messages beyond the limits of their particular sets before. It is certainly true that the Central Radio Association ("From the Rockies to the Ohio"), which was organized in 1911 and which in 1914 had several hundred members, shortly afterward was relaying messages over hundreds of miles. No, the relay was not especially significant. That morning there was born the germ of an idea for the long-needed and much-desired truly representative national amateur radio organization.

The relay idea represented an ideal basis for the needed national organization. Some basic principle, some prime moving force, was essential for the success of such an organization. Americans have always been great "Joiners" but if an amateur organization were ever to progress beyond the paper stage, or expand into more than a local club, it must offer more than a gaudy membership certificate and one's name on the rolls. The futility and early death of the Wireless Association of America had shown this clearly, as did the restricted appeal, limited to the New York metropolitan area, of the Radio Club of America.

At best, ranges in those days were limited. With the power and the equipment and the wavelengths then available, there was little hope for enlargement of the distances covered. But an intermediate amateur could relay messages over greater distances with ease and expedition. The only requirement was to achieve some sort of mutual understanding so that each amateur would aid his fellows. Organization was needed-organization that would accomplish the dual purpose of opening relay facilities to

all and of bonding together the amateurs of the country into one strong, cohesive, self-reliant body.

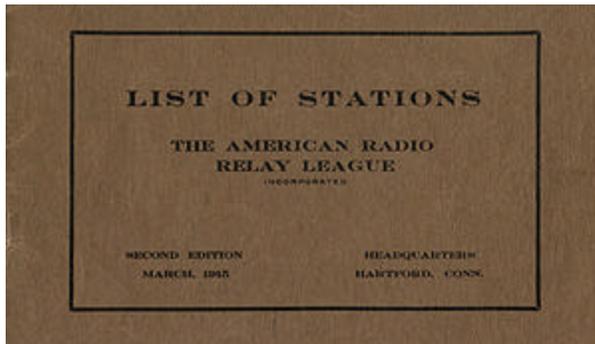
All these thoughts coursed through Hiram Percy Maxim's mind as he drove to his office that brisk March morning in 1914. There even occurred to him a name for the organization—the American Radio Relay League. The next step was to put the idea into execution. He presented his plan to the members of the Radio Club of Hartford at its next meeting, April 6, 1914. The club voted to take charge of the development of a relay organization, and a committee to handle the details was appointed by the chair. The first steps toward the fulfillment of the idea had been taken.

By middle May application blanks bearing detailed questions concerning receiving and transmitting equipment and performance were printed, and Maxim and Secretary Tuska sat down and wrote letters to every amateur station they could think of, announcing the formation of the American Radio Relay League and enclosing one of these blanks. There were no dues; membership was free on application. At the same time, the requirements were set at a high standard and rigidly maintained, so that only qualified amateurs were accepted as relay stations. The response was tremendous. Application blanks came back in every mail. The influence of the League was mounting rapidly. It had members in every section of the country. By June, successful relays had been accomplished over such routes as Hartford to Buffalo. A route from Boston to Denver was being organized.

By August, 1914, more than two hundred relay stations had been appointed, from Maine to Minneapolis and from Seattle to Idaho. One of the stations belonged to a man 64 years old; others were owned by youths just entering high school.

In September the League published a map of the United States showing the location of 237 stations in thirty-two states and Canada. In October the League published its first call book, actually a *List of Amateur Stations*, a little blue-bound book showing the names, addresses, calls, power, range, receiving speed and operating hours of 400 stations. One-kilowatt stations were surprisingly numerous; they claimed ranges from 50 to 350 miles. The smaller stations, using from 10 to 100 watts, worked from 10 to 20 miles. This call book, the United States map, seven state maps, and a pad of 50 official message blanks were sold for 50 cents.

In early 1915, the League was incorporated under the laws of the State of Connecticut, to give it legal status. The membership grew steadily. In March, the second edition of the List of Stations was issued. Six hundred members were listed, an increase of 50 per cent in less than six months.



Second edition of the *List of Stations*

Meanwhile, through radio contacts and correspondence, the building up of the relay routes for which the League had been formed was going on. Considerable success was had, but the difficulty of adequate organization contact, especially with distant states, seemed insurmountable. It was proving a real task to acquaint the growing membership with new plans and

schedules by means of correspondence alone. It became increasingly apparent that some kind of general circular or bulletin was necessary. The League, however, had no funds; the nominal optional membership assessment was not remunerative; there was no profit in publications which were sold at cost.

The answer, seemingly obvious but surveyed with some reluctance by Maxim and Tuska, was a self-supporting magazine. In December, 1915, each member of the League received in his mail a sixteen-page magazine called QST- the "December Radio Relay Bulletin". This, it was announced, was being published privately at the expense of Maxim and Tuska. It was to be sold independently of the League, on a subscription basis. The subscription fee was to be \$1.00 per year. The stated object of the magazine was "to maintain the organization of the American Radio Relay League and to keep the amateur wireless operators of the country in constant touch with each other".