Wired Radio Versus Space Radio

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. . . in which the Editor discusses the American system of free broadcasting and its alternatives—and the possibilities of the proposed "wired radio"—which is coming soon—and doubts that the latter can supersede DX radio reception in the favor of true fans—and expresses the opinion that wired radio will be an immediate challenge to the well-known ingenuity of myriad radio constructors—why there is room for both services to the great radio public.

WHEN broadcasting was established in this country, the universal opinion was that the service would always be free. No one in America has ever seriously considered broadcasting for pay from the listeners. This is in distinct contrast to the European system, whereby every radio set is taxed by the government anywhere from 25 cents a month upwards to pay the broadcasters. This is the custom that prevails in most countries of the world with some few exceptions. Of course, even in the United States, some one foots the bill—that some one being usually the public. But this is indirect taxation, whereas the European system is one of direct taxation on each set.

In America the broadcasters expect to get back, through the returns from goodwill programs or indirect advertising, their outlay for broadcasting—in which effort, it may be said, they have been fairly successful. Not every station, however, operates at a profit, nor will probably do so for some time to come. In general, the principle has been recognized in this country that radio should be free for all, so that any one by buying a set can listen in to his heart's content, year in and year out. This is the prevailing system of space radio.

There is, however, another system which may shortly go into operation in the eastern part of the United States, and which is known under the name of wired

radio. There is nothing new about this, for it is not a new invention by any means.

General G. O. Squier took out patents on wired radio many years ago, but so far the system has not met with much success or encouragement in application to broadcasting; although this can be accomplished by wired radio over any existing lines, be they telephone or telegraph, electric-light or power.[1] It is understood that, for the time being at least, the telephone interests will have none of wired radio. On the other hand, one of the largest electric light and power corporations in the country, with networks extending throughout the east, definitely intends to go "on the wire" with wired broadcasting in the near future, probably within six or eight months.

Many technical difficulties had to be overcome to make this possible, but officials of the company sponsoring wired radio now believe that the difficulties have been smoothed out, and that a real service can actually start very soon. Somewhere in the east there will be studios where three different programs will be broadcast simultaneously on different wavelengths over existing wire systems.

By means of a simple switch on a special receiving set, it is promised, the listener renting the instrument from the wired-radio company will be able to select any one of the three programs being fed to the electric-light wires, and this program will issue from a loud speaker. Two models of receivers are planned. One will use a crystal detector, and is intended primarily for headphone reception. The other will include a regular audio amplifier and a loud speaker, all "A," "B" and "C" power being derived from the power line. No aerial and ground will be used, as the receiver picks the programs directly off the power wires.

If one already owns a radio receiver, he can rent the crystal receiver and connect it to his set in such a manner that the audio amplifier in the latter will amplify the signals; the radio loud speaker will then reproduce them as it does space-radio impulses. This is just an outline of the proposal, from the advance information at hand.

Interesting as are the possibilities of wired radio, however, I personally do not

[1] Major General George Owen Squier (1865-1934) first became a proponent of wired radio in 1900 after observing that the tactics of the Spanish American war was revolved around "coal and cables":

> Reliable submarine [i.e. telegraph cable] communications under exclusive control are not only absolutely necessary, but exercise a dominating influence upon the control of the seas, whether in commercial strategy or in military and naval strategy.

Eventually, Squier moved from advocating a network of US government cables that networked the newly annexed territories in the Philippines, Cuba, and Puerto Rico, to an agenda closer to home. Forming a company in 1922 called Wired Radio, Squier sold "centralized transmissions within a rationalized system of stimulus codes", or the canned music crowd control we now know as Muzak, a term coined by Squier.

Jonathan Reed Winkler, *Nexus: Strategic Communications and American Security in World War I*, (Cambridge, Mass: Harvard University Press, 2008), 20-21. Susette Min, "Soothe Operator: Muzak and Modern Sound Art," *Cabinet Magazine*, 7, (2002).

believe that it will prove a formidable competitor of space radio.

It may be said, as a matter of fact, that the so-called wired radio really should not be called radio at all, although it uses radio instrumentalities throughout. In any event, wired radio certainly takes the romance and thrill out of radio broadcast reception, unless you are satisfied with one or two local stations. With space radio even a mediocre set has no trouble tuning in any evening at least forty or fifty stations; and if the set is a really good one, as many as a hundred stations can be logged.

This does not mean, of course, that you can enjoy a hundred different programs during that evening, because the time limitation is against this. But the argument remains in favor of space radio; for the simple reason that, if you wish to stay with any one on the programs, you can do so by tuning in the station you wish to listen to and, unless it is an exceptionally bad night, when much static prevails, there is not much difficulty in staying with the station selected. If I do not wish to know what is going on in Chicago, I can listen to Washington or to New York, or to Atlanta. That is, with space radio. With wired radio it would seem that there must be limitation to a very few programs. The fact is, you will have to take what you get. This seems to be a serious disadvantage, and only time will tell whether it can be successfully overcome.

On the other hand, it may be said that, with wired radio, you do not have to contend with static and uncertainties, but you may be assured of a program at all times. How this choice will strike the average listener it is, of course, impossible to predict.

Then comes the most important point under consideration; and that is, *wired radio will not be free.* The apparatus will not he sold, but leased at a certain monthly rental per instrument.

Just how many people will avail themselves of such a service, when general radio entertainment always has been free, remains as yet to be seen. While there can be no doubt that wired radio will in all probability never supplant space radio, it is possible that it will prove an interesting adjunct to space radio. The parallel to this may be found in space radio and the phonograph.

When radio first came into vogue it was freely predicted that the phonograph would speedily be relegated to the scrap heap. I predicted editorially in RADIO NEWS, early in 1921, when broadcasting first started, that nothing of the kind was apt to happen, and rather that the phonograph would be helped by radio. This indeed proved to be the case, for there are more phonographs and more records being sold today than there were at any time.

I do not believe that it will be at all practicable, as suggested, for the wired-radio companies to establish a method of secret transmission over their lines, so that only the apparatus rented from them will be capable of receiving their programs; because, the moment apparatus is installed and the nature of the device becomes public, every radio constructor will surely try to build a set by means of which he can tune in on the wired radio.

It is in the nature of every radio fan to investigate and the prediction is freely made that, if wired radio comes into universal use, the parts business will take a sudden leap. Every radio fan and every set builder will no doubt try, at one time or another, to build a radio receiving set that will bring in the wired-radio programs. It seems that the wired-radio interests will be powerless to prevent this; because there is no law on the subject, and because the "bootleg" listener would be stealing nothing.[2]

Mr. Hugo Gernsback speaks every Monday night at 9 P. M. from Station WRNY on various radio and scientific subjects.

[2]Gernsback made a similar point in a *New York Times* editorial earlier that year, criticizing the state ownership of radio broadcasting in Europe. In a kind of "information wants to be free" argument for the wireless era, Gernsback writes:

> It has always been the contention of leaders in the American radio industry that the European method of paid listeners' programs [taxed in this model, as opposed to the privatized subscriptions of "wired radio"] was economically unsound. . . . The reason is that a sufficient number of listeners will not pay a fee and an entirely too large proportion of European listeners use "bootleg" radio outfits and listen in secretly.

Hugo Gernsback, "Wellsian Opinion of Radio Tinged with Provincialism," *The New York Times*, (April 1927)