

RADIO-CRAFT

"RADIO'S GREATEST MAGAZINE"

RADIOBOTAGE

By the Editor — HUGO GERNSBACK

. . . . *Eternal Vigilance
must be our watchword
against radio subversion*

It is a well-known fact that history tends to repeat itself in more ways than one. Right now we find ourselves again in a similar position to that in 1915 when we were not at war with Germany—yet German agents were active to the detriment of the country then, as they are now.

Prior to World War I, the then German Imperial Government had planted on these shores a number of radio stations which ostensibly were for commercial purposes only, but were later proven to be violating the laws of this country by committing unneutral acts against the United States.

The United States, at that time, took over the German wireless stations at Tuckerton and Sayville, Long Island, to prevent unneutral messages from being sent to Germany.

In an Editorial, entitled, "Sayville," in my former magazine, *The Electrical Experimenter* for August 1915, I took pains to show how masked and disguised messages could be sent out, violating our then neutrality. My reasoning was violently objected to by the head of the Sayville wireless station, the well-known Dr. K. G. Frank. For the record, I reprint elsewhere in this issue (*), the exchange of letters that took place at that time. The arguments set forth by Dr. K. G. Frank are exactly those used by present-day German officials; and the tone and attitude was the same in 1915, as it is in 1941. Dr. Frank was later proven to be the active United States head of the German Information Bureau (Secret Service)—now the *Gestapo*.

Through the vigilance of some self-appointed American investigators—old-time wireless operators—who made phonograph records of the Sayville transmissions at that time, the United States Government became convinced that the two stations were used for illegal purposes and promptly took them over.

In those days there was no broadcasting. All traffic had to go out via dots and dashes. The spoken word was not then broadcast. It should be noted that present subversive activities of the Axis Powers are much more thorough, less crude and infinitely more subtle. It is of paramount importance today that information regarding much of our defense activity should not reach the Axis Powers; the more delay that can be interposed to important news reaching the Axis, the better it will be for our welfare. *Information if it is to be of use at all, must be transmitted with reasonable speed.* As far as the United States and its geographical position is concerned, this can be accomplished nowadays only by means of cable, radio or telegraph. Technically, this country at this writing is not at war with the Axis, yet our defense activities are of terrific importance to the Axis partners. *Eternal vigilance* to keep information from going out, either by radio, cable or telegraph, must be the watchword from now on. Since the advent of radio broadcasting, conditions have changed and the "radioboteur"—the Fifth Columnist—who is active, will use the utmost ingenuity to get important information through. It should not take an Edgar Allan Poe to devise effective schemes as to how our radio broadcast stations can be misused to transmit such information, *which on the surface looks innocent enough.* It should always be borne in mind that the United States, at the present time, is wide open and it is comparatively easy to get vital information out of the country. To the North of us the chances are slim, because Canada being at war, probably stops most subversive intelligence. Our eastern and western coasts are not quite so safe, because radio transmitters placed at isolated points on our coasts can easily transmit short wave radio messages to Europe, or Asia, with outfits that can be placed in automobiles or trucks and moved about whenever necessary. That, of course, is the obvious thing, hence, the smart "radioboteur" will not use it, except when no other avenue is open. It is dangerous and will become more dangerous to foreign agents as time goes on. This will be made clearer below.

The hot spot in the United States, at the present time, is our southern border. Information can get across this border easily. It can even be telephoned or telegraphed to Mexico, thence cabled, or radioed, across the oceans if necessary. It is here where our Government will have to be more than careful and more than watchful, and it will be a task of the first magnitude to prevent messages from leaking out in this direction. While on the surface it looks hopeless, it is not quite as difficult as it might appear, because there

are several methods, which need not be discussed here, to effectively stop messages of this type.

There are other means whereby Fifth Columnists, and foreign agents, can disguise information in more subtle ways which are not immediately apparent. There are a number of foreign-language stations in this country, which to the writer's mind, should, at the present time, not be allowed to broadcast in such languages. I know I will be assailed vigorously on this point by those who operate such stations, but I insist that while they might have a purpose in peace times, they have no purpose at the present dangerous period through which we are passing.

You do not have to be a master of ingenuity to invent a number of simple and easily arranged codes which can be sent out over these—and for that matter any other broadcast station—by foreign agents who pose as entertainers. Popular songs, even ordinary music, can be arranged in such a way as to convey certain meanings. You have often witnessed the so-called "mind reading" performances where simple words or questions are asked by one performer, while the "mind reader" immediately tells you what object his partner has touched. Inflection of the voice, certain word combinations, etc., all can be made into effective codes. The same thing is true of music, whether it is a piano or violin solo. It can be done so effectively that even the owners of the station would not be aware of what is going on. What good you say, are such masked codes? Of tremendous importance, for the simple reason that a number of listeners can take down and decipher the code and then pass it on by radio, or by other means, over the border and across the oceans. You might say, "Why go to the trouble of doing all this?" "Why not use the cable or similar methods?" The point is that it is more difficult to do it by cable, because certain word combinations arouse suspicion, whereas radio broadcasts by voice, singing or instrumental music appear harmless and the perpetrators run less chance of apprehension.

We note, therefore, with great satisfaction that our Government, through the Federal Communications Commission, has set aside recently, \$1,600,000 to aid in national defense. Plans have been made for the establishment of listening posts to record, translate and analyze foreign shortwave broadcasts in this country. While records have been made before of foreign shortwave broadcasts for various Government agencies—Departments of State, Agriculture and Justice—the Government never had undertaken any study of them on a large scale. Now, for this purpose, the field service is adding about 40 trained men to its staffs at the stations from which the work will be carried on. These men, with the cooperation of the existing staffs, will now conduct a 24-hour watch to find and record programs which might be of interest. The records will be sent to Washington, where the headquarters and main staff of the new division will be located. Here a force of more than 300 technicians, translators, clerks, propaganda analysts and other experts will translate them into English and study them to determine their importance.

Up to the present time, various studies have been made chiefly by private propaganda-analysts and patriotic organizations; and broadcasters as well as private investigation groups will be asked to cooperate. The Commission plans to supervise radio broadcasts more carefully in order to tighten control. Thus, for instance, additional men are working on monitor, or listening stations which have been tracking down an increasing number of illegal stations. The Federal Communications Commission has already a number of mobile radio listening posts and their number will be greatly increased in the near future.

But, what is needed desperately right now is actual recordings of every United States station of every broadcast emitted. This in itself is an enormous undertaking, as can readily be imagined, but in view of what I have said above, it will be found necessary, without a doubt. While the danger of "radiobotage" is not so great from network programs—due to the fact that these usually are rehearsed and would, consequently, be stale by the time they are actually broadcast—it is the smaller broadcast stations which are dangerous at this moment. They are chiefly dangerous because subversive activity may go on, and no doubt has gone on already, without the knowledge of the owners of the stations. The quicker we close this, now wide-open door, the more effective our Defense efforts will become.

(*) See Page 687.