

The War in the Ether:

Fixing the Positions of Agent Radio Stations

~~(Confidential)~~

The basis for combatting agent transmitters was the location of these radio stations by direction finders. For technical and tactical reasons this broke down into:

- a. Long range direction finding.
- b. Close range direction finding.
- c. Work in the immediate vicinity of the target.

Corresponding to the peculiar character of the radio agent situation and in view of the military situation of the moment, the German long range direction finding bases had to change currently their set-up and their manner of working. First a network of long range direction finders was created far beyond the German frontiers. The next step was to bring these direction finders under coordinated control; this was in order to replace the previous multiplicity of single readings by synchronized systematic readings on the same transmitter, by as many long range direction finders as possible and in this way to get dependable fixes.

In October 1942 the following three shortwave direction finding bases were available for the purposes of "radio counterintelligence:"

1. For the west: Middelkerke, Wilhelmshafen, Hannover, Langerargen, Bodensee, Bordeaux. (Controlled partly from Giessen.)
2. For the east: Reval, Lemberg, Nikolajew, Pillau. (Radio control by Cranz.)
3. For the south and southeast: Pulsnitz, Varna, Athens. (Radio control by Pulsnitz.)

To this system of long range direction finders were added, in February 1943, instruments in Rome, Sicily,

and Sardinia.

Regarding the close range work, conditions were as follows: Close range direction finding apparatus for fixing the ground wave had been developed long before the outbreak of the war, and sets had been constructed which were suitable for use in the field. After the search for enemy radio agents began in the west in the fall of 1940, the first such transmitter was located in Antwerp in April 1941. This was accomplished after the area, in which the transmitter must be located, had been determined on the basis of long range direction finding.

Even in this first case it was manifest that the close range direction finders must be of such a nature that one could approach the location of the transmitter unnoticed. Consequently, even then the picking up of a transmitter was only possible by the aid of an especially constructed suitcase apparatus. This instrument was operated by a man dressed as a locksmith and permitted locating the transmitter within a few houses.

It was more difficult to do the work in the immediate vicinity because the agents usually had watchers to guard them. This problem was not solved until early in 1943 when a belt direction finder was developed which could be worn inconspicuously under the clothing of the operator.

The use of Fieseler-Storch planes as "Flying close range direction finders" dates from the summer of 1941. The first experiments began in May. The first successful commitments of the "Storch" came in the west beginning with September. In

April 1942 three machines were in use and the number was later increased to 12.

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Translated from original
German materials by
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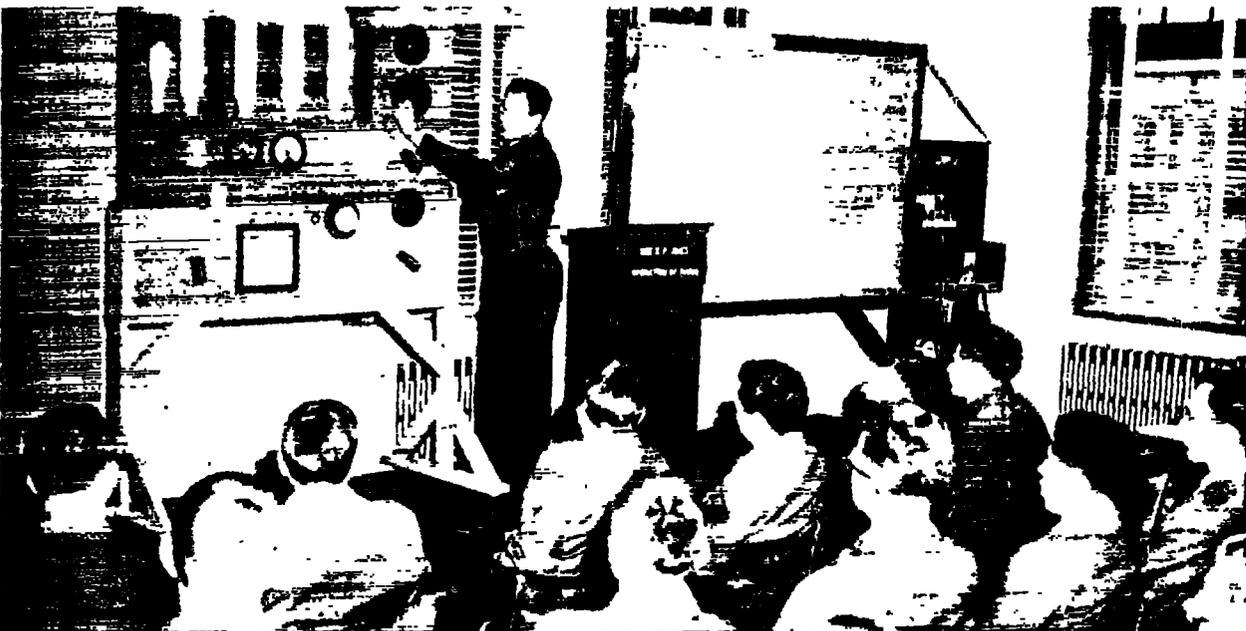
TASATC Training Aids

Instruction at the ASA Training Center is carried out on a sufficient scale so that training aids are developed in the shops of the installation.

Capt Lee A. Rivers, Chief, Morse Branch, Capt R. C. McLees, Visual Aids Development Officer, 1st Lieutenant Donald J. Davidson, Training Aids Officer, (production) and Sfc Robert C. Hessman, NCOIC Communications Equipment Section, Morse Branch, plot a solution. Sfc Harry J. Williams, NCOIC, G. T. A. shop and Mr. James J. Dobbins, civilian artist, prepares a plan for a working model of the control board.

U. S. Army photographs at left and below indicate the nature of the constructions by showing phases in the development of a control panel. The small dimensions of the standard equipment and the large size of the classes, make it necessary to construct something big enough for all to see.

In the photo at top, showing the interior of the carpenter shop, Mr. John T. Carter, modelmaker, is conferring with Sgt R. B. Freeman, on adjustment to move needles over to "teaching point" position at flick of switch. In the middle photo, painter Arthur A. Angel is applying the color scheme. Below, Sgt R. P. Ames, is using the finished model to teach the operation of radio.



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Despite all the successes of the German "radio counterintelligence," and despite all the stations picked up, the number of hostile agent circuits in the German sphere of influence increased constantly. The means and personnel of the German radio counterintelligence during the war were in no wise commensurate with the magnitude and importance of the task; they remained totally inadequate, quite apart from the fact that they were not employed effectively until much too late.

Tenth Tennis Victory For AHS

Arlington Hall netmen won their tenth victory in a dozen matches recently when they defeated Walter Reed Army Medical