The War in the Ether:

TANNENBERG: FINALE AND DISCUSSION

~~(Confidential)~~

The battle of Tannenberg was the first in the history of man in which the interception of enemy radio traffic played a decisive role, although the intercept service of the victorious Germans was poorly coordinated and some of the vital radiograms, sent in plain text, were intercepted by chance.

A previous article in the June 1952 issue covered this battle against the Russians to the point where the Germans were ready for the kill. General Hindenburg had learned from intercept that the left wing of his forces consisting of the 1st Reserve Corps and the XVII Corps was still unopposed by the First Russian Army of General Rennenkampf because the Russians had not yet come up into line and was able to use these forces with his right wing, consisting chiefly of XX Corps, which was opposed by the Russian Second Army under General Samsonov, consisting of XXIII Corps and other units.

The forces which General Hindenburg took from his left and used with XX Corps were the 1st Reserve Corps and XVII Corps. Radio deception was used to give the impression the left wing was still in strength, as will be noted in the following article.

The Russian XVII Corps and XV Corps mentioned below had come to the support of the Russian Second Army. The Russian II Corps was additional reenforcement which had not yet arrived.

On 28 August at 0700 hours Hindenburg and his Staff arrived in Froegenau to direct the battle from there. Great tension prevailed in the Army Staff Headquarters. They were entirely in the dark as to the enemy's purpose at Allenstein. This group still had complete freedom of action.

At 0800 hours radiograms of the Russian XIII Corps disclosed that it was marching from Allenstein southward to Hohenstein, and that its vanguard would arrive at 1200 hours in Grieslienen, five kilometers north of Hohenstein. Its purpose was to lend the XV Army Corps a hand.

On the basis of this knowledge, the order was immediately sent by airplane to the German I Reserve Corps to proceed at all speed, regardless of everything, and on the shortest possible route, to the Stabigotten-Grieslienen Line (northeastward of Hohenstein).

Translated from original German materials by Dr. Ray W. Pettengill

The final encirclement on the part of the Germans ended in the well-known result. The Russian XIII and XV Army Corps, as well as large portions of the XXIII Corps, were captured and forced to lay down their weapons.

Even while the battle against the Russian Second Army was still at its height, the attention of the Germans was called to the pending operations against the Niemen Army. On the 28th a Russian radiogram announced that the II Corps (left flank Corps of the I Army) was to begin the retreat to-

ward the frontier and be transported by railroad. This transportation, however, did not take place.

Early in the morning of 29 August, an incomplete radiogram was intercepted,which stated as follows:

Because of heavy battles of Second Army Command orders supporting reenforcements.. and advance of cavalry to.."

(General Rennenkempf had received orders on the morning of 28 August to proceed with his left flank to the support of the Second Army. This radiogram was apparently an order of Rennenkempf to one of his Army Corps. A later radiogram, however, interrupted the advance march again.)

The above-cited radiogram confirmed what they had been expecting in the German Eighth Army Staff Headquarters. During the night of the 29th a number of radiograms were again intercepted which mentioned the encirclement of Koenigsberg from the south. On the morning of the 30th one such radiogram communicated that the head of the Russian II Army Corps on his countermarch (which thus had been ordered for a second time) was to demolish completely the railroads and telegraph wires west of the Koenigsberg-Bastenburg line, including Korshen and Bastenburg. This last-mentioned radiogram brought it about that the German Eighth Army Staff Headquarters could now devote further attention to the remnants of Samsonov's Army.

All these Russian radiograms were intercepted by the German garrison radio stations at Thorn and Koenigsberg, which were well behind the German lines, but also in part by the radio stations of the Eighth Army Staff, and were immediately translated and transmitted to the German Army Command. The German Command therefore knew not only the strength and organization of the enemy, but also his objectives.

It is very interesting to note how differently the importance of these intercepted Russian radiograms was estimated in the postwar period. Ludendorff mentioned this fact very casually in a subordinate sentence: "...we had received an intercepted enemy telegram which gave us a clear picture of the enemy's moves for the following days." Ludendorff forgot that there was not only "one" radiogram but several dozen which were intercepted during the course of operations and which revealed the situation of the enemy.

Hindenburg himself, in his book, "Aus meinem Leben," which appeared in September 1919, did not devote even one word to the radiograms; on the contrary, he described the course of the Battle of Tannenberg with the definite emphasis that he was in the dark as to the enemy's objectives and organization.

The Russian General Danilov spoke of an "unpardonable negligence" in the Russian radio service, and declared that the imperfect communication service had been the chief reason for the catastrophic outcome of the battle.

The German Archives publication declares: ".....On the whole the German Army Command viewed the intercepted radiograms as an extremely welcome source of intelligence. The Army Staff Headquarters, because of them, was temporarily,and even immediately before the beginning of the Battle of Tannenberg, advised of the objectives of the enemy in a way such as happens only seldom in wartime." And in connection therewith, the German Archives publication immediately strives to save the face of the German Command by continuing to say: "But the critical decisions and orders for the battle according to the unanimous statements of all participants were made independently of the information which became known on the morning of 25 August through the radiograms. One cannot assume that without these radiograms the course of the battle would have been different."

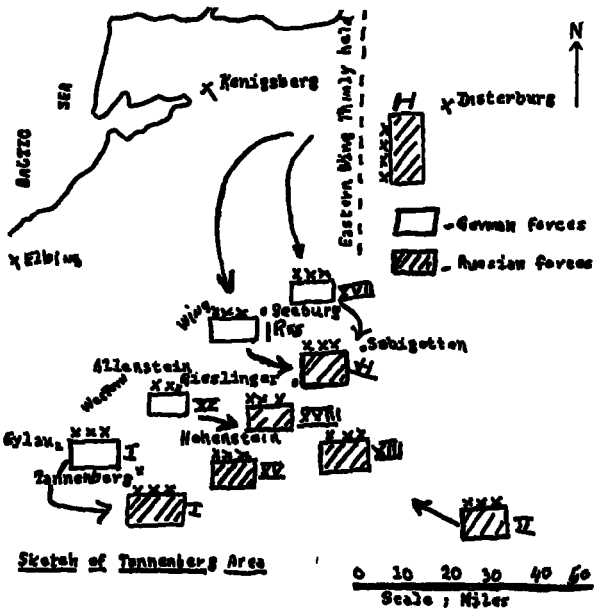
To this one can only reply: the general has not yet been born, who after winning a battle, would admit that he had won it thanks to a well-functioning intelligence service. Since the victory at Tannenberg had become a symbol for Germany, the "unanimous statements of all participants" should not of course be any different. Undoubtedly the dispositions for the battle were made before the first radiograms were intercepted. But during the course of the battle the knowledge of the contents of the intercepted radiograms played a decisive role. The development of the battle without these radiograms would very definitely have been entirely different.

Now we shall try to find out why the Russians sent their communications in plain text. To use plain text for such important communications as the two radiograms of 28 August was a mistake of the gravest kind. However, when one examines the circumstances on the side of the Russians, one obtains a picture which gives the explanation for it. The Russian communication system operated very imperfectly durint the battle. As a result, the army orders for the staff corps at the front arrived too late. Many times these did not receive their orders until about 1000 hours of the same day on which the orders were effective; under such circumstances the troops could not begin to enter action in the designated formation until almost noon. Very seldom were there telephone connections, which was partly due to the fact that there were insufficient cables. For this reason, where there were radio stations, these were preferred for the case between the army leaders and the army corps.

The radiogram of General Samsonov to the XIII Army Corps at 0600 hours, 25 August was of an urgent nature since it pertained to the operations for the same day. It was sent as a priority message. There were no wire connections. One can assume that time did not permit the encipherment of this message; in the last analysis, however, the reason seems to be that in the XIII Corps no radiograms could be deciphered; they had no cipher key. An enciphered radiogram was thus simply out of the question in traffic with the XIII Corps.

Since various Russian staff corps headquarters did not possess the facilities for deciphering radiograms, it is probable that this was also the case in the Russian IV Army Corps, to which General Rennenkampf sent his above-repeated fateful radiogram in plain text.

The Germans had learned something from the happenings along the aether waves at the Battle of Tannenberg which was supposed to be put to practical use during the "Battle of the Masurian Lakes." Before the German attack on the Russian First Army began, the Germans wanted to tie up the important enemy reserves stationed farthest toward the north - (east-ward of Koenigsberg) - so that these could not be



Sketch of Tannenberg Area

moved toward the south where the German attack was in progress. Since no troop contingents were available to hold this large enemy reserve, the German Eighth Army Staff Headquarters resorted to strategy. In the forenoon of 7 September, the radio station at Koenigsberg sent a radiogram in plain text as follows:

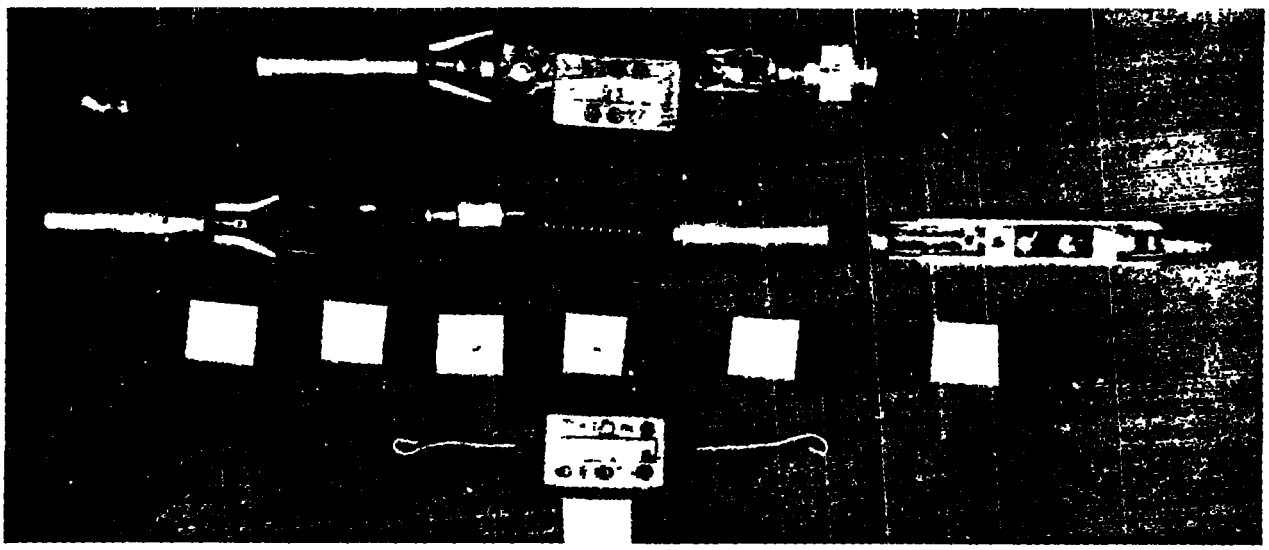
"To the Corps Chief,
Guard Corps,

Priority telegram.

Tomorrow the Guard Corps will join the.... immediately west of Labiau, parts of V Army unloaded....(here follows a series of garbles)....

Army Staff Headquarters."

The radiogram was intercepted by the Russians and the strategy succeeded. This is the first known case of purposely misleading radio traffic during World War I. The contents and the precise wording of the radiogram had been well thought out. The Guard Reserve Corps, which had shortly before arrived in the theater of war, in reality had a different mission, but still was the northernmost army corps within the German attack organization; hence the mission designated in the radiogram could be possible. The V Army Corps, which was stationed in France, was garrisoned in Posen in peacetime, hence its presence in East Prussia appeared possible. The Russian Army Command had also believed for a long time that this Army Corps belonged to the Eighth Army, although they did not know where it was located.



Unit Develops Germanium-Crystal Antenna Tester

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By M/Sgt Thomas D. Brooks

This useful device was made at USM-8 from parts which can be found at most any installation and comprises a modified P-337A coax antenna plug, a JK-26 plug, a Germanium crystal and a few odd parts. The tester is used with a pair of high-impedence phones that plug into the JK-26 end of the tester. The P-337A end of the tester is, in turn, plugged direct into any multi-coupler or antenna terminated at a type 464-A coax jack.

The device finds constant use in the multi-coupler units. As the device is a simple detector with sensitivity limited to the sensitivity of the individual crystal used, and the sensitivity of the headset, a true comparative listening test can be made. A "clean" antenna will render no random noise, although broadcast or other signals may be heard if the receiving location is near the transmitters. In most cases, this will not be true when checking the RCA-type multi-couplers, as such frequencies in the broadcast band are rejected. Also, microphonic or oscillating stages may be detected.

A type IN21 Sylvania crystal was used in this particular unit to allow for changing the crystal unit, if need be, without having to use a soldering iron to replace the crystal. However, the type IN34 crystal will work as well and is more easy to find. If this type is used, a modification will have to be made to connect the crystal by means of soldering the leads to the plugs, which makes the IN21 preferable.

In assembling this unit, the P-337A jack is first modified as in part "A" of the exploded photograph. The jack sleeve (part "E"), is removed from the jack, and the back of the jack split and bent into shape so that the sleeve fits inside of the back of the jack, rather than over it. The fit is then adjusted so that the sleeve laps into the jack flush with the inside of the flared jack end, then sweated together with solder. Next, sweat a small hollow brass rivet (part "B") to the end of the jack center pin to make a flat connection seat for the crystal. A small still spring (part "D"), about 3/8 of an inch long is fitted to the pin end of the crystal (part "C"). A fibre paper sleeve is next fitted to the crystal body so that it butts the body shoulder and extends flush with the pin end of the crystal. This is done to keep the crystal insulated from the jack assembly, as the crystal is in series with the antenna and phones. JK-26 (part "F"), is next modified by adding a small brass extension connector, made from jack