Русская Криптология

betraying the strategic plans that the Austro-Hungarian general staff had drawn up for use in the expected war against the Slavs. Fear of a Russian Redl had kept Colonel Andreiev, in charge of the Army's cipher bureau, from distributing copies of the new and secret cipher that he had drawn up for war use until the very last minute.

His caution bred disaster.

The Russian plan of campaign against Germany in 1914 called for an invasion of East Prussia by two armies. The 1st Army was to drive straight west into that province and grip the German defenders tightly in battle. The 2nd Army, to the south, was to circle around the Masurian Lakes, come up behind the Germans, block their retreat, and destroy them. This strategy naturally required careful timing and close collaboration between the two forces. Unfortunately, Russian communications were woefully inadequate. The 2nd Army had only 350 miles of wire all told to string during its advance across the plains of Poland; this pitiful supply contrasts sharply with the 2,500 miles of wire later used in a single day by an A.E.F. army on the Western Front. At the same time radios were issued only to the headquarters of both armies and the headquarters of their immediate subordinates—their corps. Division and lower headquarters lacked them. The several corps headquarters therefore used their wire to link up with their divisions. Since army headquarters had exhausted their meager wire supplies in stringing lines to the rear commands, this left wireless as the only means of communication among the several corps headquarters and between them and their army headquarters-the two highest echelons of field command.

Their messages lay naked to the enemy. The general inefficiency that crippled the Russian mobilization had fouled up distribution of the new military cipher and its keys. Within a single army (the 2nd), for instance, the XIII Corps did not have the key needed to read cryptograms from its immediate neighbor, the VI Corps. The war broke out August 4. Before a fortnight had passed Russian signalmen were no longer even trying to encipher messages, but were passing them over the radio in the clear.

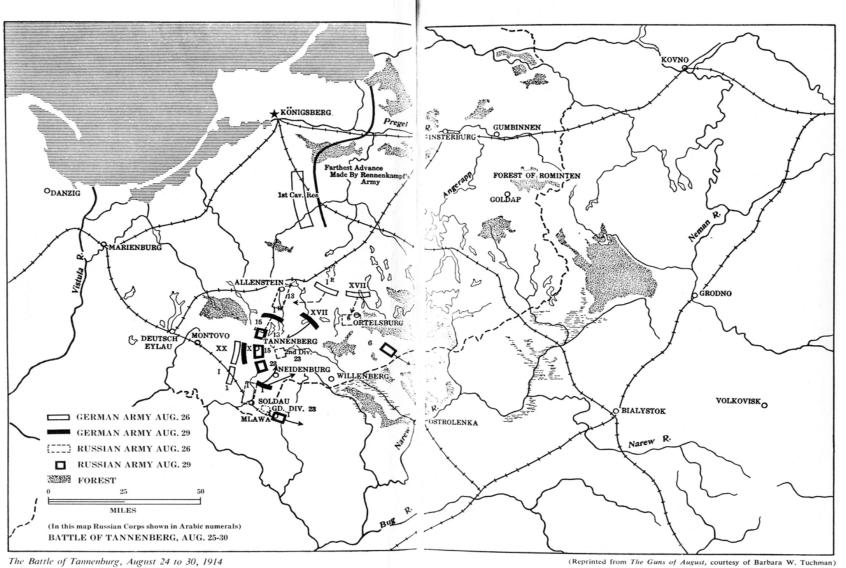
In accordance with the Russian strategy, General Pavel Rennenkampf, commanding the 1st, or northern, Army, began moving into East Prussia on August 17. The German general staff had long foreseen the two-pronged attack—the terrain made it obvious. They had left only one army to defend East Prussia because their strategy called for a quick and decisive victory against France first. This single force was approximately as strong as either Russian army but desperately weaker than both combined, and the general staff had dictated as its strategy to strike with all possible strength at the first Russian force within reach, then to turn and attack the second. East Prussia was the homeland of the Junkers. The Germans preferred not to yield it to the hideous trampling of the Slav.

They gave battle to Rennenkampf at Gumbinnen. Under a hammering

Russian artillery barrage, the German troops broke and fled 15 miles to the rear before they could be halted. The frightened German commander prepared to fall back to the Vistula River and abandon East Prussia. He reported his intentions to the German high command, which promptly began looking for a replacement. But his brilliant First Chief Staff Officer, Colonel Max Hoffmann, pointed out that the southern Russian army had already invaded so far that its left wing was actually closer to the Vistula than the German rear and so was in a position to cut off the German retreat. He convinced his chief that he had to strike against this wing to give the German army freedom to maneuver, if only to reach the safety of the Vistula. The Germans had somewhat mauled the Russian bear before their rout, and Rennenkampf, instead of pursuing to turn victory into triumph, had paused to lick his wounds. Hoffmann was confident that he would rest another day or two. He proposed, and his general agreed, to disengage two German corps from the front against Rennenkampf, switch them southward over the excellent network of German railroads, and fall upon the Russian southern prong with surprise.

The movement was in its early stages when the new German commander, Paul von Hindenburg, and his chief of staff, Erich Ludendorff, who really ran the show, arrived and confirmed it. The difficult entrainment process began. Ludendorff flung out a screen of cavalry along the northern battle line to conceal the withdrawal of his troops and to keep Rennenkampf under observation. The division of forces violated the German strategic doctrine of concentration, and the question arose as to whether all German forces should be thrown into the battle against the southern force, commanded by General Aleksandr Samsonov. To do so would almost ensure victory, but it would also leave the German rear entirely unprotected from an attack by Rennenkampf. While the German staff was discussing the pros and cons of this move on the evening of August 24, a motorcyclist brought in two Russian intercepts. They had been forwarded on the initiative of the head of the radio station at the German fortress at Königsberg. His operators, who had little traffic of their own to transmit, had begun listening in to the Russian transmissions as a diversion.

Both messages were from the headquarters of Samsonov's XIII Corps, which was communicating with army headquarters by radio because that was the only means the corps had. And both were in the clear because XIII Corps had never received the proper cipher key. They specified exactly where the corps was going, when it expected to be there, and what it would do next. Was it a trick? No, because these details were perfectly consistent with an overall Russian directive that had been found in the wallet of a dead Russian officer the day before. The intercepts did not answer the crucial question of Rennenkampf's intentions. But Ludendorff decided that, with this intelligence, the likelihood of overwhelming victory over Samsonov was worth risking defeat by Rennenkampf. The orders went out to march the remaining troops facing Rennenkampf across the short inner distance between the two pincers.



The march was getting under way next morning as Ludendorff and Hindenburg appeared at headquarters in Marienburg. But Ludendorff was not entirely free of anxiety about what he had done; second thoughts disturbed him. His thin line of cavalry could have been easily pierced by the Russian 1st Army. "Rennenkampf's formidable host hung like a threatening thunder-cloud to the northeast," he worried. "He need only have closed with us and we should have been beaten." Their defeat would have meant a tremendous moral blow to the German cause, loss of the country's richest grain and dairy lands, and possibly the fall of the only barrier between the Russian steam-roller and Berlin. Should he perhaps have been a little more cautious? While there was yet time, should he leave some troops to block Rennenkampf? Or should he even call off the whole offensive against Samsonov and turn back against Rennenkampf? So much was at stake, and it rested upon little more than his soldier's intuition that Rennenkampf would merely crawl forward as he repaired his supply lines and refitted his troops.

But at headquarters that morning there arrived what at one stroke lifted the burden from the minds of Ludendorff and Hoffmann and permitted them to prepare one of the great military triumphs of the war. It was a Russian intercept. It, too, was in clear, but this one was from Rennenkampf to his IV Corps, and it read, in part:

The army will continue its attack. On August 25 it will reach the Wiberln-Saalau-Norkitten-Potauren-Nordenburg line; on August 26 the Damerau-Petersdorf-Wehlau-Allenburg-Gerdauen line.

Their maps told the Germans that Rennenkampf was still moving at his snail's pace. The evidence of hasty German departure that the Russian general had seen as he advanced leisurely upon their evacuated positions had confirmed his erroneous opinion that the Germans were in full retreat after Gumbinnen. He did not want to press them too much for fear of forcing them to the Vistula before Samsonov could crush them. The Germans, however, saw at once that he could not reach any position in time to attack the German rear before the expected destruction of Samsonov was complete. Relieved, they concentrated at once on engineering that destruction.

Later that morning, as the German commanders were returning to headquarters from a conference at a corps headquarters, they stopped at a railway station in Montovo for news. A signalman handed Hoffmann still another Russian intercept—also in clear. Samsonov had sent it to the cipherless XIII Corps at 6 a.m. It was a long dispatch, and Hindenburg and Ludendorff had already driven off when Hoffmann got it all. He sped after them in his own car, overtook them, and, as the two automobiles jounced side by side along the rutted Polish road, handed it over. Hindenburg stopped his car, and the officers studied it:

... On 25 August the 2nd Army proceeds to the Allenstein-Osterode line; the main strength of the army corps occupies: XIII Corps the Gimmendorf-Kurken

line; XV Corps Nadrau-Paulsgut; XXIII Corps Michalken-Gr. Gardienne . . . . The I Corps to remain in District 5, to protect army's left flank . . . .

It was, in fact, nothing less than a full roundup of the situation as Samsonov saw it, together with the most detailed and explicit moves to be followed by his army. It gave the Germans a knowledge of enemy intentions unprecedented in the whole of military history. It was like reading the mind of a chess opponent, like playing blindman's buff without the blindfold. It was almost impossible to lose.

The Germans formulated their plans to take advantage of the weaknesses of the Russian dispositions. They plotted a double envelopment of Samsonov, and it worked to perfection. General combat opened the next day, the 26th. One of the Germans corps marching down from Rennenkampf's front struck hard at Samsonov's right; during the night, that wing was turned. Before dawn on the 27th, a hurricane barrage of artillery demoralized the hungry, tired troops of his left flank, and before noon they had fled the field without a single serious German infantry assault. Soon the realization penetrated to Samsonov that instead of the Russians crushing a retreating German Army, that army had in fact almost enveloped him. His XIII and XV Corps, in the center, fought bravely in the confused, surging struggle, but the frantic orders and cries for help that their radios squealed in clear were all heard by the Germans who, fully informed, could exploit a gap here, a movement there. Bit by bit the Germans drove in behind the two corps from both sides; soon the Russians found themselves fighting both front and rear. By the 30th, the Germans had encircled the corps with a ring of steel from which only 2,000 Russians escaped. This ended the battle: there were no Russians left to fight. By then Samsonov was dead. He had shot himself in despair as he and his staff stumbled through the forest in the dark night of defeat.

Gradually, it became clear to the Germans that they had won, as Hoffmann wrote, "one of the great victories in history." Almost 100,000 Russians were taken prisoner. An estimated 30,000 were dead or missing. The Russian 2nd Army had ceased to exist. One of the few battles of the entire war that was a decisive victory, Tannenberg—as the Germans named it—demonstrated that the Russian steamroller was not quite the invincible machine that had terrorized central Europe. It catapulted Hindenburg to a popularity that carried him, later in the war, to supreme command, and, in peace, to the presidency of his country. Pro-German groups in Russia began to agitate for a withdrawal from the war. Russian morale sank.

Hoffmann, the architect of the victory, acknowledged its real cause. "We had an ally that I can only talk about after it is all over—we knew all the enemy's plans. The Russians sent out their wireless in clear." The case was clear-cut. Interception of unenciphered communications had awarded the Germans their triumph. Tannenberg, which gave Russia the first push on her long slide into ruin and revolution, was the first battle in the history of the world to be decided by cryptologic failure.