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# The Ultra Secret

By F. W. Winterbotham.  
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By DAVID KAHN

This book reveals the greatest secret of World War II after the atom bomb. It is a must for World War II and intelligence buffs. But it has to be read with caution.

"The Ultra Secret" tells how the British and the Americans exploited the information they obtained from cracking German messages enciphered with a cipher machine named the "Enigma." So valuable was this intelligence that it was given a special security classification, "Ultra," which the intelligence itself came to be called. The author, an R.A.F. officer, was put in charge of distributing Ultra under tight security to Churchill and to commands around the world. Winterbotham therefore saw much of the output and in this book has correlated it with the events of the war.

The stories he tells are revelations. During the Battle of Britain, Ultra told the R.A.F. Fighter Command well in advance of radar detection how many bombers would be thrown against England and when. This enabled the British to parcel out their few fighters so that some would always be available to attack an oncoming wave. These tactics denied the Germans command of the air over England and consequently any possibility of invasion.

During the campaigns in North Africa, Ultra kept Gen. B. L. Montgomery informed fairly exactly of Gen. Erwin Rommel's order of battle and, in some cases, of his plans. It also enabled the British to know when supply ships would sail from Italy—and to sink them, thus eventually starving Rommel of vital fuel. Another intercept led to the Battle of Cape Matapan, which turned the Mediterranean from an Italian to a British lake.

The tide of the Battle of the Atlantic turned when Ultra dug deep into the naval Enigma in 1943 and revealed where the U-boats met their milk-cow supply submarines. Throughout the tough fighting in Normandy, Ultra delivered masses of intercepts from Hitler's messages on down, often within hours of their dispatch. This, "probably Ultra's greatest triumph," Winterbotham says, led to "the destruction of a large part of the German Army in the west."

Dozens of such stories crowd "The Ultra Secret," which is filled as well with sketches of the famous as Winterbotham, this bringer of good and bad tidings, saw them (Churchill was always polite). This makes exciting reading, and it constantly provides fresh insights into some of the best-known episodes of the war, for even the official historians did not have access to Ultra intercepts. The new material makes the book essential to the historiography of World War II.

But all is not exactly as Winterbotham tells it. He exaggerates the importance of Ultra, calling it "decisive" and writing as though it alone won the war.

Everyone now agrees that Ultra was of supreme importance, and that without it the war would have lasted longer. Even Gen. Mark Clark, criticized here for not exploiting Ultra properly during the Italian campaign, acknowledges that the reading of some Hitler signals saved his neck during the Anzio landings. But neither Marshal of the Royal Air Force Sir John Slessor, who wrote the foreword, nor Vice Admiral Sir Norman Denning, who was in charge of the Admiralty's U-boat tracking room, would say, in answer to my questions, that without Ultra, Britain would have lost the battles of Britain and the Atlantic.

Winterbotham, however, seems often to suggest that merely cracking the Enigma sufficed to win the war. Of course it did not: otherwise things would have been a lot easier. But though Winterbotham himself sometimes gives cases where knowledge of German signals could not affect a battle, usually for lack of men or guns, cases where no messages were intercepted, and also cases where a change of plan falsified Ultra information, his attitude of Ultra-won-all negates them.

This tone is the basic flaw of the book, the reason the general reader needs to salt its information with knowledge of how wars are won. It is why the book is not history but merely a contribution to it. One that has to be

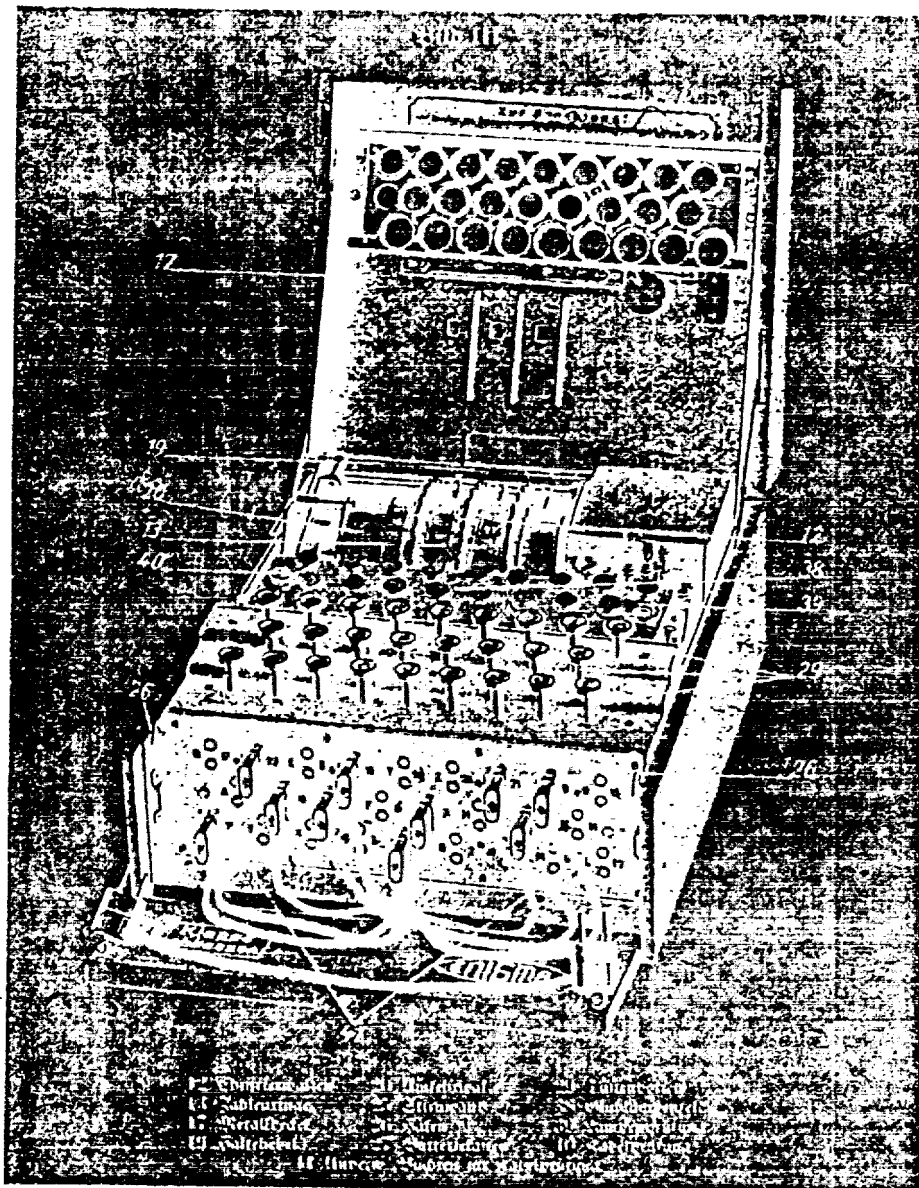
checked, at that. P-Winterbotham's memory 30 years after the events, using messages in the German archives to refresh his recollection of intercepts where he could, so it is not surprising that errors stipple the text. The American solutions of the Japanese diplomatic and naval cryptosystems had nothing to do with the breaking of Enigma. Winterbotham's attributing the original Enigma solution to information from a Polish employe of the cipher machine factory cheats the Poles of credit for one of the great cipher solutions of history. The facts are these:

On July 15, 1928, Polish cryptanalysts noticed a decided change in the letter frequencies of German army cryptograms, which they were intercepting. The Poles quickly concluded that the Germans had begun using the Enigma, which was invented and publicly sold early in the 1920's. Purchase of one of the commercial models showed that the Reichswehr had altered it for secrecy.

In 1932, the Polish Biuro Szyfrów (cipher bureau) got additional manpower in the form of three young mathematicians, Henryk Zygaliski, Marian Rejewski and Jerzy Rozycki. They had achieved a partial solution in their office, hidden in the forest of Pyry outside Warsaw, when Poland's French allies furnished some key Enigma documents. Major Gustave Bertrand of French cryptographic espionage had obtained them from a Reichswehr cipher unit employe, Hans-Thilo Schmidt, who wanted money. (Bertrand has told this story in his book, "Enigma.") With this help, the Poles completed their solution, and on July 26, 1939, presented two reconstructions of the machine to the French and two to the English.

These enabled the British codebreaking unit at Bletchley, a small town 50 miles northwest of London, to solve the later variations of the machine and other machines used for different branches of the German armed forces. Security forbade Winterbotham from recounting these details, but he properly and generously credits the achievement. To generate up-to-the-minute solutions for these other machines, incidentally, the Bletchley geniuses evolved perhaps the first modern electronic computer, which they nicknamed the "Colossus."

Why has this story remained under tight wraps so long? It seems that after World War II, Britain gathered up as many of the tens of thousands of Enigmas as she could find and later sold them to some of the emerging nations. Presumably if she could read Enigma messages in 1940, she could do so in 1950. Only recently have these coun-



The Enigma cipher machine.

David Kahn is author of "The Code-breakers."