

1943 - 1944

BIGOT
BRITISH - MOST SECRET
U.S. - SECRET

Copy No. 6

ULTRA

ENIGMA

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Overview

ULTRA & ENIGMA

As the Supreme Allied Commander of the Overlord invasion, General Dwight D. Eisenhower was fortunate to learn that he would have the best spies in the world working for him: the British Secret Service.

The Allies' ability to break Axis ciphers enabled them to read enemy fears and intentions and to monitor the effects of their deceptions. The information gathered from decrypted messages was known by the code name Ultra. It proved invaluable to the D-Day deception planners because it permitted them to see if the Germans accepted their misinformation as truth. Ultra was undoubtedly the most powerful source of obtaining Axis enemy information during World War II.

Much of German radio traffic was encrypted on the Enigma encrypting device. With over 200 trillion possible letter combinations, its code was hailed by the Nazis as unbreakable. However, with the help of Polish cryptographers, the code was cracked by Allied intelligence in December of 1941. From that point on, the Allies were able to "listen in" on the enemies' conversations. Of course, the fact that Enigma had been broken was kept Top Secret.

The Ultra obtained was compiled into weekly reports, called "Appreciations," which told Eisenhower where the German forces were, what their order of battle was, and what strengths they had. It confirmed that the top Nazi commanders agreed Calais was the most likely invasion site, and

how they planned to meet the Allied attack. These reports exemplify how completely the Germans were fooled, and how much we knew about the German forces. The Appreciations were circulated to very few and stamped "Top Secret." From this information, Eisenhower and his staff were able to work up precise tables on the German's ability to move reinforcements into Normandy.

Enigma refers to a family of typewriter-like cipher machines. The operator typed the letters of a message and the machine would do the rest. The wheels rotated to produce an encrypted letter, which lit up above the keyboard. The code changed according to the wheel and plug positions. To read or write a coded message, the operator wrote down all of the letters as they lit up. Operators were given monthly charts to indicate the daily setting, because a message enciphered by an Enigma machine could be deciphered only by another Enigma machine with the same settings.

Ultra's operation headquarters were at Bletchley Park in Buckinghamshire, England. Thousands of wireless operators tracked the enemy's radio networks, carefully logging every letter or figure. These messages were then sent back to Bletchley Park to be deciphered, translated and fitted together like a gigantic jigsaw puzzle to produce unprecedented detail of the German defenses for the Allies.

