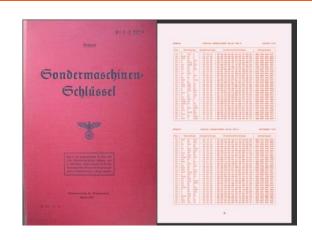
ENIGMA CODE BOOKS at STATION X



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Here we see an example of an Enigma code book which Germany used during World War II. The title, Sondermaschinen Schlüssel, means "Special Machines Key." In this context, "key" is interchangeable with "code." Click on the image for a better view.

In May of 1941, when Bletchly Park's code breakers received the secret tables of Dolphin - the German Navy's Enigma code, which the Royal Navy removed from a captured U-boat - the event was beyond a stroke of good fortune.

Because Fritz Lemp (captain of U-110) died during (or soon after) the Royal Navy's attack on his vessel, no one will ever know why Lemp neither scuttled his ship nor destroyed his code books.

Georg Högel, a U-110 crewman, examines the situation with the benefit of hindsight:

You can't change things in retrospect. I had to leave because those were the orders. And the unequivocal order was to leave everything behind and go up and climb onto the deck. There was no other way.

The only book which didn't end-up in British hands, after U-110 was captured, was Högel's book of love poems.

King George VI called the recovery of U-110's Enigma codes "the most important event of the war at sea so far."

Turing and his team were ecstatic. As Valerie Emery, a "Station X" employee recalls:

The prize was the bigram tables, and they were magnificent. Although some of them had got a bit wet, and we had to dry them.

Fortunately, the code-breaking team had access to proper drying paper and were able to save the treasure. Almost immediately, having the bigram tables made a huge difference in the work at Bletchley Park. Take, for example, what happened to https://doi.org/10.1001/jheps.com/

After Germany's mighty new battleship <u>sank the HMS Hood</u>, pride of the Royal Navy, Churchill ordered a retaliatory strike. But who knew where the *Bismarck* had sailed after she sank the *Hood* on May 24, 1941?

Peter Calvocoressi, a Station X code breaker in 1941, later described how Bletchley Park played a role in locating the Bismarck:

Enigma-transmitted messages, by air-force operators, revealed the Luftwaffe's preparations to provide Bismarck with air cover. Those messages indicated the battleship was approaching a safe harbor at Brest [in France].

British air and sea power, with intelligence information from Bletchley Park, worked together to <u>sink the</u> Bismarck.

Soon after, supply ships and their escorts, traveling in the North Atlantic to/from Britain, benefitted from deciphered Enigma messages.

On the 23rd of June, 1941, Station X decoded a U-Boat message which saved a convoy. HX-133 was heading for England, with much-needed supplies, when the code breakers in Hut 8 learned that a wolf pack of ten U-boats was lying-in-wait.

The Admiralty ordered a counter-attack which lasted five days. Two of the U-boats sank, and the convoy arrived safely.

This represented a major turn of events for Britain's defense. Station X had, in a way, joined the Battle of the Atlantic.

Although the Naval code was still taking longer to break than the other branches of Germany's military - on average, about a week during 1941 - the intelligence coming to and from Bletchley Park was stunning.

Within a month after the U-110 codes were delivered to Station X, convoy sinkings had dropped by a third. With convoys rerouted away from the wolf packs, the Allies were able - for the first time - to foil Doenitz' plan to win the war by destroying Britain's supply chain.

The results were not just defensive victories. Within a month, Allies were able to sink seven out of eight U-boat supply ships because of information coming from Station X.

Doenitz began to suspect something was wrong with the codes' security. How else could he explain the sudden turn of events, where Allies were sinking German vessels (instead of the other way around)?

Others, however, suspected that perhaps it was French workers - who were then enduring Germany's occupation of their country - who might be talking. Whatever their reasons, the German high command did not believe that Enigma had been cracked.

See Alignments to State and Common Core standards for this story online at:

http://www.awesomestories.com/asset/AcademicAlignment/ENIGMA-CODE-BOOKS-at-STATION-X-The-Imitation-Game

See Learning Tasks for this story online at:

http://www.awesomestories.com/asset/AcademicActivities/ENIGMA-CODE-BOOKS-at-STATION-X-The-Imitation-Game

Questions 2 Ponder

Should We Follow Orders We Know Are Harmful?

Georg Högel's actions in leaving Enigma code books on U-110 meant they could be confiscated when Royal Navymen boarded Högel's ship. That action harmed his country, even though Georg was following orders.

Are there times when orders should not be followed? When / under what circumstances?

Should Georg have thought more carefully, to assess the likely impact of leaving the code books on board U-110?

Would your answer be different if the orders are military orders? Why, or why not?

When Does Intuition Play a Role in Human Actions?

David Balme had no idea about Enigma, its top-secret codes, its monthly top-secret code books or the codebreaking work at Bletchley Park. Why, then, did he remove the code books from the crippled U-110?

Does intuition play a role in human actions? Under what circumstances?

When Does Courage Turn a Person into a Hero?

David Balme was a young man, barely out of his teens, when he went into a sinking German U-boat, expecting to be shot. What kind of character traits are needed to do what Balme did?

What Balme retrieved from U-110 helped code breakers to decipher Germany's top-secret Enigma codes. Did his actions make him a hero or was Balme just doing his job?

Media Stream



ENIGMA CODE BOOKS at STATION X

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Bismarck versus HMS Hood - Battle of Denmark Strait

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Bismarck Sinks HMS Hood

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Swordfish Planes Track and Attack the Bismarck

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Sinking of the Bismarck

Churchill sent an order to "sink the Bismarck." This was particularly urgent after the German ship's fatal attack on the battle cruiser HMS *Hood*, a few days before, when all but 3 of the Hood's 1,418 crewmen died.

There is a controversy—still debated—about the *Bismarck's* demise. As it happens, some of her crew had signaled "surrender" before the Royal Navy took her out.

The surrender efforts came about, among other things, by the raising of a black flag. This is a naval parley signal (expressed, in common parlance, as "let's talk"). The *Bismarck* also used Morse lamps, from the ship's yardarm, to signal a surrender message, but the Royal Navy's senior officers either didn't know about the signals or chose to disregard them.

<u>Terry Charman</u>, a senior historian at the Imperial War Museum, provides some of the reasons why the Royal Navy ignored the surrender attempt:

The Bismarck's admiral was a fairly fanatical believer in Hitler and the telegrams he sent were along the lines of "we will fight to the end." It would have been very dangerous to take the surrender.

With so much damage from the air—and torpedo attacks from HMS Ark Royal, an aircraft carrier—the Bismarck's steering was jammed. She was in peril unless the Royal Navy captured her instead of sinking her.

The lives of 2,200 men, aboard the Bismarck, were at stake.

Likely believing it was too dangerous to capture the battleship—even if she was disabled, most of her crew was not—the Royal Navy continued to pound the ship which had sent the Hood to the bottom of the Atlantic just days before.

Within two hours of the British attack on her, the once-mighty battleship was a wreck of twisted metal. Among her raging fires were dead and dying crewmen.

When the final torpedo, fired by the Royal Navy, ended her life, the Bismarck sank in the Atlantic (hundreds of miles off the coast of Brittany). Charman—author of <u>The Day We Went to War</u>—also tells us about her survivors:

HMS Devonshire picked up 200 [of the estimated 600] survivors but had to leave a lot of men behind because there was <u>U-boat activity in the area</u>.

Such—as historians tell us—is the awful price of war.

The battle between the Hood and the Bismarck is the subject of popular culture. One of the most-famous songs, about the events which took place in May of 1941, is by Johnny Horton. This embedded YouTube video combines historical footage (of the Bismarck's launch) together with excerpts from the film "Sink the Bismarck" (with <u>Horton's famous song</u> playing in the background).

Clip from "Dogfights: Hunt for the Bismarck" - online, courtesy the History Channel via YouTube. Copyright, History Channel, all rights reserved. Clip provided here as fair use for education purposes.

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