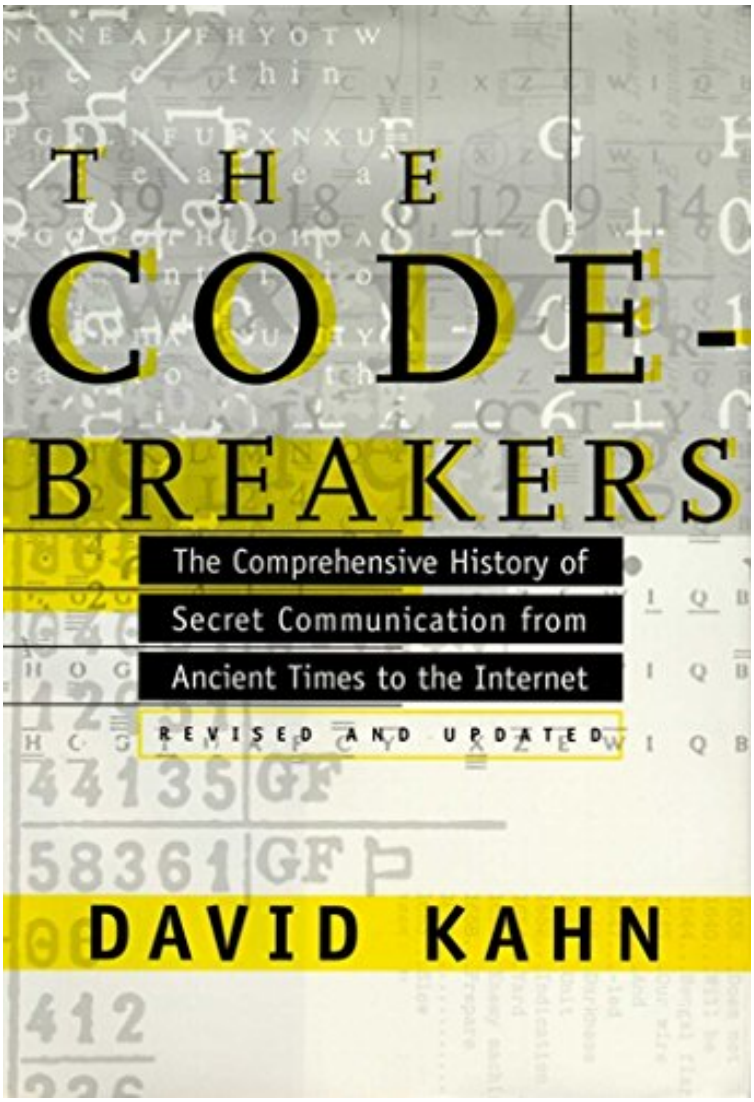
The Codebreakers: The Comprehensive History of Secret Communication from Ancient Times to the Internet (English Edition)



Par David Kahn
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Par David Kahn : The Codebreakers: The Comprehensive History of Secret Communication from Ancient Times to the Internet (English Edition) before purchasing it in order to gage whether or not it would be worth my time, and all praised The Codebreakers: The Comprehensive History of Secret Communication from Ancient Times to the Internet (English Edition):

Description : Description du produit The magnificent, unrivaled history of codes and ciphers -- how they're made, how they're broken, and the many and fascinating roles they've played since the dawn of civilization in war, business, diplomacy, and espionage -- updated with a new chapter on computer cryptography and the Ultra secret. Man has created codes to keep secrets and has broken codes to learn those secrets since the time of the Pharaohs. For 4,000 years, fierce battles have been waged between codemakers and codebreakers, and the story of these battles is civilization's secret history, the hidden account of how wars were won and lost, diplomatic intrigues foiled, business secrets stolen, governments ruined, computers hacked. From the XYZ

Affair to the Dreyfus Affair, from the Gallic War to the Persian Gulf, from Druidic runes and the kaballah to outer space, from the Zimmermann telegram to Enigma to the Manhattan Project, codebreaking has shaped the course of human events to an extent beyond any easy reckoning. Once a government monopoly, cryptology today touches everybody. It secures the Internet, keeps e-mail private, maintains the integrity of cash machine transactions, and scrambles TV signals on unpaid-for channels. David Kahn's The Codebreakers takes the measure of what codes and codebreaking have meant in human history in a single comprehensive account, astonishing in its scope and enthralling in its execution. Hailed upon first publication as a book likely to become the definitive work of its kind, The Codebreakers has more than lived up to that prediction: it remains unsurpassed. With a brilliant new chapter that makes use of previously classified documents to bring the book thoroughly up to date, and to explore the myriad ways computer codes and their hackers are changing all of our lives, The Codebreakers is the skeleton key to a thousand thrilling true stories of intrigue, mystery, and adventure. It is a masterpiece of the historian's art.

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M. Brotherhood, U.S.N.R., a curly-haired, brown-eyed six-footer, saw immediately from indicators that the message bore for the guidance of Japanese code clerks that it was in the top Japanese cryptographic system.This was an extremely complicated machine cipher which American cryptanalysts called PURPLE. Led by William F. Friedman, Chief Cryptanalyst of the Army Signal Corps, a team of codebreakers had solved Japan's enciphered dispatches, deduced the nature of the mechanism that would effect those letter transformations, and painstakingly built up an apparatus that cryptographically duplicated the Japanese machine. The Signal Corps had then constructed several additional PURPLE machines, using a hodgepodge of manufactured parts, and had given one to the Navy. Its three components rested now on a table in Room 1649: an electric typewriter for input; the cryptographic assembly proper, consisting of a plugboard, four electric coding rings, and associated wires and switches, set on a wooden frame; and a printing unit for output. To this precious contraption, worth quite literally more than its weight in gold, Brotherhood carried the intercept.He flicked the switches to the key of December 7. This was a rearrangement, according to a pattern ascertained months ago, of the key of December 1, which OP-20-GY had recovered. Brotherhood typed out the coded message. Electric impulses raced through the maze of wires, reversing the intricate enciphering process. In a few minutes, he had the plaintext before him.It was in Japanese. Brotherhood had taken some of the orientation courses in that difficult language that the Navy gave to assist its cryptanalysts. He was in no sense a translator, however, and none was on duty next door in OP-20-GZ, the translating section. He put a red priority sticker on the decode and hand-carried it to the Signal Intelligence Service, the Army counterpart of OP-20-G, where he knew that a translator was on overnight duty. Leaving it there, he returned to OP-20-G. By now it was after 5 a.m. in Washington -- the message having lost three hours as it passed through three time zones in crossing the continent.The S.I.S. translator rendered the Japanese as: "Will the Ambassador please submit to the United States Government (if possible to the Secretary of State) our reply to the United States at 1:00 p.m. on the 7th, your time." The -- "reply" referred to had been transmitted by Tokyo in 14 parts over the past 18' hours, and Brotherhood had only recently decrypted the 14th part on the PURPLE machine. It had come out in the English in which Tokyo had framed it, and its ominous final sentence read: "The Japanese Government regrets to have to notify hereby the American Government that in view of the attitude of the American Government it cannot but consider that it is impossible to reach an agreement through further negotiations." Brotherhood had set it by for distribution early in the morning.The translation of the message directing delivery at one o'clock had not yet come back from S.I.S. when Brotherhood was relieved at 7 a.m., and he told his relief, Lieutenant (j.g.) Alfred V. Pering, about it. Half an hour later, Lieutenant Commander Alwin D. Kramer, the Japanese-language expert who headed GZ and delivered the intercepts, arrived. He saw at once that the all-important conclusion of the long Japanese diplomatic note had come in since he had distributed the 13 previous parts the night before. He prepared a smooth copy from the rough decode and had his clerical assistant, Chief Yeoman H. L. Bryant, type up the usual 14 copies. Twelve of these were distributed by Kramer and his opposite number in S.I.S. to the President, the secretaries of State, War, and Navy, and a handful of top-ranking Army and Navy officers. The two others were file copies. This decode was part of a whole series of Japanese intercepts, which had long ago been given a collective codename, partly for security, partly for ease of reference, by a previous director of naval intelligence, Rear Admiral Walter S. Anderson. Inspired, no doubt, by the mysterious daily production of the information and by the aura of sorcery and the occult that has always enveloped cryptology, he called it MAGIC.When Bryant had finished, Kramer sent S.I.S. its seven copies, and at 8 o'clock took a copy to his superior, Captain Arthur H. McCollum, head of the Far Eastern Section of the Office of Naval Intelligence.He then busied himself in his office, working on intercepted traffic, until 9:30, when he left to deliver the 14th part of Tokyo's reply to Admiral Harold F. Stark, the Chief of Naval Operations, to the White House, and to Frank Knox, the Secretary of the Navy. Knox was meeting at 10 a.m. that Sunday morning in the State Department with Secretary of War Henry L. Stimson and Secretary of State Cordell Hull to discuss the critical nature of the American negotiations with Japan, which, they knew from the previous 13 parts, had virtually reached an impasse. Kramer returned to his office about 10:20, where the translation of the message referring to the one o'clock delivery had arrived from S.I.S. while he was on his rounds.Its import crashed in upon him at once. It called for the rupture of Japan's negotiations with the United States by a certain deadline. The hour set for the Japanese ambassadors to deliver the notification -- 1 p.m. on a Sunday -- was highly unusual. And, as Kramer had quickly ascertained by drawing a navigator's time circle, 1 p.m. in Washington meant 7:30 a.m. in Hawaii and a couple of hours before dawn in the tense Far East around Malaya, which Japan had been threatening with ships and troops.Kramer immediately

directed Bryant to insert the one o'clock message into the reddish-brown looseleaf cardboard folders in which the MAGIC intercepts were bound. He included several other intercepts, adding one at the last minute, then slipped the folders into the leather briefcases, zipped these shut, and snapped their padlocks. Within ten minutes he was on his way.He went first to Admiral Stark's office, where a conference was in session, and indicated to McCollum, who took the intercept from him, the nature of the message and the significance of its timing. McCollum grasped it at once and disappeared into Stark's office. Kramer wheeled and hurried down the passageway. He emerged from the Navy Department building and turned right on Constitution Avenue, heading for the meeting in the State Department eight blocks away. The urgency of the situation washed over him again, and he began to move on the double.This moment, with Kramer running through the empty streets of Washington bearing his crucial intercept, an hour before sleepy code clerks at the Japanese embassy had even deciphered it and an hour before the Japanese planes roared off the carrier flight decks on their treacherous mission, is perhaps the finest hour in the history of cryptology. Kramer ran while an unconcerned nation slept late, ignored aggression in the hope that it would go away, begged the hollow gods of isolationism for peace, and refused to entertain -- except humorously -- the possibility that the little yellow men of Japan would dare attack the mighty United States. The American cryptanalytic organization swept through this miasma of apathy to reach a peak of alertness and accomplishment unmatched on that day of infamy by any other agency in the United States. That is its great achievement, and its glory. Kramer's sprint symbolizes it.Why, then, did it not prevent Pearl Harbor? Because Japan never sent any message saying anything like "We will attack Pearl Harbor." It was therefore impossible for the cryptanalysts to solve one. Messages had been intercepted and read in plenty dealing with Japanese interest in warship movements into and out of Pearl Harbor, but these were evaluated by responsible intelligence officers as on a par with the many messages dealing with American warships in other ports and the Panama Canal. The causes of the Pearl Harbor disaster are many and complex, but no one has ever laid any of whatever blame there may be at the doors of OP-20-G or S.I.S. On the contrary, the Congressional committee that investigated the attack praised them for fulfilling their duty in a manner that "merits the highest commendation."As the climax of war rushed near, the two agencies -- together the most efficient and successful codebreaking organization that...