

## **The myth of Enigma – the contribution of the amateurs**

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**Thanks to the internet and global networking amateurs play an increasingly important role in the field of cryptologic history. This paper presents some recent research on the history of enigma which substantiates this thesis.**

Established scientists like to smile at amateurs. Historically speaking, the distinction between amateurs and professionals is a relatively recent phenomenon. Without any doubt, amateurs have made many important contributions to science. This is well known for example in the field of astronomy.

Amateurs also played an important role in researching cryptography. My research provides evidence of this; I conducted this research from 2001 to 2007 and published it in my book „Mythos Enigma. Die Chiffriermaschine als Sammler- und Medienobjekt“ .

A number of factors contributed to the fact that today Enigma is the best known – and for many laymen actually the only - cypher machine:

The myth surrounding Enigma does not date back to World War II, but actually emerged much later: the story of the British Operation Ultra and the decyphering of messages transmitted by Enigma was kept secret for a very long time. When the story was finally revealed in 1974 it immediately aroused great interest, which continues until today. Articles and books continue to be published with new details of this secret operation. Of course these publications again contribute to the myth and help to keep it alive and growing.

Various individuals, especially amateurs, play an important role here. From 2001 to 2007, I did not limit my research to written sources, but also conducted extensive interviews with approximately 50 people. Some of these people are very well known. Others are unknown, however, because they never appear in public. I divided my interview partners into three groups: contemporary witnesses, scientists and collectors.

**Contemporary witnesses:** Contemporary witnesses in various countries can tell the story of the decyphering of Enigma first hand and are living proof that this legendary story is actually true. However, not many of these people are alive today and in the next years probably most of them will have died. Only very few of these people were cryptography specialists before the war and most of them were in completely different jobs after the war. It is therefore debatable whether it makes sense to distinguish between amateurs and professionals in this group.

**Scientists:** By far not all people who play an important role in the field of cryptologic history and research on Enigma can be considered professionals in the narrow sense

of the term. For example, David Kahn: His book „The Codebreakers“ was first published in 1967; a revised edition twice the length of the first edition was published in 1996. Today it is considered a standard work. When David Kahn began his investigations in the beginning of the sixties, he was a journalist for a New York newspaper and only his tenacious approach to this work turned him into a cryptologic historian. Frode Weierud is an engineer at CERN; he conducts his research during his spare time. He has published many important contributions to research and is a long-term member of the Crypto Simulation Group. Some scientists consider their interest in the history of Enigma and cryptography as a hobby. The mathematician Friedrich L. Bauer of Munich, who has studied the mathematical foundations of encryption for decades, always termed cryptography as an interesting minor matter.

**Collectors:** Among collectors, amateurs outweigh professionals by far. There are, however, institutions like the Heinz Nixdorf Forum in Paderborn – the largest computer museum in Europe – where professionals are in charge of building and maintaining the collections. But this museum only exists because there is a community of collectors, which is active worldwide and sells some interesting pieces to the museum. Also Bletchley Park, probably the most important centre for the history of Enigma, often exhibits objects from private collections and is an important center for collectors from all over the world.

During my five-year research period I came in contact with several people, who with enormous patience and knowledge had built collections of cypher machines. I even met collectors who themselves were capable of performing professional restoration and reconstruction work. Many of them cannot or do not wish to publish their work and are only known in the community of collectors. Several of these collectors are afraid that their pieces could be stolen or confiscated.

Without a doubt there is – as among scientists – also a global network of collectors: most of them, however, live in Western Europe or the United States. Eastern Europe, China, Africa and Latin America are not represented.

I do believe that further careful research of this group of collectors would provide important results. The description and analysis of the cipher machines is just as important as interviewing contemporary witnesses.

### **Sources:**

My book published in 2008 contains a detailed source list and bibliography. Most of the interviewed persons are listed by name. The author is also willing to establish contacts with the anonymous sources. I limit myself here to the most important sources mentioned in the text:

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### **Biography of Dominik Landwehr**

Dominik Landwehr was born 1958 in Zurich/Switzerland. He holds a master in German Literature and Cultural Studies from Zurich University 1983 and a Ph.D in Media Science from the University of Basel. 1987 – 1990 he was as delegate for the International Committee of the Red Cross in various crisis areas such the Afghan border in Pakistan or the Cambodian border in Thailand. Landwehr worked as a journalist for radio, television and print media and published extensively on matters of technology and society. Since 1998 he director of the pop and new media department of the Migros Culture Percentage in Zurich, a large cultural foundation active mainly in Switzerland.

[www.sternenjaeger.ch](http://www.sternenjaeger.ch)

[www.peshawar.ch](http://www.peshawar.ch)

[www.mythos-enigma.ch](http://www.mythos-enigma.ch)

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