

Report on Berlin Targets by Major Heller  
of G.S.I(S), 21.A.G. B.O.A.R.

TICOM Report I-104, 17 September 1945

Source: Appendix C from A. Hammarborg, "Catalog of Enigma Cipher Machine Wirings." Technical Information Division, Bibliographic Research Branch, June 1954. Top Secret FROTH. Declassified and approved for release by NSA on 26 Sept 2007 in response to FOIA Case No. 44559A. DOCID: 3220592

URL: <https://cryptocellar.org/enigma/e-history/ticom-i-104-report-on-berlin-targets.pdf>

Editor: Frode Weierud, Crypto Cellar Research



**NATIONAL SECURITY AGENCY  
CENTRAL SECURITY SERVICE**  
FORT GEORGE G. MEADE, MARYLAND 20755-6000

FOIA Case: 44559A  
26 September 2007

Mr. Frode Weierud  
Le Pre Vert  
1041 Rte de Mategnin  
F-01280 Prevessin-Moens  
FRANCE

Dear Mr. Weierud:

This responds to your Freedom of Information Act (FOIA) request of 28 October 2004, which was received by this office on 2 November 2004, for a copy of the National Security Agency document entitled "Catalog of Enigma Cipher Machine Wirings," Control Number 182-4, June 1954. A copy of your request is enclosed. For purposes of this request, and based upon information you previously provided, you are considered a representative of the media. Additionally, you previously requested, and were granted, a fee waiver. There are no assessable fees associated with this request. Your request has been processed under the FOIA, and the document you requested is enclosed. Certain information, however, has been deleted from the enclosure.

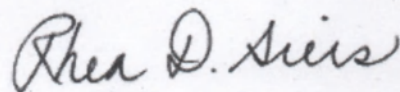
Some of the information deleted from the document was found to be currently and properly classified in accordance with Executive Order 12958, as amended. This information meets the criteria for classification as set forth in Subparagraphs (b), (c), and (g) of Section 1.4 and remains classified TOP SECRET as provided in Section 1.2 of the Executive Order. The information is classified because its disclosure could reasonably be expected to cause exceptionally grave damage to the national security. The information is exempt from automatic declassification in accordance with Section 3.3(b)(1, 3, and 6) of E.O. 12958, as amended. Because the information is currently and properly classified, it is exempt from disclosure pursuant to the first exemption of the FOIA (5 U.S.C. Section 552(b)(1)).

In addition, this Agency is authorized by various statutes to protect certain information concerning its activities. We have determined that such information exists in this document. Accordingly, those portions are exempt from disclosure pursuant to the third exemption of the FOIA which provides for the withholding of information specifically protected from disclosure by statute. The specific statutes applicable in this case are Title 18 U.S. Code 798; Title 50 U.S. Code 403-1(i); and Section 6, Public Law 86-36 (50 U.S. Code 402 note).

Since these deletions may be construed as a partial denial of your request, you are hereby advised of this Agency's appeal procedures. Any person denied access to information may file an appeal to the NSA/CSS Freedom of Information Act Appeal Authority. The appeal must be postmarked no later than 60 calendar days from the date of the initial denial letter. The appeal shall be in writing addressed to the NSA/CSS FOIA Appeal Authority (DJ4), National Security Agency, 9800 Savage Road STE 6248, Fort George G. Meade, MD 20755-6248. The appeal shall reference the initial denial of access and shall contain, in sufficient detail and particularity, the grounds upon which the requester believes release of the information is required. The NSA/CSS Appeal Authority will endeavor to respond to the appeal within 20 working days after receipt, absent any unusual circumstances.

Please be advised that the document appears to be missing some pages. This is because the blank pages in the document were removed. No information was on those pages.

Sincerely,

A handwritten signature in cursive script that reads "Rhea D. Siers".

RHEA D. SIERS  
Deputy Associate Director for Policy

Encls:  
a/s

~~TOP SECRET FROTH~~

NATIONAL SECURITY AGENCY  
Washington 25, D. C.

~~TOP SECRET FROTH~~

CATALOG OF ENIGMA CIPHER MACHINE WIRINGS

Compiled by

Astrid Hammarborg

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U.S.C., SECTIONS 793, 794, AND 798, THE TRANSMISSION OR REVELATION OF WHICH IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

June 1954

TECHNICAL INFORMATION DIVISION  
Bibliographic Research Branch

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APPENDIX C

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C O P Y

~~TOP SECRET~~TICOM/I-104Report on Berlin Targets by Major Hellerof G.S.I(S), 21.A.G. B.O.A.R.TICOM, 17 September 1945TICOM Investigation of Berlin Technical Targets1. Targets visited:

- (a) Heimsoeth and Rinke, Chiffriermaschinen Gesellschaft
- (b) Siemens, Werner Werke
- (c) AEG
- (d) Lorentz
- (e) Telefunken

Remaining targets were located in the Russian Zone of Berlin.

2. General. All targets had been previously visited by Russian Intelligence and technical experts who had removed virtually all documents and subsequently removed all machinery, plant and equipment. Despite this fact it was possible to collect a certain amount of information and equipment.

3. Heimsoeth and Rinke. Chiffriermaschinen Gesellschaft. This firm mentioned in PROC 5802 as being located in the Steglitzerstrasse 2 was finally located at Uhlandstrasse 138, Wilmersdorf.

All other addresses which have from time to time been mentioned in connection with the manufacture of Enigma machines were previous locations of the above firm who are the sole manufacturers of Enigma machines for all Germany.

Personalities: Ob. Ing. Korn (Absent on 'holiday').  
 Ing. Schroeder  
 Ing. Schiele

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## 3. (continued)

Items removed:

a. Zaehlwerkmaschine type CA 15. This machine is a four-wheel model having a gear drive and employing eccentric teeth for wheel progression. It was sold to the Dutch for military use. Subsequent to declaration of war, two machines were delivered to OKW at Stahnsdorf.

b. Lueckenfuellerwalze (drawings and prototype model). This type of wheel was a new design carried out at the request of OKW and intended to replace the existing type throughout the German Armed Forces. It was in fact approved but had not reached production stage at cessation of hostilities. It differs essentially from current type of wheels in use, in that the fixed tooth or teeth which cause the progression of neighbouring wheels, is replaced by 26 variable teeth whose setting can be altered daily. This change in design results in a basic alteration of tyre-setting and wheel body, although in practice only the progression is affected. The prototype obtained is designed for army use and is fitted with a 'neutral' wheel body.

c. Umkehrwalze D. One complete army fitting was obtained. This differs only in external measurements from the naval version. The history of Umkehrwalzen is a little odd. Type was requested by OKW and duly delivered but for unknown reasons, was withdrawn from service almost immediately. Orders were then given to design a new type having improved security characteristics. Type D was the result. This was approved and put into production, but never reached full distribution. It was withdrawn, no reasons being given, and production of type B was recommenced.

Other material located at the factory in Russian territory (Chaussee-strasse 117, Stettiner BHF.).

a. Strip printer adaptor for German Service model. This adaptor fitted over the lamp sockets and consisted of a straightforward teleprinter which was actuated via relays by the current which would normally light the bulbs.

b. Page printer Naval model. Based on the Springschreiber, this model consisted of a straightforward naval type Enigma which was operated electro-magnetically, the enciphered or clear text being printed directly on to a paper page. Only a limited number of these machines were delivered to the navy.

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3. (continued)

c. Numerous commercial 4-wheel models. These are standard commercial models.

d. Russian investigation. Both factory and offices were visited by Capt. Polin and Lt. Medwedjew. Both officers appeared to be fully conversant with the Army model and demonstrated obvious familiarity with the mechanics of the Army model. Ing. Schroeder gained the impression that both were cryptographers. These officers removed a complete set of drawings for the Lueckenfuellerwalze and a Naval type Enigma machine which they stated they had never before encountered. They did not enquire regarding the Umkehrwalzen nor did they obtain a complete model of the Lueckenfuellerwalze.

General

The offices contain large number of files relating to commercial sale of Enigma machines and current production correspondence. Schiele stated that all SECRET files had been burnt before the Russians entered the town. The files were not examined in detail.

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