

# governmentattic.org

"Rummaging in the government's attic"

Description of document: Three (3) National Security Agency (NSA) Technical

Journal Book Reviews 1964, 1967 and 1968

Requested date: 31-July-2017

Release date: 27-September-2021

Posted date: 25-October-2021

Source of document: National Security Agency

ATTN: FOIA Division, Office of Information Management

9800 Savage Road, Suite 6932

Ft. George G. Meade, MD 20755-6932

Fax: 443-479-3612

Submit A FOIA Request Online

The governmentattic.org web site ("the site") is a First Amendment free speech web site and is noncommercial and free to the public. The site and materials made available on the site, such as this file, are for reference only. The governmentattic.org web site and its principals have made every effort to make this information as complete and as accurate as possible, however, there may be mistakes and omissions, both typographical and in content. The governmentattic.org web site and its principals shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to have been caused, directly or indirectly, by the information provided on the governmentattic.org web site or in this file. The public records published on the site were obtained from government agencies using proper legal channels. Each document is identified as to the source. Any concerns about the contents of the site should be directed to the agency originating the document in question. GovernmentAttic.org is not responsible for the contents of documents published on the website.



#### NATIONAL SECURITY AGENCY FORT GEORGE G. MEADE, MARYLAND 20755-6000

FOIA Case: 102191 27 September 2021

This responds to your Freedom of Information Act (FOIA)/Privacy Act (PA) request, which was received by this office on 31 July 2017, for a digital/electronic copy for three NSA Technical Journal articles:

- Book review: A History of NSA General-Purpose Electronic Digital Computers, May 1964
- Book Review: Norse Medieval Cryptography in Runic Carvings, Summer 1968
- o Book Review: The Broken Seal, Summer 1967

Your request has been processed under the provisions of the FOIA. Enclosed is the material you requested. If you need further assistance or would like to discuss any aspect of your request, please do not hesitate to contact me at foialo@nsa.gov or you may call (301)688-6527.

Additionally, you may contact the Office of Government Information Services (OGIS) at the National Archives and Records Administration to inquire about the FOIA mediation services they offer. The contact information for OGIS is as follows:

Office of Government Information Services National Archives and Records Administration 8601 Adelphi Rd. - OGIS College Park, MD 20740 ogis@nara.gov 877/684-6448; (Fax) 202/741-5769

> Sincerely, Sharmed Lutin

KIMBERLY BEALL
Acting Chief, FOIA/PA Division

# **Book Review**

Samuel S. Snyder, A History of NSA General-Purpose Electronic Digital Computers, NSA, Summer 1964. Reviewed by John A. Rixse.

The author has prepared a very interesting documentary on an important facet of the COMINT business. The development of the use of computers to its present proportions has been a gigantic achievement—the history and significance of which are not generally advertised outside of NSA. In Mr. Snyder's book an account of this development is presented for the benefit of present and future employees.

Actually, this history is more than just the story of computers at NSA. Those who are aware of the achievements of the past decade and a half will recognize in this account the outline of the development of computer designs and applications for the entire computer industry. This is only fitting because the importance of the cryptologic mission has demanded that NSA maintain a position of leadership in furthering the art of mechanizing analytic and data-handling techniques.

As he reads this story, one may experience some nostalgia and think, perhaps, that this or that particular aspect was really more important, or more challenging, or more sophisticated than is implied by the brief coverage given. The author obviously does not intend to emphasize technical details since an actual blow-by-blow account of each phase of the history of computers at NSA would be dry reading for most people. Rather, he has created a general picture that can be understood and enjoyed by all readers.

The newness of the computer industry and the great achievement made by NSA in a short span of time form an impressive theme for this story. The earliest efforts leading to the first computers (ATLAS I and ABNER) are well described. This phase was followed by a long succession of design improvements which is still going on. Development of the Agency's ability to utilize these machines more advantageously has gone hand in hand with advances in design and reliability. Each of the computers acquired by NSA during this period represents a phase in the over-all evolution of the computer industry. Each different computer type is described in terms of its features and its primary uses. A distinction is made between those computers which were directly sponsored by NSA and those which were obtained from the commercial market, which in some cases were influenced by NSA requirements and technical contributions. Other

TANDLE VIA COMINE CHANDING ONLY 119

CONFIDENTIAL

### CONFIDENTIAL

developments, brought out directly or implied, include the remote control (or out-station) systems, Harvest, and the use of computers in a master-slave relationship with other COMINT equipment. Also, a sprinkling of examples of computer order codes and partial lists of operational programs are included to give depth to the story. Of particular interest is a complete catalog of all NSA computers showing their source and the dates of their acquisition.

This book indeed tells a fascinating story—one which should enlighten every member of the cryptologic community and one that each individual should be proud of. Because of its interest and value, then, I feel that some provision should be made for periodically bringing this history up to date.

J. A. R.

## **Book Review**

Norse Medieval Cryptography in Runic Carvings. By Alf Mongé and O. G. Landsverk. Illustrated. 224 pages. Norseman Press, 1480 Millar Drive, Glendale, California 91206. \$4.95. Reviewed by Vera R. Filby.

Cryptography, medieval Norse linguistics, the history of the Benedictines in Northern Europe, Viking explorations in North America, archaeology, runology, scholarly controversy—if this array of subjects excites your interest, you could not help enjoying Norse Medieval Cryptography in Runic Carvings, published privately last year and only recently available.

One of the two authors is Ole G. Landsverk, who has been teacher, research physicist, and manufacturer of electronics equipment. He is the historian and archaeologist of the pair. The cryptanalyst is Alf Mongé, U. S. Army, retired. He was military assistant during World War II to Dr. Solomon Kullback, whom some of you will remember.

The authors' principal purpose is to show, with proof furnished mainly by cryptography first solved as recently as 1963, that Norsemen explored and colonized continental North America as early as 1009 and until as late as 1362, and that they penetrated as far inland as Minnesota and Oklahoma. The basic subject matter of the book, as Mr. Landsverk writes in his opening statment to the reader, "is secret dates in Norse runic inscriptions." Mr. Mongé calls his discovery calendrical cryptography because it is based on medieval Norse variations of the Julian ecclesiastical luni-solar calendar. The contents of the hidden messages may seem to some readers most unromantic; they are dates and names. As Mr. Mongé says of one of them: "The Kensington cryptogram has not the slightest connection with either mysticism or magic. It is purely arithmetic and mechanical in structure." But this may allay the suspicions of those of you who know the cryptanalytic nonsense and the fantasy characteristic of the Shakespearean "ciphers," so incomparably described and analyzed by Col. and Mrs. Friedman in their book, published by Cambridge University Press, The Shakespearean Ciphers Examined.

The Kensington stone was dug up by a Swedish-born farmer in Minnesota in 1898. The runic inscription contained in pentathic numbers the date 1362. It was at once attacked by scholars as a fraud, and has generally (but by no means unanimously) been held to be a hoax ever since. But here is the switch! Many a scholarly reputation has shrunken and withered away when an object accepted as genuine—even pronounced to be superb of its kind—turned out to be a fraud; but Mr. Mongé dares to hold that the Kensington "fraud" is genuine, and he offers cryptographic proof. If he is right, then as he points out,

#### UNCLASSIFIED

the inscription is a hoax in a quite different sense, since the maker concealed in his apparent message a secret message. And what was the message? The runemaster's name, Harrek; the stonecutter's name, Tollik; and the date, confirmed and reconfirmed in several ways, Sunday, 24 April, 1362.

Mr. Mongé had broken messages out of about three dozen inscriptions by 1967. The North American carvings—and the authors point out, enticingly, that there are many others to be studied—are from Byfield, Massachusetts (encrypted date 1009), Heavener, Oklahoma (1012, 1016, 1022), Newport, Rhode Island, the famous tower (1116), Kingigtorssuaq, Greenland (1244), and Kensington, Minnesota (1362). Besides these, he had decrypted inscriptions found in Sweden, Norway, and the Orkney Islands.

It would be hard to choose which of these, if all or any are valid, is the most important, but perhaps it is the cryptogram Mr. Mongé found and solved in the legend of the Vinland map. The legend, in Latin and not runic, is shown to contain the anagrammed name Henricus and the possible date 1122. The authors identify Henricus as Eirik Gnupson, first Bishop of Greenland, from about 1112 to about 1122.

When The Vinland Map And The Tartar Relation was published by Yale University Press in 1965, it was the sensation of the rare book world, not only because of the amazing provenance of the manuscripts but also because the map provided, after these many centuries, the first incontrovertible documentary proof that the Norse had explored North America long before the time of Columbus. The event of its publication might have been even more sensational if it had been known at the time that the legend of the ancient and long-lost Vinland map concealed the name of its creator and possibly the date of its creation.

Norse Mediaeval Cryptography is fascinating, the writing generally excellent if sometimes overenthusiastic, and the book physically attractive. The text is flawed by a few typographical, grammatical, and spelling errors, but these are easy to forgive. The reader cannot help identifying himself with the authors, admiring them for the extraordinary job of work they have done, and envying them for the marvel-lous time they must have had doing it. More regrettable, however, is the absence of an index. Its lack is especially vexing since the book is oddly organized, and the details of many of the parts of the complicated story are likely to be scattered in half a dozen different places.

The ingenuity, patience, and brilliance of the medieval, probably ecclesiastical, cryptopuzzle makers are matched or exceeded by those qualities in the authors. But even they leave one question unanswered: Why?

Maybe it was those long winter evenings.

-V.R.F.

# **Book Review**

Ladislas Farago, *The Broken Seal*, Random House, New York, 1967. Reviewed, in a manner of speaking, by Lambros D. Callimahos.

The publisher for Broken Seal is well Korea¹ but the contents are not so well formosa—in fact, the initials are indicative of the squeaky tenor of the narrative. Broken Seal is a Random publication of assorted and sundry facts and fancies winnowed from the oceans of material [how do you like that for a mixed metaphor?] available in the public domain on the Pearl Harbor Investigation. It is the latest in an apparently never-ending series of books on this phase of World War II which replace the earlier analyses of Cannae, Baklava, and other succulent morsels of military history. (A discourse from the Japanese point of view appeared not too long ago—I think the title was "Torah! Torah!"—written by one of the literati, apparently a convert, whose name escapes me at the moment.)

Ladislas Farago is a man in his sixties, full of Old World charm acquired in his native Hungary. A journalist covering the capitals of Europe for over 40 years, he found himself, shortly after Pearl Harbor, in the Special Warfare Branch of ONI in a rather modest role—but that's not the way he plays it. In spite of his collaboration in 1946 with Rear Admiral Ellis M. Zacharias in the latter's autobiography, it must be pointed out that Farago never had access to Magic files or material. Furthermore, he obtained his U.S. citizenship in 1952, nine years after this reviewer got his.

Accustomed in his traipsings on the continent to giving the public what it wants, Farago knows how to douse the facts of a story with enough paprika to make an interesting dish of a stale piece of veal. In weaving his story, the warp of true facts is often crossed by the woof of misinterpretation, misconception, and flights of the imagination; woofer and tweeter are going full blast hand-in-hand, while the 520 lines per inch scanning the image are accompanied by lots of snow. In his 48 pages of reference notes it appears at first blush that Farago has documented his sources in scholarly fashion; but a closer look at some of his vague attributions ("unpublished Ms. whose author wishes to remain anonymous," "based on interviews and correspondence with sources who wish to remain anonymous," or "information was supplied by an unimpeachable private source") reveal him as a sly old fox who will let nothing stand in the way of telling a good story, magnifying and dramatizing even the inconsequential, clothing it in a veil of

<sup>1</sup> Chosen.

#### **UNCLASSIFIED**

mystery which really does not exist. The lay public may read his book with baited [sic] breath, but the cryptologic insider will yawn and take another puff on his nargileh.

The book has 28 chapters, six of which have practically nothing to do with Pearl Harbor but are devoted to the megalomaniac Herbert O. Yardley and the American Black Chamber (the "Burakku Chiemba" in the title of one of Farago's chapters). The spirit of burusiito pervades the writing, pp. 1-439 passim, starting with the comment in a pretentious foreword as to why we failed to anticipate the blow at Pearl Harbor: "This book attempts to answer the question, as definitely as possible, by presenting all facts, including many which have been omitted by the previous probes." This is not kamikaze, but Farago's mortal wind; his facts are full of errors interlaced with myopia, conjunctivitis, and sometimes with a wee bit of the psychedelic. The name Sinkov appears as Sinkow, attesting to an aural source of information; Kryha appears about half the time as Cryha; attention to many other details is equally pediculous. Farago's knowledge of cryptology is very superficial, his comprehension limited, his elucidation amateurish. In a wrong context he brings in an example of a transposition cipher, with the numerical key based on COURTESAN—no doubt to jazz it up a bit.

Among the unwittingly relaxing items in the book is the reference to "the young Canadian woman" with whom William F. Friedman fell in love and whom he married—Elizebeth Friedman is no more Canadian than my Siamese cat. Then there is the part about Harry L. Clark wondering "if those monkeys used stepping switches instead of discs" in the Purple machine, after which "an assistant was sent downtown to buy several dozen in the dime stores and electrical supply shops." Farago apparently does not know the difference between telephone selector switches and a 15-amp fuse: the latter is available in a dime store. The ultra-mysterious "daughter of a great patrician family" whose identity "has never been disclosed" but referred to only as "Miss Aggie" will tickle those who knew Agnes Driscoll. And as for the remark that "the handful of people cleared for 'Magic' were called Ultras," they were really called "personnel."

The one big bombshell in the book is Farago's accusation that Yardley sold out the secrets of his "black chamber" for \$7000 to the Japanese to support his gambling and drinking and because he was embittered at what he felt was a lack of adequate recognition. I find this allegation hard to believe, because why hasn't another long-nosed journalist uncovered this before? Furthermore, the "documentary proof" Farago mentions is in the Archives of the Japanese Ministry of

<sup>2 &</sup>quot;Divine wind" to you.

Foreign Affairs, Tokyo, 1868-1945, microfilmed for the Library of Congress, 1949-1951, Reels UD29-UD30. With such an astounding discovery, certainly Random House, if not Farago, would have thought to include a copy of the crucial document as a frontispiece, back-to-back with a photograph of Farago. In order to set history straight, it behooves us to get copies of the prints and have some of our Japanese translators go over the material.\* If this accusation of Yardley should be true, it is a hundred times worse than the M&M case.

The other puzzling thing about Farago's book is his identification by name of the four U. S. officers who went to England in January 1941 to establish technical cooperation with the British. The Pearl Harbor Report mentioned the number four, with no names; the names are found only in Broken Seal and in the special supplement to the Chicago Tribune issued on 7 December 1966 written by an anonymous author who apparently also passed this information on to Farago. Clearly somebody talked out of turn, and we can only regret the lack of security judgment on the part of someone who had been one of us. Also included in Broken Seal and the Chicago Tribune article is a list, never before made public, of the material designated to be taken to England on that trip; the list contains types of errors which might be those expected of a party not appreciating the import of the items on the actual list.

This reviewer apologizes for his sentiments on *Broken Seal*; but after all, the perennial rehash of Pearl Harbor plus the subjective notions and dreams of the various writers and self-styled experts do begin to pall on one. Until the story is written soon by somebody who was intimately connected with the events, we shall have to suffer the continued outpourings of those who know not whereof they write. *The Broken Seal* is eminently readable for anyone not connected with the business.

—L. D. C.

<sup>\*</sup>We hope to publish evidence confirming the truth of Farago's assertion in a forth-coming issue of the Journal.