

WILLIAM F. FRIEDMAN

310 SECOND ST. SE WASHINGTON &amp; D. C. 20003

1 August, 1969

Dr. Forrest C. Pogue  
Executive Director  
The George C. Marshall Research Foundation  
P.O. Box 831  
Lexington, Virginia 24450

Dear Doctor Pogue:

It gives me much pleasure to write you formally that I hereby convey to The George C. Marshall Research Foundation full title to all the books, periodicals, technical papers, and articles, journals, etc., comprising The Friedman Collection on Cryptology. The Collection includes several hundred items relating to the subjects of Cryptography, Cryptanalysis, Signal Intelligence, Communications Intelligence, Secret Writing, Secret Signalling, Radar, Secret Telephony, Secret Telegraphy, etc. It also includes files of personal correspondence, lantern slides, and a few exemplars of cryptographic devices and machines. All items in The Collection are UNCLASSIFIED as of the current date.

A brief review of the background information relative to my making the above-stated gift to The George C. Marshall Research Foundation may be useful.

You will recall that the gift has been the subject of discussion with you since May 1966, and correspondence relating to the gift bears dates from May 18, 1966 onward. Most of the letters comprising this correspondence confirm conversations between us during visits by you to talk with me at my house. In the correspondence there are also references to discussions with you and with others via telephone regarding the gift and the annotated and other catalogs being made by me with the assistance of my wife. On 16 May 1969 I sent you for deposit, via your Research Assistant, Mr. Wilbur J. Nigh, some 1500 cards of one of the catalogs (See Encl. 1). These cards represent the results of many hours of work on our part and they were typed from manuscript by Miss Mary Ann Knight of your staff. Miss Knight's services were made available to us one day a week in accordance with an arrangement worked

out by Miss Eugenia D. Lejeune, the Archivist-Librarian of the George C. Marshall Research Foundation in the summer of 1966, after I had orally made the gift of The Friedman Collection to the Foundation. I much appreciate your willingness to permit Miss Knight to come whenever her assistance was mutually convenient. It would perhaps have been better to do the work of cataloging and annotating at The Marshall Foundation Library at Lexington, Virginia, where the Friedman Collection is permanently to be housed. However, I understood that you preferred not to send the Collection and the pertinent Catalogues to Lexington until your building there had been inspected and approved by U.S. Government authorities for the storage of valuable or classified documents, and after you had an adequate staff installed there. In the meantime it was deemed best to keep the entire Collection in situ in our residence.

However, an unforeseen difficulty then became obvious and of a somewhat serious nature. This concerned the amount of insurance carried by Mrs. Friedman and myself on the property and contents of our home. The coverage was not sufficient in amount considering their current value. The Marshall Foundation was concerned only to the extent of its interest in The Friedman Collection.

You will recall that I had told you in the course of our conversations and discussions that I had had The Friedman Collection appraised by Mr. P.W. Filby, a man peculiarly qualified for appraising books, etc., of a cryptologic character, by reason of his personal background in actively working in the cryptologic field for a number of years before, during, and after World War II. I enclose a copy (Encl. 2) of his appraisal dated 11 April 1963, and a copy (Encl. 3) of his revised appraisal dated 26 February 1968.

Then, when I told you that the Collection was not covered by special insurance against the apparently and presently unavoidable hazards of the troublous times under which we here in Washington now live, and that I did not have sufficient financial means to pay the rather large premium which the hiring of special guards and the installation of protective measures (of dubious value) would entail, you were quick to agree with me that some action was necessary. I talked the matter over with the representative of the insurance company and asked him what could be done. The suggestions of the agent of the insurance company, with which I have dealt for many years, viz, the J.E. Douglass Company (5130 Connecticut Avenue, N.W., Washington D. C. 20008) were useful. Mr. Douglass suggested several changes in the insurance policy involved, the principal one being that I increase the amount

of insurance protection we were carrying on the house and its contents. This would automatically allow for more coverage on the books, papers, etc. of the Friedman Collection, increasing that coverage from \$60,000 to \$80,000, with an accompanying increase of \$140.00 in the annual premium on the policy. You readily and courteously agreed to pay and did pay directly to the insurance company a pre rata share of the additional annual premium to cover the Marshall Foundation's interest in the coverage for the Friedman Collection, amounting to \$49.00 for the period of 4 October 1969 to 4 October 1970.

It may be of interest to add that I first became interested in putting my Collection in the Marshall Library because I understood that it would be approved as an institution which could keep valuable or classified papers relating to our National Security or to our National Defense. I am glad that the Foundation's Library has now been given full authority to handle classified documents under an agreement signed by the President of the Foundation and The Adjutant General of the Army. A second consideration in giving the Collection to the Foundation was the fact that you agreed to keep the Collection intact. Of great importance also was my admiration for General Marshall. I had also great admiration for the current President of the Foundation, General of the Army Omar Bradley. I was particularly pleased to be able to show him some of the more valuable or most interesting items in the Collection, for in August 1966 General Bradley honored me by taking several hours of his valuable time to make a quick survey of the Collection.

I understood also that it simplified your own problem of giving me typing help in that you had Miss Knight nearby, working on copying documents from the Library of Congress, the National Archives, and elsewhere in the Washington area. As my wife and I complete our work of describing and annotating various items, the completed portions of the Collection can be shipped to Lexington at your request. I am pleased that Miss Lejeune, who carefully examined the Collection in order to estimate space requirements and the like, is keeping available for the Collection the room set aside months ago, which she was kind enough to show our daughter in May of 1968.

We are still working ahead on the Collection as time will permit, but I hope to have everything ready to turn over to the Library before many months. I know that you realize that this type of effort requires much time and I am pleased that you understand the problem. I know too,

that you wanted the type of evaluation my wife and I are trying to give this project. When we first talked about the gift and the project of cataloging it you mentioned the making of a special catalog for the Collection, a suggestion which pleased me very much.

I will close this rather lengthy letter by stating that I appreciate all that you and the others concerned have done, and I especially wish to add that I appreciate the work that Miss Knight has done.

Sincerely,

*William F. Friedman*

William F. Friedman  
Lieut. Colonel, AUS, Ret'd

Enclosures (3) as stated above,  
plus a copy of the Insurance  
Policy with the Glens Falls Company,  
Policy No. H 70 - 01 - 80

## Inventory (WFF files - Paul Williams)

1970?

Shelf 8143  
Box 1  
X-61-28-1Envelope 1 1919-37 201 file

- contains:
- ① paperwork associated with toys, and military activation status.
  - ② Coded MSGs, decrypted MSGs
  - ③ letter mentioning COMSEC procedures
  - ④ letter discussing a cipher machine
  - ⑤ invite from the War Dept for WFF to be a Subcommittee member.
  - ⑥ Military Thesis paper
  - ⑦ Mention of international regulations governing the exchange of coded telegrams
  - ⑧ Correspondence between WFF and the sig Corps regarding the development of codes + ciphers
  - ⑨ correspondence between Major Mauborgne and WFF regarding a position with the sig Corps.
  - ⑩ Mention of his heart condition as diagnosed by a military MD and how it impacted on his continued employment at Riverbank

Envelope 2 1938-1942 201 file

1. Correspondence regarding Friedman's desire to patent and market a cipher device for children
2. paperwork on toys, bank deposits and the like
3. letters of appreciation for lecturing

4. Correspondence regarding conference between WFF and Bell Labs, subj: code production

Envelope 3 1943-1955 201 file

- Contains:
- ① correspondence relating to code prod at Bell Labs, ~~and~~ the National Cash Register Co. Labs and RRA Labs
  - ② TDY paperwork, Efficiency Rating, Job Position description, Personnel actions, Statement of Federal Service

Inventory W.F.F. Files (Paul Gilham)

Friedman's Slide Files 1-61-28-3 Shelf 8143

Rec'd  
EX 3

## Inventory W.F.F. Files (Paul Melham)

- FENCL)  
# 2
- Friedman files + 61-28-2 Shelf 8143
- Envelope: From W.F.F. to C. Christian AG-NSG Records Dep.  
Phg #1, W.F.F. # 30462(1)
- W.F.F.  
back)
- a) General Solution for the ADFGVX Cipher System. S.S.  
Wash: GPO, 1934.
  - b) Statistical Methods in Cryptanalysis. Solomon Kullback.  
Wash: GPO, 1938.
  - c) German military ciphers from February to November 1918. J.R. Childs. Wash: GPO, 1935. (2)
  - d) Studies in German Diplomatic Codes Enciphered During the World War. Charles J. Mendelsohn.  
Wash: GPO, 1937.
  - e) American Army Field Codes in the American Expeditionary Forces During the First World War.  
W.F.F. Wash: GPO, 1942.
  - f) Field Codes Used by the German Army During the World War. W.F.F. Wash: GPO, 1935.
- 2) Envelope: Lecture Cards and notes. 364 cards.
- Black box
- 3) Final Report of the Radio Intelligence Section, General Staff, General Headquarters, American Expeditionary Forces. Lt. Col. Frank Moorman. Wash: GPO, 1935.
  - 4) Further Applications of the Principles of Invariant Symmetry of Position in Secondary Alphabets. Frank B. Rowlett. Wash: GPO, 1935.
  - 5) The Principles of Invariant Symmetry of Position in Secondary Alphabets and their Application in the Solution of Polyalphabetic Substitution Ciphers. W.F.F. Wash: GPO, 1935.
  - 6) Permutation Tables Involving a Feature of Non-transposability. Abraham Sinkov.  
Wash: GPO, 1934.
  - 7) Notes on the Liaison Service and the Liaison Intelligence Service of the German Army During the World War. From Moorman's Final Report. 1935.



Box #1 cont'd

- 8) The contribution of the cryptographic Bureaus in the World War. Ives E. J. J. Wash: GPO. 1935.
- 9) Basic Cryptologic Glossary. NSA. 1955
- 10) The Index of coincidence. NSA. 1955
- 11) Table of Binomial Distribution. ASA. 1946
- 12) Military cryptanalysis. Part I. WFF. Wash: GPO 1942.
- 13) Appendix to Military cryptanalysis. Part I. ASA. 1946
- 14) Military cryptanalysis. Part I. WFF. Wash: GPO, 1938. 4 copies.
- 15) Military cryptanalysis. Part I. WFF. Wash: GPO, 1936. 2 copies.
- 16) Military cryptanalysis Part I. WFF and L. D. Callimahes. NSA. 1957.
- 17) Military cryptanalysis Part II. WFF and L. D. Callimahes. NSA. 1955.

Cryptanalysis?

Pencil:  
 Box 4 Friedman's files Y-61-30-1 Shelf 8143 (pencil box 4)

- Inventory (WFF files) (Paul Guiliam)
- a) final version of WFF Lecture no 1
  - b) " " " " " " 2
  - c) " " " " " " 3
  - d) Envelope: from WFF to Clyde Christian AG-USA  
 Record dep.
    - 1) Introduction to cryptology: Lecture I, II, III.
    - 2) no. 3 Revised
    - 3) no. 4
    - 4) no. 4
    - 5) no. 5
    - 6) no. 6 1<sup>st</sup> draft
    - 7) no. 6 2<sup>nd</sup> draft
    - 8) no. 6 Final
  - e) Folder # 311 Army Extension courses:  
Subcourse - Military Cryptanalysis - Part I -  
Non-alphabetic substitution systems. 1936-57
  - f) Folder # 313 Army Extension courses:  
Subcourse - Military Cryptanalysis - Part II -  
 1937
  - g) Folder # 315 Army Extension Courses:  
Subcourse - Military Cryptanalysis - Part III  
 1938-39
  - h) Folder # 559-2 Army Extension Courses  
 Special text no. 164 Advanced Military  
Cryptography, 1931 Edition - in pencil -  
 original edition, WFF, Wash, 1931
  - i) Army Extension courses Special Text  
 no. 165 Elementary Military Cryptography  
 1935 ed. Wash: GPO, 1935 (also 1943 ed.  
 (2 copies)
  - j) Army Extension courses Special text  
 no. 166 - Advanced Military Cryptography.  
 1935 ed. Wash GPO, 1935 [3 copies] (also  
 1943 ed. (2 copies)

## Inventory W.F.F. files (Paul Wilhelm)

Friedman files Y-61-30-2 Shelf #143

1) From W.F.F. to C. Christian AG-NSA Records Dep. Inside:

a) Statistics for Cryptology.b) Military Cryptanalytics, Part I. by W.F.F. and L.D. Callinaker.c) Military Cryptanalytics, Part II. W.F.F. and L.D.C.

2) Envelope: "Mr. Friedman's Hagelin file" and "personal".

3) Envelope: From W.F.F. to C. Christian AG-NSA Records Dep. PKG #3,  
W.F.F. # 30462 (3) (via courier) R/D -017 Pkg #53-50Inside: a) Military Cryptanalysis Part II

b) " " " " Part III

c) " " " " Part IV

4) Envelope: "John Hurt's Brochure: The Japanese Problem in the Signal Intelligence Service."  
Copy #1.5) The Zimmermann Telegram of January 16, 1917 and its Cryptographic Background. W.F.F. and Charles J. Abensolohn. Wash: GPO, 1938.

6) "The Zimmermann Telegram" - lecture by W.F.F. before Crypto-Math Institute &amp; Sept 1958. NSA.

7) Principles of Solution of Military Field Codes Used by the German Army 1917.

8) Envelope: Pearl Harbor #2 W.F.F. Misc. Papers &amp; Docs re Pearl Harbor Attack.

9) General Solution for the Double Transposition Cipher. Solomon Kullback. Wash: GPO, 1934. 2 copies.10) Analysis of Mechanic-Electrical Cryptograph. Part II. S.I.S. Wash: GPO, 1935.

11) Envelope: RIP 98 Appendix II "American Measures Against Publicity"

12) Envelope: Hagelin file, Imperial: Hagelin negotiations."

13) Envelope: Project Rand: "Is there a Defense." Bernice Brodie.

- K) TM 32-220 Dept of Army Technical Manual - Basic Cryptography. April 1950
- L) Signal Corps Bulletin July + Sept 1937. No. 97. War Dept. OCSO.
- M) War Dept. OCSO. Articles on Cryptography and Cryptanalysis (reprinted from SC Bulletin). Wash: GPO, 1942
- N) Elements of Cryptanalysis. Training Pamphlet No 3: OCSO. May 1923 Wash: GPO, 1924. by WFF.
- O) Division Field Code no. 4. 1922 (2 copies)
- P) 10 copies of Military Cryptanalysis Pt II
- Q) 7 copies of Military Cryptanalysis Pt III
- R) 4 copies of Military Cryptanalysis Pt IV

Pencil

-76 =

Inventory CUFF files - Paul Gilliam)  
 Y-61-30-3 (Box #6)  
 (A METAL Box)

A. Pearl Harbor #1

Miscellaneous Papers + documents on Pearl Harbor attack

B. #17 Certain aspects of "magic" in the Cryptological Background of the various official investigations into the attack on Pearl Harbor

C. 3 reels of recording tape

S(GL) 3109 (INT)

"Communications Intelligence and Security"

Col. Friedman

0930-1230, 11 Dec 1958

Senior School, MCEC

MCS, Quantico, Va.

D. 3 reels of tape

"Communications Intelligence and Security"

Lt. Col. W.F. Friedman

26 April 1960

S(GL) 3109 INT (8)

MCS LOG # 000528

E. Lecture: "The Zimmermann Telegram"

F. Marine Corps Lecture Series

11 December 1958

306 continued

- G) SCAMP folders I-IV (Special Committee for Advice on Mathematical Problems) (forerunners of Friedman Lectures-HHS)
- H) folder containing receipts for Friedman documents
- I) envelope containing keys for safe & instructions.
- J) SCAMP: working papers 1958
- K) Friedman's folder when he was NSA Consultant
- L) folder on NSA Advisory Board
- M) "Commit - Hard facts in the cold war."
- N) folder containing receipts
- O) Machine identification of words.
- P) Draft. Lectures 1, 2, & 3 and a final copy.