TOP SECRET: A2919466

UNITED TATES GOVERNMENT

memorandum

DATE:

15 September 1982

Serial: T542-059-82

REPLY TO ATTN OF:

T542

SUBJECT:

Friedman Collection (U)

PL 86-36/50 USC 3605

TO: Q41 (Attn:

- 1. (U) This memorandum and its enclosures (Tabs A-F) will supplement this morning's phone conversation on the Friedman Collection. Please note one change (paragraph 4) in the information I gave you this morning.
- 2. (TS-CCO) The first enclosure is the Marshall Library's Newsletter, announcing receipt of the Friedman papers (Tab A). As indicated (Tab B), Vince Wilson and Alfred Hesse visited Lexington in January 1971. Their review of the collection involved using the 3 X 5 card index to identify folders potentially containing classified information. Note (page 3) the specific interest in Hagelin correspondence, and (same page) their conclusion that there was "no great danger of classified material, marked or unmarked, being found in the Friedman collection." Ed Fishel's November 1971 trip report (Tab C) focuses more on the potential historical value of the collection than on anything else. Note, however (page 3), some background on the Agency's role in the compilation of the collection and its attendant catalogs. Tab D marks the 1974 trip report prepared by Vince Wilson and Lambros Callimahos.
- 3. (S-CCO) As for the Friedman papers held as part of the History Collection in T542, most of the approximately sixty Shinn boxes of material were assembled from papers held by Friedman in either his Agency office or at his home. They were reviewed and segregated from the collection before the rest of the material was turned over to Friedman. Four boxes, described in our index as the Friedman Supplement, are papers retrieved by Agency personnel from Friedman's home in the recovery operation Mrs. Friedman preferred to described as NSA's "search and seizure act."
- 4. (TS-CCO) After I spoke with you this morning, I discovered a note from Dave Goodman, a onetime history fellow here, noting receipt from the Marshall Library of photocopies of the Friedman-Hagelin correspondence (Tab E). Before this, I was under the impression that our Hagelin-Friedman items had been included with the material that did not go to the Marshall Library. Tab F represents an assessment of the potential damage resulting from disclosure of the correspondence, along with the suggestion that the correspondence had been made available to Ronald Clarke. I do not know who the author of the assessment was (a guess would be that "L" stands for Lambros Callimahos, but that's only a guess). To the best of my knowledge, the originals are still at the Marshall Library.

Declassified and approved for release by NSA on 06-19-2015, pursuant to E.O. 13526

OPTIONAL FORM NO. 10 (REV. 1-80) GSA FPMR (41 CFR) 101-11.6 5010-114

HANDLE VIA COMMIT CHANNELS ONLY

TODREE (1042919466

5. (U) If we can be of any further assistance, please get in touch.

WILLIAM M. NOLTE

hi holte

T542

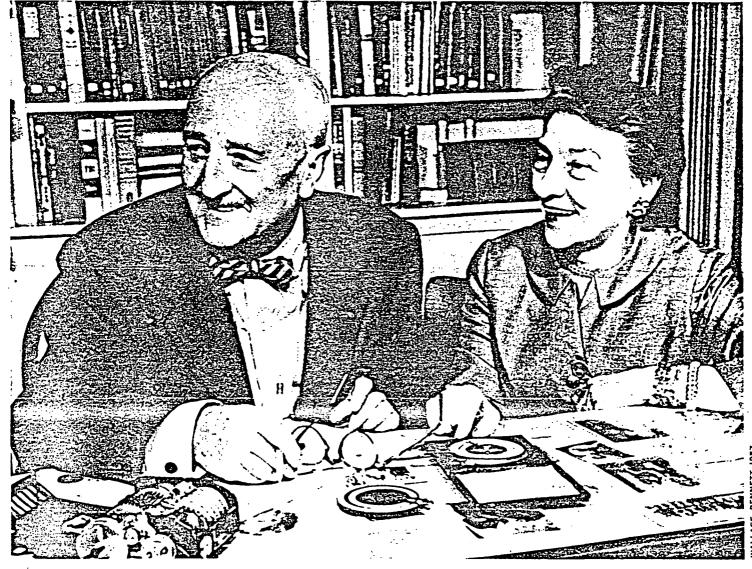
6 Encls: a/s

cc: T54

GEORGE C. TMARSHALL RESEARCH LIBRARY NEWSLETTER

Volume IX, Number 3, Lexington, Virginia / Spring, 1971

FRIEDMAN CRYPTOLOGIC COLLECTION GIVEN TO MARSHALL LIBRARY



WALLACE

ID:A2919466

Miss Eugenia Lejeune (top) who died in March, 1971, reviewed the material with the Friedmans to determine the space required for the Collection. In February, 1971, Miss Lejeune equipped a special room (center) to house the Collection. Three months later, Lieutenant General Marshall S. Carter, Foundation President, and Dr. Forrest C. Pogue, Director, examine the Collection with Mrs. Nan Pascal, Library Research Assistant.

One of the most important and extensive private collections of cryptologic material in the world has been given to the Marshall Library. The gift was made by the late Lieutenant Colonel William F. Friedman, who died in 1969, and Mrs. Friedman, of Washington, D.C. Colonel Friedman and his wife have been widely acclaimed in the field of cryptology since World War I.

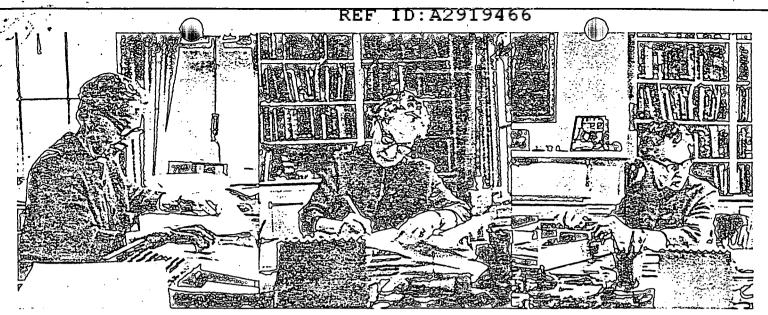
The Friedman Collection "will be a tremendous addition to the Library's holdings," stated Lieutenant General Marshall S. Carter, Foundation president and Director of the National Security Agency from 1965 to 1969. "We are deeply indebted to Colonel and Mrs. Friedman for their thoughtfulness in deciding to house this Collection with the papers of the World War II Chief of Staff."

Approximately three thousand items are in the Friedman Collection, now being prepared for the use of researchers in the field. These range from Colonel Friedman's first publications in the cryptographic field in 1916 and papers allied with their assignments for the U.S. Government to books in various languages, pamphlets, technical papers, periodicals, microfilm, slides and newspaper

clippings.

For almost half a century Colonel Friedman was regarded as this country's most eminent cryptologist. In Congressional hearings on the Pearl Harbor attack, Mr. Friedman was identified as leader of the group of U.S. Army cryptologists who solved the Japanese diplomatic cipher and built a machine which automatically deciphered these important communications. For his wartime work he was awarded the highest civilian honors given by the government. In 1944 he received the War Department's Commendation for Exceptional Civilian Service; in 1946 the Medal for Merit: and in 1955, the National Security Medal for "distinguished achievements. in national intelligence work." In a rare action, the U.S. Congress in 1956 awarded him \$100,000 as partial compensation for the commercial rights of his inventions held secret by the Government. In testimony before Congress, General Marshall said that the work of the organization Colonel Friedman directed "contributed greatly to victory and tremendously to the saving of American lives.'

Born in Kishinev, Russia, on September 24, 1891, William Frederick Friedman was brought by his family to Pittsburgh in 1893, where he became a naturalized citizen. After graduating from Cornell University with a degree in genetics, Colonel



Mrs. Friedman continued the work begun by her husband of annotating each item in the Collection, adding invaluable depth to the material.

Friedman served as director of genetics research at Riverbank Laboratories in Geneva, Illinois. While there he met Miss Elizebeth Smith, who became the future Mrs. Friedman. Miss Smith was conducting research on the claim that Sir Francis Bacon had written the works of Shakespeare.

Riverbank was a privately owned facility where research projects were conducted in many areas, including the science of cryptology. The director of Riverbank, Colonel George Fabyan, was interested in the cryptological evidence that Bacon had written the plays of Shakespeare. Mr. Friedman became interested in the controversy and his talents were diverted from genetics to cryptology.

Before war broke out in 1917, Riverbank Laboratories volunteered the services of its unique group of cryptographic personnel, including Mr. and Mrs. Friedman, who trained the first class of Army cryptographers, to the U.S. Government. During World War I. Lieutenant Friedman served in Army intelligence. In 1921 his long government career began with the Signal Corps. He was chief cryptanalyst with the War Department from 1921 to 1947 when he became chief cryptologist for the Department of Defense. In the 1950's he was also a special assistant to the director of the National Security Agency, and from 1955, until his death in 1969, he served as a consultant for the Defense Department.

While her husband was working for the War Department, Mrs. Friedman was employed by the Treasury Department as a code and cipher expert unscrambling those used by rum-runners during Prohibition. Her skills also led to the capture of smugglers and the break up of opium smuggling rings. She was selected to establish cryptographic communications for the International Monetary Fund, and also served the IMF as a consultant. From 1924 to 1942 she was chief of the Treasury Department's cryptographic section, and a research analyst with the Navy Department from 1942 to 1946.

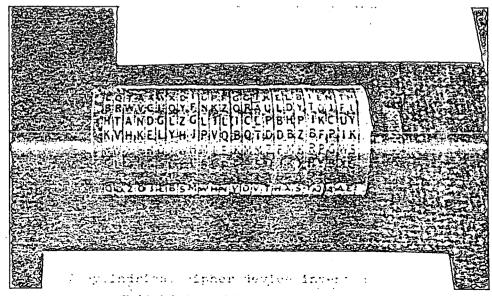
The Friedmans' interests were not limited to their government work. They continued their study of the Bacon-Shakespeare question, and after several years concluded that there exists no proof that the author was other than Shakespeare. Their "The Cryptologist Looks at Shakespeare" was awarded the \$1,000 Folger Shakespeare Library Award in 1955 and was published by the Cambridge University Press as The Shakespearean Ciphers Examined in 1957. The next year they won the fifth annual award of the Shakespeare Festival Theatre and Academy. Other works in the area of cryptology in literary works by the Friedmans include "Acrostics, Anagrams and Chaucer" in 1959 and a study of acrostics claimed to have

been found in medieval French poems.

The Friedmans were also interested in archaeology and many archaeological subjects are represented in the Collection. Among these are: the runes of Europe and Scandanavia, Linear A and B of Crete, Stonehenge and Easter Island. The development of Western civilization is studied through the Aztecs, Incas and some North American Indians; however, the largest amount of material is about Mayan culture. Color reproductions of the three remaining Maya codices are in the Collection. There are technical papers on the Mayas as well as highly readable accounts of their daily lives. The archaeological section of the Collection is smaller than the other sections, but its contents have been chosen with care.

In the Friedman Collection there are also several hundred items relating to cryptography, cryptanalysis, secret writing and signalling, radar, telephony and telegraphy.

To supplement the technical side of



A cylindrical device used briefly by the U.S. Signal Corps.

An example of the Wheatstone Cryptogram invented in 1875.

cryptography, the Collection contains fictional works whose plots involve spies and codes as well as popular books on cryptographic games for children and a set of the official publications of the American Cryptogram Association.

The Friedmans also gave the Library valuable code books used by the Union Army during the Civil War and rare books on the subject of cryptography dating from the 1500's.

There is a large amount of material concerning Pearl Harbor and the controversy over who was to blame for the "day of infamy". Colonel Friedman included in the collection everything he could find in print on the Pearl Harbor debate.

Of particular interest also is a copy of the Voynich Manuscript which has been the subject of intense research for some years. Thought by some to be the work of Roger Bacon, the English medieval monk and scientist, the manuscript has never been deciphered. Colonel Friedman and many others have attempted a solution, including the late Father Theodore C. Petersen of Catholic University, Washington. Father Petersen copied the unusual illustrations and text and spent much of his free time working on a solution. He still had not succeeded at the time of his death, but his workbooks and his color copies of the manuscript bequeathed to the Friedman Collection should be valuable to scholars in this field.

The correspondence between the Friedmans and their associates provides valuable background for the Collection. Their broad interests are reflected in the correspondence concerning each of the three main

areas of the Collection: cryptography, literature and archaeology.

In the area of literature the works of James Joyce and Gertrude Stein are prominent. Colonel Friedman believed that the works of the authors composing the "cult of unintelligibility" were really of a cryptographic nature since the authors deliberately attempted to conceal their true meanings. This Collection also includes examples of the personal shorthand codes used by Samuel Pepys, Benjamin Franklin and William Byrd.

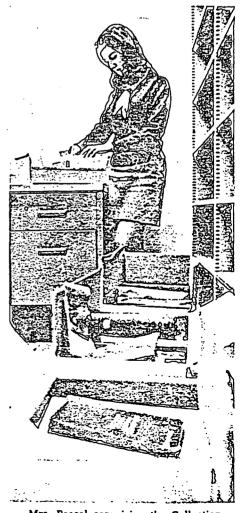
Although after years of study, the Friedmans confirmed William Shakespeare's authorship, they have included in the Collection books and essays representative of the other major viewpoints.

Dr. Forrest C. Pogue, Marshall Library director, said that several vears before his death, Colonel Friedman become interested in the work of the George C. Marshall Research Foundation and decided that he wanted his collection to go to the Marshall Library. Initially making contact with Dr. Pogue, he corresponded or talked with General Omar Bradley and General Marshall Carter, Foundation officials, concerning the deposit of the collection at Lexington. At Dr. Pogue's direction, Miss Eugenia Lejeune, archivistlibrarian of the Foundation, went carefully through the collection with Colonel and Mrs. Friedman, and then the Director arranged for part-time assistance to the Friedmans in the typing of annotated cards which Colonel Friedman made over a three or four year period. After his death, Mrs. Friedman continued this activity, adding to an already valuable collection ditional important information.

From 1965, when his first contacts were made with Dr. Pogue, until a short time before his death, Colonel Friedman talked at considerable length with the Director about his cryptographic work. The Colonel also arranged for other valuable papers to be given to the Marshall Library. One of the more interesting was the donation of the diaries for the years 1918-1926 of the inventor, Gilbert S. Vernam, which were given to the Library by Mrs. Ruth V. Nielssen, daughter of the diarist, through the aid of Colonel Friedman and Mr. R. D. Parker, former director of research for the American Telephone and Telegraph Company.

The Marshall Library is extremely fortunate to receive the extensive Friedman Collection. Once the material has been integrated with the Library's holdings, it will become a most important addition to the vast and growing research facilities.

Access to the Collection will be restricted for a period; inquiries should be made in writing to the Director, George C. Marshall Research Library, Drawer 920, Lexington, Virginia 24450.



Mrs. Pascal organizing the Collection.

25 January 1971

TRIP REPORT

of

Alfred W. Hesse and Vincent J. Wilson, Jr.

to

The Friedman Collection at the George C. Marshall Research Library Lexington, Virginia

Our visit to the Friedman Collection on 18-19 January 1971 was made in company with General Carter and Dr. Forrest Pogue, Executive Director of the Marshall Library, who were going to attend a meeting of the Library Board of Directors. Because of our travel schedule and the Library's hours, we had approximately eight hours with the collection and in conference with Miss Eugenia Lejeune, Archivist of the Marshall Research Library.

Present Status of the Friedman Collection

We began our review of the Friedman Library and collection by a conference with Miss Lejeune. She will be in charge of the general administration of the collection including its initial sorting, indexing, and arrangement, with the assistance of regular and extra Library staff.

The Friedman collection arrived at the Marshall Research Library on ?17? December 1970 and is still in some 74 transfer cartons (approximately two cu. ft. each). These cartons have been opened, and checked on a sampling basis, by the Library staff, but have not yet been systematically unpacked. Some of the cipher machines (early Hagelin B-21, an M-209, a SIGFOY, an original Wheatstone cipher disk, and some old Army ciphering cylinders and strip boards) were set out of the cartons on top of file cabinets. All these cartons and equipment were stored in the Library's room-sized vault, designed and authorized for storage of TOP SECRET material.

TAB B

In addition, there is a 3 x 5 card index file of the whole collection, prepared by Mr. and Mrs. Friedman, which is a standard library card catalog of the collection, including not only books but also pamphlets, magazines, clippings and miscellanea. It is arranged alphabetically by author and by subject. This file is now stored in a room on the second floor of the stacks, which is intended as the home of the Friedman collection, except for any classified or limited-access material which would remain in the vault.

There is another file of 5 x 8 cards, known as the analytical file, presently placed in the vault, which was prepared by Mr. and Mrs. Friedman and later by Mrs. Friedman alone right up to the time the collection was moved to Lexington. It is arranged alphabetically by proper name (except for the latest cards which have not yet been interleaved into the file). The cards are keyed to the books and other items of the collection by numbers assigned sequentially (probably in order of accession) up to about 2000. This is called the analytical file because the cards contain annotations, varying in length from a few lines to occasionally several cards, giving an analysis of the content, scope, or reliability of the book or item and usually including some cross-references.

The only other item in the collection is a 4-drawer 3-way combination lock safe, the material in which was not available for survey because only Mrs. Friedman has the combination.

Assessment of the Friedman Collection

It was clear, because of the shortness of time available for our study, that we could not hope to examine everything in the collection. Our best procedure was some kind of discriminative sampling which might lead us to those items more likely than others to show up classified or codeword material. For such a procedure the analytical card file was a most useful, and available, key.

Since this collection represents Mr. Friedman's catholic interest in anything cryptologic, there were large blocks of material which we could with reasonable assurance disregard as having a very slight chance of revealing any classified material. Such blocks of material related to the Voynich MS, the Shakespearean ciphers, the Mayan hieroglyphs, the Casanovan studies and the historical material on cryptography in Renaissance Europe, in the American Revolution, the Civil War, and World War I, as well as most open publications on cryptology, either fictional or technical.

Our method, then, was to work systematically through the analytical card file, ignoring the large categories outlined above and searching out those which seemed more significant for our purposes (e.g., ENIGMA, Hagelin, ASA, AFSA, etc.). By using the accession numbers on these cards in conjunction with an index list of the contents of the cartons by accession number, we could locate the carton containing the material to be examined more closely.

In this way we ran down about a dozen main categories, but in no case did we find anything bearing a classification higher than RESTRICTED, anything which seemed to have had a classification removed or obliterated, or anything which a quick scanning suggested should have been classified. (See Appendix). The only document found marked SECRET was a review of David Kahn's <u>The Codebreakers</u> in the analytical file, which seemed to deserve that classification, not on an official basis, but only on a personal basis.

Notice should be taken of the fact that, although all the Hagelin cards in the analytical file were checked, no file of correspondence between Mr. Friedman and Hagelin was found. Files of correspondence with others do occur in the cards and in the collection, but not for Hagelin. This seemed strange. It is possible that the Hagelin correspondence is in the locked safe, but this is mere conjecture.

Conclusions

On the basis of our selective sampling we conclude that there is no great danger of classified material, marked or unmarked, being found in the Friedman collection. We found no evidence of codeword material. If there is any requirement to protect some material by limiting access, the physical security arrangements are available and seem adequate. We were informed that some of the staff are cleared for TOP SECRET and also that prospective users of any classified material would need to be cleared by regular DOD procedures.

There should be time for further, more thorough review of the Friedman collection before it is open for study. Miss Lejeune estimates it will take at least three months to unpack, sort, check and complete cataloging the collection. Thereafter it was indicated that the Marshall Research Library could probably stall for as much as a year before announcing the collection was available for use. We recommend that a second review be made at a time when the materials are unpacked and arranged but before any general access is granted.

General Carter and the staff of the George C. Marshall Research Library - Dr. Forrest Pogue, Executive Director; Miss Eugenia Lejeune, Archivist; and Mr. Royster Lyle, Curator - were all most cooperative and helpful. The staff were most willing to make such arrangements as seemed necessary for protection of any special material which might be uncovered.

Inclosure:
Appendix



Specific materials reviewed in the Friedman Collection included:

- 1. ENIGMA only photostats of published promotional material for the commercial machine found.
- 2. Hagelin copies of company descriptive brochures of equipments, covering C-446, CX-52, CX-52B, BC-543, RT-53, CB-55, and CDR-55. No annotations, no methods of solution, and no correspondence of substance.
- 3. ASA Cryptanalysts' Manual, dated 1940, 1946, 1947 bulky compilation of letter frequencies by language as well as mathematical and statistical tables. Classified RESTRICTED.
- 4. AFSA Glossary of TA, dated 1951 slim pamphlet, classified RESTRICTED.
 - 5. U.S. Army Field Codes World War I vintage or training documents.
- 6. Official Report of Congressional Hearings on Pearl Harbor, 39 vol. no evidence found of any significant annotations.
- 7. Yardley thin file of Mr. Friedman's correspondence with Yardley up to 1931, bearing no classification and probably unclassified in substance.
- 8. Two folders of papers one labelled "Solutions," which apparently dated from the 1920's, and the other labelled "Working Papers," which concerned the Voynich MS.
- 9. A number of books e.g., A. Dulles, <u>The Craft of Intelligence</u> and L. Farago, <u>The Broken Seal</u> the latter had numerous annotations of a personal nature, but nothing was seen which seemed to need official classification.

Appendix to Trip Report dtd 25 Jan 71

12 November 1971

M. Hame

FINDINGS IN VISIT TO MARSHALL FOUNDATION LIBRARY

(Dates of TDY: 10-11 Nov.)

My main purpose was to find artifacts in the Friedman

Collection suitable for the Director's display center. My

main accomplishment was getting a bird's eye impression of the

considerable value of the collection to our history program.

As to the artifacts, I found the ones I expected to and no others suitable for our display. The two: A Union Army codebook (pocket size) and a Civil War-style cipher disk used by the AEF.

I also found, as expected, that our wanting to use the collection, and borrow or withdraw items from it, may embarrass the Foundation by running counter to Mrs. Friedman's wishes.

Another finding: It is now settled that Roberta Wohlstetter will do the W.F.F. biography.

Description of the Friedman Collection

The collection's accession numbers go up to about 2000, but there are perhaps 200 or 250 missing (i.e. unused) numbers, and in another 100 or 150 cases a number is shown in the catalog but the item to which it is assigned is missing from the shelves, evidently having been given away.

The most logical explanation of the missing numbers (this is my conjecture) is that in going through his collection in recent years

WFF many times consolidated two or more items under a single number and canceled (instead of reusing) the numbers thus vacated. For example,

TABC

all of perhaps a dozen letters, with numerous photocopies of Civil
War items that I had sent him over a longer period, are filed under a
single number.

The bulk of the collection is in an upstairs room that is kept locked. Some items--including the classified ones we contributed recently--are kept in a humidity-controlled vault. A few items (artifacts) are on display in the museum.

Perhaps half of the numbered items are books.

Only perhaps a dozen are artifacts--cipher devices, codebooks.

I did not see any correspondence files, although many of the numbered items include letters to WFF. It is unlikely that he wrote many letters without keeping copies of them, but if they are in the collection, they are not catalogued.

The catalog is organized in two ways--by accession number and by "author." The lattern term is a very large umbrella; for example, I am listed as the "author" of the odds and ends of raw material I send to WFF by letter.

WFF wrote comments about several hundred of the items. These are typed on 5-by-8 cards, filed separately by accession number. Mrs. Friedman added notations in pencil on many of the catalog cards.

A subject catalog would be useful, of course. The makings of one are present on the cards now in the catalog; on each of them the subjects to which the item pertains are noted.

Our Use of the Collection

I read the catalog cards up through $\frac{\pi}{4}450$ and examined 40 or 50 of the items. Before I reached $\frac{\pi}{5}50$ it had become clear that we need a copy of the whole catalog, and of the comment cards. This collection is perhaps as rich in material for us as is the Cryptologic Collection in 30089.

Until this time, Dr. Pogue had not had a close idea of the utility of the collection to us, nor had Mr. Lyle, his assistant on the scene.

We discussed inconclusively the problem of how our use can be effected without displeasing Mrs. Friedman. There are some points in our favor:

(1) NSA assisted in the cataloging in its early years, contributing the full time of one person for several months, a year or two. (2) It was my car (and Mrs. Friedman has been informed that it was) that hauled the last dozen or so boxes of the collection to Lexington. (3) At a cost of many manhours, we (NSA) contributed a generous number of items to the collection. And many of WFF's Civil War items were provided by me.

(4) The collection surely contains scores of items that the Agency

- (4) The collection surely contains scores of items that the Agency contributed to by providing CREF information or L24 reportuction services.
- (5) Some of the items (e.g. Civil War codebooks) were, and a case could be made that they still are, Government property.

General Carter as well as Dr. Pogue is concerned about this problem.

One possible solution, not yet suggested to them, might be a personal request from me to Mrs. Friedman. A better one, suggested to me by S.S. Snyder, is that we offer to provide by IBM listing a topical index in return for keeping a copy of it ourselves.

The collection is closed to all outsiders except us and Mrs. Wohlstetter, but for only perhaps a year and a half or so.

A request I placed for half a dozen items may bring this problem to a head fairly soon. These were: (1) the AEF cipher disk. There were three of these in the collection and I requested one as a gift to NSA. (2) One of the six Civil War codebooks. It is unduplicated in the collection (or anywhere else), but there are five other unduplicated ones. I asked for it on long-term loan. (3) a photocopy, one of several . identical ones in the collection, of a cipher letter to General Washington from Dr. Benjamin Church, his medical officer who is now known to have been a British spy. (This would make a good little problem to print in Spectrum) (4) a photocopy of a Civil War message (also a possible Spectrum feature). This is duplicated several times in the collection, and it was provided by me. (5) a copy, one of three in the collection, of the book containing the between-wars articles on cryptology that appeared in the Signal Corps. Eulletin. The Library may have this, but we could use another. I asked for it as a gift. (6) a copy, one of eight in the collection, of a short treatise on international communications that WFF wrote (and GPO printed) by way of educating the U.S. delegation to one of the betweenwars international conferences on frequency allocations etc. This I also asked for as a gift. (7) a copy of published material relating to the battle of the Falklands.

I intended, but neglected, to request also an M-94 cylindrical cipher device which is kept in the Library vault and is

· REF ID:A2919466

just rusty and worn enough to make it a much better display item than the mint-condition copies of the same device we could probably find within the Agency.

If we had a copy of the catalog, we would re-reproduce the cards in sufficient number to create a subject file.

In the case of some subjects, the catalog might reveal enough material to make a TDY to Lexington worth while. But in most cases we would be served well enough to get a Xerox copy of an item or items made at the Library and sent to us. The Library has a copying machine and the staff would not be unduly strained by helping us in this way.

Some Particulars About the Collection

World War I

This is the period for which the collection appears to be richest in material of the kind we are after. The $\frac{1}{2}$ of the catalog that I examined yielded perhaps a dozen WV I items that seemed to be new to me.

- 1. The Falklands material mentioned above consisted of magazine and newspaper pieces published in 1934, beginning with an article by an Australian Navy officer named Blakely who claimed that he read traffic giving Von Spee's itinerary across the Pacific and into the Atlantic. His disclosure was followed in the Australian and British press by one or two other claims (not Comint) and some challenges and refutations. WFF's note on this item says "A completely subjective and imaginative account of World War I cryptography"; but this does not destroy the story.
- 2. If the book 40 0.B. (by Hugh Cleland Hoy; London: Hutchinson & Co. Ltd, 1935; pp. 256) continues to elude us, perhaps we could reproduce the collection's copy, which is accession #424.
- 3. WFF noted that the AEF never used the primitive cipher disk (one of the artifacts I asked for).
- 4. Clue to the location of the Walter Fines Page MSS: There is a W.H.P.Library at Randolph-Macon (Ashland, Va.)
- 5. A name we should seek to identify: J. Rives Childs, "1st Lt., N.A.," author of several writings (some unclassified) on German Army ciphers in W.J. I.

Civil War

- 1. In The Friedman Lectures there is a sentence that promises I will some day reveal the background of "A Rebel Cipher Dispatch: One Which Did Not Reach Judah P. Benjamin." I had forgotten about this and will need to recover the article, which appeared in Harper's for June 1898 and is WFF's #240.2.
- 2. We should also get from L. of C. the magazine Signal for Karch-April and May-June 1954, containing a two-part article by G. Raynor Thompson, Signal Corps historian. There may be little new information in it, but it contains 15 or 20 photographs which we could get from Archives or the Brady collection once we knew how to identify them.
- 3. Federal ciphers in original handwriting are among the WFF items in the vault, as #'s 187 and 187.1.

- 4. WFF's #193 is a typescript, "Codes and Ciphers Duringthe Civil -War/Prepared Under the Direction of the Chief Signal Officer/20 April 1945/SPSIS-1." The "SPSIS-1" stamps it as part of the history produced in ASA. Do we have it?
- 5. In addition to the six C.W. codebooks, the collection includes a book of worksheets that belonged to William R. Plum, Army of the Cumberland telegrapher and author of the Military Telegraph history. These are messages that Plum wrote in his book before taking out the columns onto a message blank. It is part of the museum display.

l'iscellaneous

- 1. There is a Charles Mendelsohn Collection in the U. of Penna. Library. A card index to it is WFF's $\frac{1}{n}1544.4$. We probably should ask for the reproduction of this index.
- 2. Possible source of artifacts: the Signal Corps Euseum at Fort Lionmouth, established 1962.
- . 3. Another possibility: There is a "Rebel Cipher Key" in Ford's Theater, not part of the exhibition there (according to MFF's 1943 note). It is probably a mooden version of the cylindrical cipher disk. A letter concerning it is part of MFF's #193.
- 4. Still another: For a message to go with the C.W. codebook, we might ask for a loan from the McClellan MSS at L. of C., which contain numerous undecrypted messages.
- 5. WFF's 1923 Elements of Cryptanalysis was translated into German and a copy of it, obtained by TICUL, is in his collection as #213.1. (There is at least one other mention of TICOL, in Mrs. F.'s handwriting. Should this be expurgated?)

Norld War II

- l. Some of WFF's and Signal Corps instructional publications were unclassified and are in the collection. Example: FH 11-35, Signal Corps Intelligence (pp.40), which is \$\frac{4}{2}270\$.
- 2. The Pearl Harbor material does not appear to be extensive. It includes the several 1954 articles in U.S.Kems & World Report; Gen. Kiles' July 1948 article in Atlantic Lonthly (pp.8) (7323), and Richard N. Current's article "How Stimson Meant to "Maneuver' the Japanese" (7356).

Spanish-American War

MFF's file on the Roosevelt-Dewey message includes much more than the one message he used in the <u>Lectures</u>. It is all photocopy except his worksheets used in determining which cipher message equated to the plain text ordering Dewey to Kanila. For the display center, we should ask, archives for the originals. WFF's material on this includes a couple of 1958 nesspaper stories about the message and his identification of it.

Footnote

IFF's $\frac{2}{11}364$ is Preliminary Inventory of the Records of the Chief Signal Officer (Record Group 111), prepared in 1952 by Habel E. Deutrich of the Archives. This book is still in print and we should get a couple of copies.

E. C. Fishel

Trip Report: Visit to George C. Marshall Research Library, Lexington, Va. 22-24 July 1974

In January 1971, Alfred Hesse and Vincent Wilson visited the Marshall Library to make a preliminary survey of the contents of the Friedman Collection and to examine the area in which the Collection was stored. At that time all the material was stored in a vault with all the protections required for material classified SECRET. Since then, the material has been catalogued and moved to a different location - a room especially prepared to house the Collection.

The present visit was made to examine the newhhome of the Collection, to survey the collection for classified material, to review any such classified material, and to provide any possible assistance or information about W.F. Friedman and the Collection to the Library staff.

Under the present-permanent-arrangement, all unclassified material is located in a special room devoted solely to the Friedman Collection; all calssified material remains in the

vault. Mr. Callimahos reviewed the classified publications and documents and found nothing that was underclassified - except for the Military Cryptanalysis texts, Parts I-IV, which retained their original RESTRICTED marking. However, some of the War Department publications of the 1930s may now be overclassified, or misclassified.

In the parts of the Collection not in the vault, a number of files and collections of loose papers were reviewed and searched for classified documents, but none was found.

Both the Associate Director (Mr. Lyle) and the Archivist (Mr. Crawford) were interested in Mr. Wilson's proposal to consider producing video cassettes on the life and works of William Friedman. (Work on a video cassette on the Comint story of the Battle of Midway is now in progress, as part of the Agency's Cryptologic History Program.) Mr. Crawford assisted Mr. Wilson in reviewing all photographs of Mr. Friedman in the Collection - and many of these photographs could be used in a documentary prepared in a television studio. The Collection has no moving-picture film of Mr. Friedman.

Mr. Callimahos reviewed the Riverbank publications in the Collection, assisting the Library staff in evaluating

these early writings of Mr. Friedman. Mr. Callimahos also provided technical information about a number of publications, manuscripts and other materials in the collection.

Proposed Actions:

- 1. That the Agency Classification Officer formally review the War Department publications known as the "Black Books" for accurate classification. (Mr. Callimahos)
- 2. That Agency publications carry notices of the Riverbank publications the Library is offering for sale. (Mr. Wilson)
- 3. That the possibility of producing video cassettes on the life and works of Mr. Friedman be pursued, as part of the cryptologic history program. (Mr. Wilson)

NOTE: The Museum section of the Marshall Library has a formal display of several primitive cryptographic machines (such as a cyclindrical device) and other articles from the Friedman Collection.

The staff of the Library is anxious to present any relevant material available on the subject of cryptology, and they welcome any assistance or suggestions.

Lambros Callimahos

Vincent Wilson

GEORGE C. MARSHALL RESEARCH FOUNDATION

DRAWER 920

LEXINGTON, VIRGINIA 24450

(703) 463-7103

ROBERT A. LOVETT
CHAIRMAN
BOARD OF TRUSTEES

FRED L. HADSEL EXECUTIVE DIRECTOR

FORREST C. POGUE

OMAR N. BRADLEY GENERAL OF THE ARMY CHAIRMAN EMERITUS

MARSHALL S. CARTER LIEUTEHANT GENERAL USA IRET.) PRESIDENT

July 19, 1976

Received for examination by NSA from the George C. Harshall Research Foundation, one complete photocopy set of the William F. Friedman-Poris Hagelin correspondence file from the William F. Friedman Collection.

Don & R. Moodman Useh (ESI)

EO 3.3b(3) PL 86-36/50 USC 3605

REF ID: A2919466

