

The National Security Agency and the William F. Friedman Collection

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ABSTRACT

In addition to being one of the founders of modern American cryptology, William Friedman was a noted cryptologic historian who amassed a major collection of cryptologic literature and artifacts in both his personal and official files. Drawing on over 50,000 pages of documents newly released by the National Security Agency and other sources, this article places the man, his career, and his collections in the context of the government's changing secrecy policies of the early Cold War to offer new insights into Friedman's sometimes fraught relationship with that agency, its efforts to influence the amount and nature of cryptologic information in the public domain, and a series of confrontations over his personal and private papers.

KEYWORDS

Cryptologic history; declassification; freedom of information; National Security Agency; security; William Friedman

A cryptologist in transition

On 12 October 1955, a brief article appeared in the *Washington Star* announcing the departure of a local man from the civil service.

One of the world's leading experts on secret codes, William F. Friedman, retired from the National Security Agency today after Government service that extends back to World War I. Mr. Friedman is widely recognized for his achievements in the field of cryptology. He received the Government's highest civilian decoration, the Medal of Merit, in 1946 for his work during World War II, and the Army's highest civilian decoration, the Exceptional Service Award, for the same reason in 1944. (*Washington Star* 1955)

The *Star's* notice on Friedman's retirement was based on an NSA press release. The next day, another paper, the *Daily News*, ran its own story under the title "Sensitive Release." It noted NSA's announcement of Friedman's retirement, which the paper said "would have received routine treatment." Then, however, an editor spotted a handwritten note in one corner of the document NSA had provided: "Make No Additions." The NSA representative who had delivered it explained that the agency hoped the media would limit its reporting on Friedman's retirement to the material in the announcement, saying "if you looked in your files you might find other things about Mr. Friedman. ... We'd like to ask that you not use them." When asked why the agency would think the *Daily News* would have anything about

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Friedman's work of a classified nature, or why a request that the newspaper restrict itself to printing only what the government had provided would not instead stoke its curiosity, the NSA official could say only, "We're a sensitive agency. We shy away from publicity as much as we can" (Clark 1955).

The *Daily News* found little if any information about William Friedman in its files. It might have come across reports from a few months back that he and his wife Elizebeth had won a literary prize from the Folger Shakespeare Library. What it probably did not learn was that the same day as this achievement was reported, Friedman suffered a serious heart attack, resulting in an extended stay at the George Washington University Hospital, or that it was one of three in 1955 and a key factor in his retirement.¹ The paper likely did not know of Friedman's accomplishments during his long government career, ones which led to his being awarded the National Security Medal by Director of Central Intelligence Allen Dulles. Other recipients of that award from this period included Major General William Donovan, founder of the World War II Office of Strategic Services (OSS), the predecessor of today's CIA; J. Edgar Hoover; Dulles' predecessor, Walter Bedell Smith; and later, Dulles himself. Friedman had joined an impressive group, albeit one having some members whose records were not without later controversy.

Friedman's road to becoming one of the most significant figures in the history of international cryptology (or the making and breaking of codes and ciphers used to protect sensitive communications and specifically those of governments and militaries) began in the East European city Kishinev, then part of the Russian Empire and now the capital of Moldova, where he was born in 1891. Friedman immigrated to the United States with his parents two years later and became a naturalized citizen in 1896. Having completed undergraduate work at Cornell University in 1914 and commenced graduate studies in plant genetics there, he was recruited to join the Chicago-based Riverbank Laboratories, an entity which combined certain elements of a research institute with others more resembling today's think tanks.² Riverbank's areas of work reflected the interests of its somewhat eccentric owner, textile millionaire George Fabyan.³ Whereas Friedman was hired to work on genetics (a topic clearly relevant to Fabyan's business interests),

¹Friedman's three successive heart attacks in 1955 as well as his recuperation are described in a series of letters he and his wife Elizebeth wrote at the time. See, for example, William Friedman's letters to Arthur Peterson, Stuart Hedden, and Walter Fried of 13 May, 16 May, and 8 June 1955. National Security Agency, William Friedman Collection of Official Papers (hereafter, "NSA Friedman Collection"), Document Reference IDs A62612, A62602, and A62467. Available at https://www.nsa.gov/public_info/declass/friedman_documents/index.shtml. See also Elizebeth Friedman's letter to Charles Harvey, 21 April 1955 (Document A62823). Additional details can be found in the authorized biography of William Friedman (Clark 1977, 222–23).

²In 1949, Friedman wrote to one of his former professors in Cornell's Department of Plant Breeding, H. H. Love, on the occasion of the latter's retirement: "My memories of the days of our association in the Department are so pleasant that I often wish I have never left the place. Although it seems that I strayed far off the genetic reservation, the things I learned under your direction have been most useful in the field to which I have devoted myself." Letter from Friedman to Professor H. H. Love, 24 June 1949. NSA Friedman Collection, Document 70009.

³For descriptions of Riverbank Laboratories and the Friedman's time there, see Clark 1977, 16–69; Kahn 1996, 369–77; Sheldon 2014; and Friedman 1973, 1–5 and 58–65.

another group at Riverbank dealt with the breaking of codes and ciphers, whether these were in the form of encrypted messages forwarded by the War Department or (more exotically) ones purportedly hidden in the plays of William Shakespeare.⁴ Friedman quickly became intrigued by and engaged in this work. He also became intrigued by and engaged to a young woman working in Riverbank's cipher section, Elizebeth Smith. The two married in 1917.

While at Riverbank, Friedman wrote a series of eight papers which are now considered to mark the emergence of cryptography as a modern scientific discipline. One of these, *The Index of Coincidence and its Application to Cryptography* (Friedman 1922), is considered by historian David Kahn to be "the most important single publication in cryptology" (1996, 376). Both the makers and breakers of ciphers, or cryptographers and cryptanalysts, had long realized certain letters in any alphabet were used more frequently than others (with "E" and "T," for example, appearing more than any other letter in English, while "X" and "Z" do much less so). This created an opportunity for the cryptanalyst to pierce the security of any cipher which simply substituted one letter for another, as the frequency distributions of the letters in the plain and enciphered texts would be identical. Accordingly, in devising a cipher, cryptographers must find ways to suppress this distribution and thereby reduce this natural weakness. Friedman's unique insight, according to Kahn, was that he "treated a frequency distribution as an entity, as a curve whose several points were causally related ... and to this curve he applied statistical concepts." "The results," Kahn concluded, "can only be described as Promethean" (1996, 377). Armed with this approach, Friedman proceeded to break a series of supposedly impenetrable cipher systems during the 1920s. Kahn, whose study *The Codebreakers'* comprehensive approach to the history of cryptology in some ways did what Friedman's application of rigorous, scientific principles had done for cryptology itself, sums up Friedman's significance in the following way: "His theoretical studies, which revolutionized the science, were matched by his actual solutions, which astounded it. His life's work, as extensive as it is intensive, confers upon William Frederick Friedman the mantle of greatest cryptologist" (1996, 393). An NSA statement summing up the significance of Friedman's work which accompanied his induction into its Cryptologic Hall of Honor noted that "much of what is done today as NSA can be traced to William Friedman's pioneering efforts."⁵

⁴Friedman distinguished ciphers from codes in the following way: "In ciphers, or in cipher systems, cryptograms [which Friedman characterized as the result of a plain language message being converted into "secret language"] are produced by applying the cryptographic treatment to individual *letters* of the plaintext message, whereas in codes or in code systems, cryptograms are produced by applying the cryptographic treatment generally to entire *words, phrases, and sentences* [emphasis original] of the plaintext messages" (NSA 2006, 8).

⁵More colorful is the suggestion by Henry Clausen, appointed by Secretary of War Stimson in 1944 to conduct a personal investigation of Pearl Harbor. "I believe," Clausen wrote, "that Friedman's accomplishments should have been honored by church bells ringing across America, because from the new Magic decrypts, it was obvious that the Japanese were preparing for war and we were being given the chance to prepare against whatever Japanese aggression might be coming" (Clausen and Lee 1992, 42).

After America's entry into the First World War, Friedman left Riverbank and was commissioned as a First Lieutenant in the Army, serving in France as a cryptologist with U.S. forces there. Honorably discharged in April 1919, Friedman returned to Riverbank. In 1921, however, the Army's Signal Corps offered him a position. Although it first attempted to obtain a commission for him, Army doctors detected a heart condition and deemed him unfit for active duty. Accordingly, he was made Captain in the Reserves. (He later was promoted to Major and ultimately, in 1936, to Lieutenant Colonel.) Briefly employed by the Signal Corps as a contractor, he became a full-time civilian employee on 31 December 1921. He would go on to a distinguished, 34-year government career, and although the names of the organizations he served changed over time, his work remained much the same. He became best known for having created the U.S. Army's Signal Intelligence Service (SIS), which he headed during the 1930s, and more specifically for recruiting, training, and overseeing the work of a team which broke a series of ciphers used by the Japanese to protect their diplomatic communications prior to and during World War II. The efforts of this group culminated in the decipherment of the system designated "Purple."⁶ Friedman's SIS colleague Frank Rowlett reported Friedman as exclaiming, upon learning that the team working on "Purple" had achieved a key breakthrough which ultimately led to its decryption, "Without a doubt we are experiencing one of the greatest moments of the Signal Intelligence Service" (Rowlett 1998, 152–53).⁷ Reflecting on this success several years later, Friedman wrote that "I regard the Japanese 'Purple' machine and the underlying system to have been by far the most difficult cryptanalytic problem successfully handled and solved by any signal intelligence organization in the world and, so far

⁶The SIS used colors to designate various Japanese diplomatic code systems, the previous one (also broken by the SIS) being Red. For a detailed account of the breaking of Purple by one of the participants, see Rowlett 1998, 140–59. Frank Rowlett was one of the first four individuals Friedman recruited for the nascent SIS, the others being John Hurt, Solomon Kullback, and Abraham Sinkov. Like Kullback and Sinkov, Rowlett was a mathematician, while Hurt was a Japanese linguist. Rowlett ultimately held a number of senior NSA positions, heading its cryptanalytic and communications security organizations before finishing his career as the first commandant of the National Cryptologic School. "Magic" was the name bestowed on the results of U.S. codebreaking efforts leading up to and during World War II, much as "Ultra" was used for intelligence derived from Britain's breaking of Germany's Enigma machine. An informed, scholarly, and readable treatment of SIS efforts against Purple can be found in Budiansky 2000, 159–70.

⁷By giving the title *The Man Who Broke Purple* to his biography of Friedman, Clark bestowed on Friedman an honor which more rightly would be shared with others, including Frank Rowlett, Robert Ferner, Genevieve Grotjan, and Albert Small. It perhaps would be more accurate to say that Friedman created the necessary methodology, built the organization, and trained the people needed to break it. In the section of his biography of Friedman which deals with Purple, Clark made clear that breaking it was a team effort. Friedman himself stated, in his testimony to the postwar Congressional investigation of Pearl Harbor, that "naturally, this was a collaborative, cooperative effort on the part of all people concerned. No one person is responsible for the solution, nor is there any single person to whom the major share of the credit should go." Testimony of William F. Friedman, 13 July 1945, *Hearings Before the Joint Committee on the Investigation of the Pearl Harbor Attack*, Part 34, 84–85. Despite the fact that Friedman's testimony presumably was available to her in writing her classic study of Pearl Harbor and the relationship of intelligence to policy and military decision making, the historian Roberta Wohlstetter (1962, 382) may have inadvertently started the story of Friedman as solely responsible ("an American cryptanalyst, William F. Friedman, had broken the primary Japanese diplomatic code").

as AH [Arlington Hall] is concerned, this has been and still is the most important source of strategically valuable, long-term intelligence.”⁸

Beginning in late 1940, however, a series of events first slowed and then changed the trajectory of Friedman’s career. One was an extended hospitalization in late 1940 and early 1941, attributed variously to exhaustion, a nervous breakdown, or a severe anxiety attack. Regardless of the cause, William and Elizebeth Friedman rarely spoke of the event. Elizebeth discussed some of the circumstances in a 1973 oral history interview with Forrest Pogue at the George C. Marshall Research Library in Lexington, Virginia.

It was shortly after the thing [the Japanese Purple diplomatic cipher] was broken. That brought the crash. He apparently had been just wound up and built up and built up and when they got the thing and read the first messages, that’s when he crashed. ... He was away from work for between 3 and 4 months, I think. (Friedman 1973, 30)

Elizebeth went on to say that “there was a period of time when he [William] was sort of on work and then he was out completely on a sort of complete rest period and he was in Walter Reed awhile, then he was out awhile and then he [was at] Mount Alto, the veteran’s hospital for a while and that was in 1941.”⁹ She also noted that for a certain period before the breaking of Purple, her husband had had difficulty sleeping and often was up until 2:00 or 3:00 a.m.¹⁰

William was generally reticent about his hospitalization. He alluded to it in a January 1944 letter to a World War I colleague, J. Rives Childs, then serving at the American Legation in Tangier, Morocco. The two appear to have been out of touch for several years, with Childs writing to Friedman a month earlier that he had phoned Elizebeth sometime in 1941, just before leaving Washington for his North Africa posting, and “had learned to my great regret that you were ill.” Perhaps hinting that he may have discovered the reason for Friedman’s hospital stay, he hastened to add, “I do hope that things have gone better with you. I can imagine the work with which you must have been burdened.”¹¹ Responding to Childs, Friedman indicated only that he “was

⁸Memorandum from Friedman to Colonel Preston Corderman, “Recommendations for Legion of Merit and Medal of Merit Awards,” 27 September 1943. NSA Friedman Collection, Document A4148494. Arlington Hall was the wartime headquarters of the U.S. Army’s Signal Security Agency, the successor to the SIS. Corderman was its commander from July 1943 to September 1945, when it was renamed the Army Security Agency.

⁹See Friedman 1973, 32; and Sheldon 2014, 64–65. Walter Reed Hospital is the U.S. Army’s main medical facility in the Washington, DC area; Mount Alto Veterans’ Hospital, in northwest Washington, opened in 1930 and closed in the mid-1960s. The buildings were razed in 1967 to clear the site for what is now the Russian embassy.

¹⁰Friedman 1973, 27. While William Friedman always credited the breaking of Purple to a team effort, he also ascribed no small role to himself: “When the Purple system was first introduced it presented an extremely difficult problem on which the Chief Signal Officer asked us to direct our best efforts. After work by my associates when we were making slow progress, the Chief Signal Officer asked me personally to take hand. I had been engaged largely in administrative duties up to that time, so at his request I dropped everything and began to work with the group.” Friedman Testimony, *Hearings before the Joint Committee on the Investigation of the Pearl Harbor Attack*, Part 34, 84–85.

¹¹Letter from J. Rives Childs to Friedman, 22 December 1943. NSA Friedman Collection, Document A70094. Like Friedman, Childs had served as a cryptologist with the American forces in France during World War I. After the war, he participated in relief efforts which the United States mounted under the leadership of future President Herbert Hoover following the outbreak of famine in the Soviet Union and then, in 1923, joined the Foreign Service. As a diplomat, he held posts in the American Embassies in Ethiopia, Morocco, Saudi Arabia, and Yemen, and ultimately achieved the rank of Ambassador. He and Friedman remained friends into retirement.

in Walter Reed at the time but I am fully recovered.” Friedman added that “the Surgeon General ... deemed it wise for me to be retired, so I am in mufti but am still on the same job.”¹² An Army Board discharged Friedman from the reserves on 15 April 1941.

A decade later, as he neared the end of his career at NSA, Friedman returned to the issue of his 1940–1941 hospitalization and his retirement from the military. The latter, more specifically, left him just over two months short of the 20 years of military service necessary to qualify for a pension. Friedman claimed that by honorably discharging him without a hearing, the Army Retirement Board had acted “in an irregular manner” at a time when there was what Friedman described as “a statutory requirement that officers who are on active duty and who become incapacitated be given an opportunity to appear before a regular Army Retirement Board before final action is taken to retire him.” This, Friedman argued, prevented the Board from either granting him a sufficient time to recover and be deemed again fit for active duty or, alternatively, retiring him at the end of that period. In either case, Friedman argued, he would have accumulated more than the required 20 years of service.¹³ Friedman then came to the point:

I am ... of the opinion that the action of the Army authorities in my case was really too hasty—much more so than warranted. Had the facilities at Water Reed Hospital been at all adequate at that time, I would have made a much quicker recovery than I did—for my recovery was actually retarded by the hospital. The fact is, that I began to recover the day I left Walter Reed.¹⁴

Regardless of the reasons for Friedman’s hospitalization, when he returned to work he found a dramatically and rapidly changing environment. The immediate effect on him personally, aside from at first working shorter hours, was a significant change in his duties. Three decades later, Elizebeth recalled that “when he went back General ... whoever it was ... in charge at the time, said he was not to go back to the cryptanalytic work, but to do entirely administrative work, keep an eye on the operation as it went along and coordinate with the Navy.”¹⁵ More generally, the Army’s signals intelligence effort was growing rapidly from an organization which had a few hundred people at the time of Friedman’s hospitalization to one numbering thousands. Moreover, it was increasingly staffed by military personnel and led by military

¹²Letter from Friedman to Childs, 14 January 1944. NSA Friedman Collection, Document A70094.

¹³Letter from Friedman to Thomas King, 14 October 1954. NSA Friedman Collection, Document A64662. King appears to have been assisting in some way with the presentation of Friedman’s case to Army authorities.

¹⁴Letter from Friedman to Thomas King, 14 October 1954. NSA Friedman Collection, Document A64662.

¹⁵Friedman 1973, 30. The Army and Navy had separate cryptologic efforts during World War II. Particularly after Pearl Harbor, when (as subsequent investigations would show) a lack of communication between the two services resulted in significant differences in the intelligence derived from codebreaking available to their respective commanders on Hawaii, a series of measures were put in place to ensure cooperation.

officers. One historian has described Friedman's predicament in the following way:

It was Friedman who had lost touch with the service. He could not acknowledge that with expansion SIS was evolving into a military bureaucracy in which there was no room for a paterfamilias. He became increasingly marginalized. By the summer of 1942 he had been elevated to the role of elder statesman, an icon who received ritual, though perfunctory, homage. His advice on cipher security was occasionally solicited, he worked on the design of cipher machines, he expanded his classic textbook on military cryptanalysis, and in the spring of 1943, as an acknowledgment of his seniority (and his friendship with Alistair Denniston), he joined another special mission to GCCS [the United Kingdom's Government Code and Cipher School, based at Bletchley Park], but he would never again return to the central position he had once occupied in American signals intelligence.¹⁶

Friedman's personal relationships with the British helped the nascent Anglo-American signals intelligence partnership weather several periods of tension which occasionally arose because some officials on both sides did not completely trust one another, notwithstanding the two Allies' recognition of it as essential. Denniston, for example, concluded that "he [Friedman] alone of those I met is competent to deal with all major problems of cypher breaking and cypher security."¹⁷ That said, the evolution of his professional ties with his British counterparts to include personal friendships also was the source of one of his first encounters with those responsible for the security of intelligence activities. In the summer of 1942, Friedman received what he characterized as a "severe reprimand" and was instructed "to refrain from technical and social contacts with the British as well as with the U.S. Navy cryptographers and cryptanalytic representatives." The ban was lifted, informally, within a few months, and shortly before his 1943 trip to Bletchley Park he received written confirmation that he could resume his former ties.¹⁸

The ban on Friedman's British contacts had been imposed by Major General George Strong, then the Army's Deputy Chief of Staff for Intelligence, or G-2. At Friedman's prompting, Colonel Carter Clarke, another military intelligence officer, went to Strong to confirm that the ban had in fact been lifted. According to Clarke, Strong indicated that "it was not his intention to relax any restriction he had imposed except to permit Mr. Friedman to participate in official and formal conferences." Given that a lower-ranking officer already had informally told Friedman that Strong's complete ban on contacts had been lifted, however, Strong allowed the decision to stand. Nevertheless,

¹⁶Alvarez 2000, 119. Alistair Denniston was the first head of GCCS and led the organization from its founding in 1920 until 1942, when he was succeeded by Edward Travis. Denniston remained with GCCS as Travis's deputy until the end of World War II. He and Friedman remained friends until Denniston's death on New Year's Day 1961.

¹⁷Quoted in Alvarez 2000, 90. For a different perspective on Friedman's relationships with the British and in particular Alan Turing, see Hodges 2014, 314–15. Hodges contrasts Turing to Friedman, characterizing the British mathematician as "someone who had looked at cryptology through the eyes of modern science," with Friedman being a "more old-fashioned figure" who was more simply "a code and cipher fanatic."

¹⁸Memorandum, "Personal," William F. Friedman, 2 April 1943. NSA Friedman Collection, Document A60573.

Clarke wrote, Strong directed that “Mr. Friedman should be informed that deliberate cultivation of certain foreigners, and oral indiscretions, are not to be expected from one of his stature of experience.”¹⁹ Perhaps speaking of the same series of events, Elizebeth Friedman later remembered that her husband “got called in the carpet one time by General Strong, accusing him of talking to me, because I worked for the Navy.”²⁰

It would be misleading, therefore, to argue that Friedman was an unimportant figure for the remainder of World War II and the immediate postwar period. He appears to have formed a strong personal relationship with NSA’s first Director, Army Lieutenant General Ralph Canine, and played a significant role in NSA’s early years following President Truman’s creation of the agency in 1952. His appointment in 1954 as one of the first Civil Service “super-grades” (the predecessors of today’s Senior Executive Service) was part of an effort by Canine when he took command to bring civilian leadership to an organization which, as was the case with all of its predecessor American cryptologic entities except Friedman’s own SIS in the 1930s, was headed by military officers. As Canine recounted in the late 1960s for an NSA oral history

My first problem was to solve the civilian-military ... There wasn’t a civilian in a position of prime importance. Well, Bill Friedman, we’ll say as my consultant, might have been a ... said to have been in prime importance. But not one of these people that you see here [Canine appears to be referring to what were by the late 1960s the many civilians at NSA] ... had a job that was in the top level at all.²¹

As Special Assistant to Canine, Friedman had a wide-ranging brief covering “the technical and exploitational aspects of all cryptologic activities” and was charged to provide Canine with “advice and assistance ... in the formulation and execution of the broad, over-all plans and programs of the National Security Agency.”²² Always somewhat sensitive to considerations of rank, Friedman also may have felt no little personal gratitude to Canine for his appointment to this position. Friedman also likely welcomed Canine’s efforts to persuade the Secretary of the Army to credit him with the necessary 20 years of service to qualify for a pension.²³ In yet another sign of Friedman’s relationship with Canine, an NSA account of the latter’s life and career drawn from reminiscences of several of his associates indicates that Friedman gave Canine an oil portrait of the General in uniform as “a token of ... Friedman’s appreciation for his efforts on behalf of providing him a substantial cash

¹⁹Memorandum from Colonel Carter Clarke to Colonel Preston Corderman, 5 April 1943. NSA Friedman Collection, Document A60573.

²⁰Friedman 1973, 23.

²¹NSA Oral History Interview, Lieutenant General Ralph J. Canine (NSA OH-2012-81). Dated to late 1960s, 6. Available at https://www.nsa.gov/public_info/_files/oral_history_interviews/nsa_OH_2012_81.pdf.

²²“Position Description: Special Assistant to the Director.” 16 March 1954. NSA Friedman Collection, Document A59333.

²³Letter from Canine to Secretary of the Army Robert Stevens, 6 May 1953. NSA Friedman Collection, Document A67117.

award.”²⁴ Friedman and Canine also shared a passion for golf, with Friedman a member of the Arlington, Virginia, Army-Navy Country Club.

After he was discharged from his 1955 hospitalization, Friedman recuperated at a Washington row house which he and his wife Elizebeth had purchased in the early 1950s on Capitol Hill at 310 Second Street, SE, moving there in 1953 after having made significant renovations to the property.²⁵ One of the reasons for the move was to facilitate the couple’s picking up work on an issue which first brought them together in their mid-twenties at Riverbank, the question of hidden messages in Shakespeare’s plays. Conveniently, their new home was only three blocks, or a short walk, from the Folger Shakespeare Library, which houses one of the world’s most notable collections of Shakespeariana. The Friedmans’ study of this issue, which refuted the notion that a cipher associated with Bacon could be present in Shakespeare, was what had won the Library’s literary prize in 1955 (Friedman and Friedman 1957).

Retirement projects and emerging tensions

Friedman’s ties with NSA did not end with his departure from the civil service, which is in some senses why several NSA officers appeared at his home in late December 1958 to retrieve a number of documents. In September 1955, around the time of Friedman’s retirement, Canine authorized an official courier to deliver materials classified up to Top Secret, including ones marked with codewords indicating the presence of information involving signals intelligence, to Friedman at his Capitol Hill residence. Only documents classified Secret could be left at the house without being returned to NSA the same day, however, with Friedman being issued a safe in which to keep these.²⁶

Canine presumably established this arrangement to support several projects Friedman pursued in retirement as an NSA consultant, as well as other special activities. The most notable of these was the development of materials to train future generations of American cryptologists. In retirement, Friedman also

²⁴“Glimpses of a Man: The Life of Ralph J. Canine,” *Cryptologic Quarterly* 6 (2) (Summer 1987): 37. For example, when Congressional legislation was under consideration in the 1950s to award Friedman \$100,000 as relief for his inability to patent a number of cryptographic inventions, Canine wrote to the Army that he did not oppose such efforts and believed that “in the long run an organization such as the Armed Forces Security Agency will suffer if, relative to other organizations, it must offer less not only of public recognition but also of material gain to men of outstanding intelligence, ingenuity, and skill.” Memorandum from Canine to the Judge Advocate General, Department of the Army, 29 February 1952. NSA Friedman Collection, Document 70726.

²⁵The Friedmans lived in several homes in or near Washington after moving there in 1920. The first two were apartments, the initial one being located just off Connecticut Avenue and the second on Connecticut itself at 1803. The Friedmans moved to their third, a house located in what was then rural Bethesda, Maryland, in 1923, but had left it by 1925 for one at 3932 Military Road in northwest Washington. From there, they moved to houses in Fenwick, Maryland (in 1946, also having an in-town residence at 1823 Q. Street, NW) and at 424 North George Mason Drive in Arlington, Virginia (in 1949), before finally settling into the townhouse on 2nd Street, NW. William Friedman, “Statement of Personal History” (DOD Form DD 398), undated. NSA Friedman Collection, Document A335508. See also Clark, 1977, 84–88.

²⁶National Security Agency Memorandum, “Designation of Official Courier,” 21 September 1955. NSA Friedman Collection, Document A67693.

took several official trips of consequence to NSA, the first being to England in 1957. A second trip that year took him to continental Europe, to which he returned in 1958.

Other aspects of Canine's tenure are worth mentioning with regard to Friedman's relationship with NSA toward the end of his career and in retirement. These are highlighted in an oral history interview conducted in 1982 with Friedman's longtime colleague, Solomon Kullback.²⁷ One was Canine's commitment to supporting NSA employees who pursued advanced degrees in fields such as mathematics or engineering at schools such as Princeton or Stanford, a policy his successors continued. However, Kullback also cited a major difference between Canine and those who followed him, and this was in "their outlook on publications." Canine, according to Kullback, "felt that if the Agency had people who were good enough to be advanced in certain areas and be able to write a scientific paper for publication, but ... nothing which would in any way risk the security of the [i.e., NSA's] activities, he felt he would just as soon have the paper published as a National Security Agency employee. Because he felt that such things would ... redound to the credit, not only to the individual, but to the National Security Agency." Some NSA Directors who followed Canine, Kullback claimed, "had sort of different outlooks on security."²⁸

It is not clear when NSA's leadership first became concerned about the arrangement established by Canine and the storage of classified documents at the Friedman home. Friedman's relationship with Canine's successor, Air Force Lieutenant General John Samford, appears to have been rocky from the start of the latter's tenure in November 1956. A handwritten note from Friedman dated 8 May 1957, indicates that Samford had refused to sanction publication of a declassified version of Friedman's study of the role of signals intelligence in the events leading to Pearl Harbor.²⁹ Friedman also was deeply offended by a September 1958 phone call in which Samford reprimanded his handling of a journalist's request for an interview, which Friedman had refused to grant but referred to the Pentagon. Friedman wrote to Samford that "the tone and tenor of your telephone call to me disturbs and distresses me to the point that I am heartsick that you should have questioned my motives or conduct in the situation."³⁰ Without directly referencing Samford or this incident, but specifically noting Friedman, Kullback provided the following

²⁷NSA Oral History Interview, Solomon Kullback (NSA OH 17-82), 26 August 1982. Available at https://www.nsa.gov/public_info/_files/oral_history_interviews/nsa_OH_17_82_kullback.pdf. See note 9. Like Friedman, Rowlett, and Sinkov, Kullback's career in signals intelligence extended from the SIS's earliest days to service with the NSA, where he was the first director of its research organization.

²⁸Kullback Oral History, 153.

²⁹Friedman, Handwritten Memorandum (no title), 8 May 1957. NSA Friedman Collection, Document A485355. For the text of Friedman's Pearl Harbor study, see William F. Friedman, "Certain Aspects of 'Magic' in the Cryptological Background of the Various Investigations into the Attack on Pearl Harbor." NSA Friedman Collection, Document A489034. Friedman completed this study under contract to NSA.

³⁰Friedman letter to Samford, 17 September 1958. NSA Friedman Collection, Document A282427.

observations on the attitude held by certain Directors who followed Canine toward NSA appearing in the media:

Some of the other directors just didn't want the National Security Agency appearing in any publication, any kind of publication. And, of course, this is what caused Mr. Friedman a hell of a lot of trouble. He was always being approached. When people thought about cryptography, Pearl Harbor, or anything else, he was the man that a lot of the government agencies or in the newspapers thought about. He was the National Security Agency. And very often, I guess, his name would appear in connection with the National Security Agency by some guy who was writing an article. Mr. Friedman wasn't even consulted whether he could use his name, and some of the directors were a little upset at simply the publicity that NSA was being in the public realm.³¹

Comments Samford made several years later on a lecture on cryptology which Friedman had given at a Marine Corps school also illustrate Samford's attitudes toward security and classification. Writing to Friedman in early 1960 and commending him for a "most entertaining as well as informative" presentation, Samford indicated that he nonetheless "could not, however, put aside the need for making a security appraisal of the disclosure of such information to an unindoctrinated audience." Samford noted that this placed him in "the personal dilemma of choosing between intuition and logic." He apparently felt that the "existing rules" on classification and security were not sufficiently robust to determine by their logical application whether Friedman's presentation contained classified information. Admitting he was by nature more an instinctive thinker than a logical one, Samford nonetheless clearly was troubled by the lack of detailed guidelines for classification. Reasoning as best he could on the basis of whether a foreign government would take additional communications security precautions if it learned of the contents of Friedman's lecture, Samford concluded that a sophisticated intelligence service would not (presumably as it would learn nothing about American signals intelligence methods of which it was not already aware), but that a less savvy one might be awakened out of its complacency or ignorance and put additional safeguards in place. On this basis, Samford judged that what Friedman had said was Secret at some points, Top Secret at others, but in no instance required the protection of a codeword. He did, however, urge Friedman "to damp out [*sic*] your references to the more modern practices of NSA."³²

Separately, following his retirement, Friedman had begun pressing for the declassification of studies and articles he had written for official publications prior to the outbreak of World War II. In a letter to the Chief Signal Officer of the Army in late 1957, Friedman argued that the appearance in print of

³¹Kullback Oral History, 154.

³²Letter from Samford to Friedman (Untitled), 25 March 1960. NSA Friedman Collection, Document A485355.

the study he and Elizebeth had written on purported ciphers in Shakespeare had prompted a publisher to propose compiling in a single volume his “old and now unclassified writings” which had appeared in the *Signal Corps Bulletin* before 1940. Accordingly, Friedman requested written confirmation that his essays were now unclassified and that the Army would not object to their publication. Friedman made the same request for two items published outside the *Bulletin* as government brochures: his “Elements of Cryptanalysis”³³ and “The Zimmerman Telegram of June 16, 1917, and its Cryptologic Background.”³⁴ In making his case, Friedman noted that the *Bulletin* had been classified For Official Use Only starting in 1933, then was changed to Restricted, which was the marking the journal carried until publication ceased in 1940. “Elements of Cryptanalysis” also bore the For Official Use marking when it was published in 1923. By contrast, the article on the Zimmerman Telegram was classified Confidential when it appeared in 1938 but then in 1946 was remarked Restricted. “When the latter classification was eliminated in 1953,” Friedman wrote, “some classified documents were upgraded, some downgraded, and some were made unclassified.” As for “Elements of Cryptanalysis,” he saw it as “so old that it is regarded as being a ‘classic.’ It is only of historical significance, of course, and valuable only to collectors of cryptologic literature. A private republication of this old and quite obsolete document would, I know, be welcomed by collectors.”³⁵

The Chief Signal Officer referred Friedman’s request to NSA in January 1958. In March of that year, the NSA Adjutant General, Paul Willard, recorded that Samford and NSA Chief of Staff Brigadier General Garrison Coverdale had agreed that publication of Friedman’s older official writings “would be detrimental to security.”³⁶ Writing to Friedman in June, Coverdale officially informed him that “it will not be possible to grant authorization for private publication of the material in whole or in part.”³⁷ Coverdale noted that

³³William F. Friedman, “Elements of Cryptanalysis” (Training Pamphlet #3). Washington: Government Printing Office, 1924. NSA Friedman Collection, Document A64681. This copy bears the handwritten notation “William F. Friedman, Washington, 1924.” It has a humorous bookplate he and Elizebeth later applied to volumes in their possession, one bearing a Mayan inscription, translated into English, which threatened those who borrowed it with a violent end if they failed to return it. It also carries an NSA stamp indicating it was declassified in 1959.

³⁴William F. Friedman and Charles J. Mendelsohn, “The Zimmermann Telegram of January 16, 1917, and its Cryptologic Background.” Washington: Government Printing Office, 1938. NSA Friedman Collection, Document A491080. Mendelsohn was another American cryptologist from the World War I era, although unlike Friedman he served under Herbert Yardley in a separate, Washington-based Army cryptographic organization that ultimately evolved into what after the war was officially the Cipher Bureau but also known as the American Black Chamber. For a brief biographical sketch of Mendelsohn, see Kahn 2004, 30.

³⁵Letter from Friedman to Major General James D. O’Connell, Chief Signal Officer of the Army, 17 December 1957. NSA Friedman Collection, Document A275497.

³⁶Willard’s annotation of 13 March 1958 to Army Security Agency Memorandum, “Request for Information,” 16 January 1958. NSA Friedman Collection, Document A275504.

³⁷Letter from Coverdale to Friedman, 2 June 1958. NSA Friedman Collection, Document A275568. Coverdale was NSA Chief of Staff from 1954 until 1959.

this would be true of any similar material in Friedman's personal library. Around the same time, Friedman appears to have attempted to obtain the downgrading of the classification of a study he had written of the breaking of Purple from Top Secret to Secret so that he could store and work from it at home. This request also was rebuffed.³⁸

Around the same time, NSA also was learning that other pre-World War II studies in cryptology were not as secure as it might prefer. On 10 April 1958, a member of the American Cryptogram Association, Howard Oakley, wrote to University Microfilms of Ann Arbor, Michigan, to request "one Microxerox book" of the 1935 War Department publication, "German Military Ciphers from February to November 1918," written by Friedman's World War I colleague Rives Childs and with a preface by Friedman.³⁹ Oakley enclosed a microfilm of Childs' paper from which University Microfilms, under a new service it was offering, could print a copy of the document. Oakley also indicated he would "take immediate steps to publicize the availability of the book," pledging to "write to those dozen or so people with whom I correspond constantly on matters cryptographic" and "notably the American Cryptogram Association so that they might mention it in their quarterly magazine." David Kahn requested a copy several weeks later.⁴⁰

A month later, the editor of the American Cryptogram Association's magazine *The Cryptogram*, William Bryan, wrote to NSA Director of Security S. Wesley Reynolds to indicate that Oakley had submitted for publication a review of "German Military Ciphers," and asked Reynolds if NSA had any objection to his publishing it.⁴¹ Responding to Bryan on behalf of Reynolds, NSA Chief of Staff Coverdale informed Bryan that "German Military Ciphers" was classified Confidential when originally published in 1935, then remarked Restricted in 1946, but subsequently returned to its previous Confidential

³⁸NSA Memoranda, "Declassification of Document," 8 February 1957; 20 March 1957; and 29 March 1957. NSA Friedman Collection, Documents A58139, A58142, and A58143. For Friedman's paper on the Purple solution, see William F. Friedman, "Preliminary Historical Report on the Solution of the 'B' Machine." 14 October 1940. NSA Friedman Collection, Document A58137.

³⁹Letter from Howard Oakley to Eugene Power, 10 April 1958. NSA Friedman Collection, Document A275525. For a copy of Childs' paper, see J. R. Childs, "German Military Ciphers from February to November, 1918." Signal Intelligence Section Technical Paper. Washington: Government Printing Office, 1935. NSA Friedman Collection, Document A68206. This version contains a stamp, crossed out, dated 1 April 1946, indicating that Colonel Harold Hayes, Acting Chief of the Army Security Agency, had changed its classification from Confidential to Restricted, but also has an 30 April 1957 handwritten statement by NSA Adjutant General Willard that it had been regraded to Confidential on the authority of General Samford and DOD Directive 5200.1.

⁴⁰Letter from David Kahn to University Microfilms, 13 May 1958. NSA Friedman Collection, Document A275526.

⁴¹Letter from William Bryan to S. Wesley Reynolds, 16 May 1958. NSA Friedman Collection, Document A275532. Bryan indicated to Reynolds that he "used to work for NSA during the later war and again around 1948–1950."

status. Therefore, Coverdale said, NSA could not authorize Bryan to publish Oakley's review.⁴²

In the meantime, a member of Reynolds' staff had discovered that the Library of Congress catalog listed a copy of "German Military Ciphers" among its holdings. That copy was missing. Roughly 1,000 other cards in the Library's catalog were found for items in English and other languages on "ciphers in fiction, history of cryptography, commercial and telegraphic codes, [and] military codes and ciphers." Reynolds recommended that NSA obtain and review copies of these cards "to determine if the Library of Congress has any other publication which should not be made available for uncontrolled publication." Pending consultation with the Department of the Defense, he also planned to send a security officer to Ann Arbor to determine "the source from which the material [i.e., the microfilm Oakley had purchased] had been obtained."⁴³

An NSA official named Mathisen made this visit in July 1958. He learned from University Microfilms President Eugene Power, who had previously worked at NSA and was currently a consultant with a Top Secret clearance, that the microfilm Oakley had provided to Bryan was made from the Library of Congress copy of the Childs paper. Power was reluctant to hand it over to Mathisen but agreed not to print additional copies. He said, however, that he would return it if asked by the Department of Defense. NSA official David Belisle recommended that DoD write to Power to this end and also contact Oakley and Kahn with requests that they return their copies. As for the Library of Congress original, it had been found in the interim. However, a memorandum in the Library's files also indicated that the Army Security Agency had declassified "German Military Ciphers" in November 1955. Belisle recommended that DoD contact the Library to inform it of the proper classification for the document and ask that it be returned.⁴⁴

⁴²Letter from Coverdale to Bryan, 10 July 1958. NSA Friedman Collection, Document A275575. Bryan subsequently wrote to Coverdale to ask whether, if he did not make public the contents of "German Military Ciphers" by publishing Oakley's review, he nonetheless could inform readers where they could purchase it. Letter from Bryan to Coverdale, 12 July 1958. NSA Friedman Collection, Document A275597. Perhaps not surprisingly, given that Bryan was asking NSA for permission to point to where one could obtain a document NSA considered classified, a handwritten note on NSA's copy of his letter indicates it was "not to be answered." Separately, Bryan was corresponding with the Army Security Agency and, while asking about the classification of "German Military Ciphers" and receiving the same answer as he had obtained from NSA, also informed ASA that "of late there has been a marked increase in foreign subscriptions [to *The Cryptogram*]. ... We cannot refuse such subscriptions without some basis, of course, but there is always that chance that some addresses are cover-up ones for 'behind the Iron Curtain.'" Letter from Bryan to Capt. V. R. Arnett, Assistant Adjutant General, Army Security Agency, 2 June 1958. NSA Friedman Collection, Document A275543. Friedman's wartime colleague, Abraham Sinkov, one of the first SIS hires, was to follow up and review NSA's position on foreign subscriptions to such publications as *The Cryptogram*. Undated NSA Memorandum to ASA. NSA Friedman Collection, Document A275601.

⁴³Memorandum for Coverdale from Reynolds, "German Military Ciphers from February to November 1918," 18 July 1958. NSA Friedman Collection, Document A275612.

⁴⁴Memorandum from David I. Belisle to Coverdale, "Classification of 'German Military Ciphers from February to November 1918,'" 31 July 1958. NSA Friedman Collection, Document A275628.

NSA visits the Friedman home

Regardless of whether a deteriorating relationship between Friedman and Samford, Friedman's push for declassification of his older writings,⁴⁵ an incident such as the one involving the American Cryptogram Association and the Rives Childs study, or some other factor was the cause, in early December 1958 Reynolds telephoned Friedman to suggest that classified NSA documents stored at his home office be returned to NSA "for safekeeping" during an extended overseas trip which he and Elizebeth Friedman were planning for January 1959.⁴⁶ According to a memorandum prepared by Reynolds for Samford following the conversation, Friedman had "no objection" to returning classified documents to NSA. Reynolds also said, however, that Friedman had told him his personal library contained

A considerable amount of material which was historical and was once classified. It has since been declassified and subsequently, on the basis of a Department of Defense ruling, classified again. Mr. Friedman stated that this material was widely disseminated when it was declassified and much of it is in the public domain.

Reynolds also noted Friedman's "extreme reluctance" to turn any of this latter material over to NSA.⁴⁷

The "ruling" to which Reynolds referred was a Department of Defense directive (5200.1), "Safeguarding Official Information in the Interest of the United States," issued in July 1957 to establish the classification of various categories of information related to national security, including cryptography. Signed by Secretary of Defense Charles Wilson, this directive stated that "communications security devices and cryptographic material ... remains of

⁴⁵Friedman complained about U.S. Government classification policies in a 16 February 1961 interview with Signal Corps historians George Thompson and Dixie Harris. Thompson recalled Friedman as describing the "ridiculous secrecy which makes Amer. military look like fools, which much is already in the public domain. Sam Morrison trying to shake loose Yamamoto story was denied by CG ASA, even by Sec. Navy ... yet tis [*sic*] in public domain" (Thompson 1961). Friedman also expressed his belief that much pre-war material remained overclassified as well as his frustration that "the pre-Pearl Harbor cryptographical work of the SIS has not been permitted to be published in official Army histories" (Harris 1961). Admiral Yamamoto Isoroku commanded the Japanese Fleet for the 16 months after Pearl Harbor. He was killed on 18 April 1943 when the plane carrying him on an inspection trip of Japan's Pacific bases was ambushed and shot down by U.S. aircraft. The United States went to great lengths to conceal the fact that signals intelligence had provided Yamamoto's itinerary and thus enabled the attack. Samuel Eliot Morison wrote a history of U.S. Navy operations in World War II but generally avoided topics involving codebreaking, which were still considered sensitive. All he would state regarding how the United States became aware of Yamamoto's flight plan was that "Admirals Halsey and Nimitz managed to learn of his intentions" (Morison 1950, 128). For contemporary accounts of the shootdown, see Holmes 1979, 134; and Layton 1985, 474–76. See also Prados 1995, 458–63; and Kahn 1996, 595–601. The Yamamoto shootdown resulted in some speculative articles in the press, which were perhaps the reason for Friedman's claim that the truth about the event was public. Major General Alexander Patch, commander of U.S. forces on Guadalcanal, also was said to have spoken of it publicly, prompting Army Chief of Staff George C. Marshall to say that "additional instructions are necessary regarding secrecy in such matters." *The Papers of George Catlett Marshall*, vol. 4 "Aggressive and Determined Leadership." Ed. Larry I. Bland and Sharon Ritenour Stevens. Baltimore: The Johns Hopkins University Press, 1996, 39–40.

⁴⁶The Friedmans' January 1958 trip took the couple to Mexico's Yucatan Peninsula, where the couple studied inscriptions left by the indigenous Mayan people, another of their retirement projects.

⁴⁷Reynolds memorandum to Samford, "Classified Documents in Possession of William F. Friedman," 5 December 1958. NSA Friedman Collection, Document A99778.

vital importance to the national defense” and thus, if disclosed without proper authorization, “could result in serious damage to the nation.” It was therefore classified Secret. Additionally, the Directive indicated that “all material related to cryptographic systems which was previously classified Restricted-Security Information is upgraded to Confidential.”

Reynolds noted that determining which materials in Friedman’s possession, other than “Agency classified material which has been loaned to Mr. Friedman,” conceivably were subject to this directive would be a task of “some difficulty” without Friedman’s assistance. However, Friedman and Reynolds agreed that NSA would pick up classified documents in Friedman’s possession during the week of 29 December. Reynolds ended his memorandum to Samford by stating this would include “Agency classified material and other material in Mr. Friedman’s possession which is easily identifiable and which he agrees could be held at NSA during his absence.”

This visit took place on the afternoon of 30 December. At least three accounts of it exist. One is a memorandum written by Reynolds to Samford on 2 January 1959. The second is contained in a 1982 oral history interview of one of the NSA participants. The third is an account provided by Ronald Clark in his biography of Friedman, one presumably drawn from materials willed by Friedman to the George C. Marshall Research Library in Lexington, Virginia, as well as the recollections of Elizebeth. While there are similarities between the three versions of this event, there also are significant discrepancies.

Reynolds’ 2 January 1959 memorandum indicates that Paul Gilliam of NSA’s Office of Administrative Services and a Mr. Cook⁴⁸ from NSA Security met with Friedman at his home and that Friedman had told them that “all classified Agency material in his possession has been returned to the Agency and is being held in a special safe at the Naval Security Station” on Nebraska Avenue in Washington. Reynolds also noted Friedman had “made available numerous publications dealing with cryptography in his possession which may now be considered classified CONFIDENTIAL.” As for Friedman’s mood during the visit, it was described by Reynolds in the following way:

Mr. Friedman voiced no objections to my taking this material, however, it was quite obvious that he felt deeply hurt and that the material was being taken for reasons other than Security. He stated that this material deals with the history of cryptography and should belong to the American people. He remarked that the Director should know that he would not publish any of this information if that was the desire of the Director. ... He stated that applying this Directive [5200.1] to old historic Signals Corps material dealing with cryptography or crypto systems of other nations is a misapplication of the directive. He feels therefore, that the material in his possession which has previously been declassified should remain that way and

⁴⁸On the identity of Cook, see footnote 51.

should not now be considered classified CONFIDENTIAL. He specifically asked that I bring his feelings and concern to your [Samford's] attention.⁴⁹

The 1982 NSA oral history contains more detail than the Reynolds memorandum but also was recorded almost 24 years after the event, not three days.⁵⁰ It generally supports the description contained in the Reynolds memorandum except on one point: the NSA officers who were present. Whereas the Reynolds memorandum states the visit involved Gilliam, a Mr. Cook, and Reynolds himself, the interviewee in the oral history—Donald Coffey, an NSA security officer—indicates that aside from “a couple of GSA helpers” only he and Gilliam were present.⁵¹ Coffey makes no reference to Cook, and explicitly states Reynolds was not present. The Clark biography aligns with the Reynolds memorandum by naming Reynolds, Gilliam, and Cook as the NSA participants.⁵²

In all other respects, however, the 1982 Coffey interview confirms and expands on the description provided by Reynolds shortly after the visit to the Friedman home. In Coffey's recollection, it lasted less than an hour. He and Gilliam, neither of whom Coffey remembered as being armed, did not arrive with a list of documents which they were supposed to retrieve. Instead, they identified and removed a small number of documents marked “Confidential” as well as the safe containing them. With respect to all other documents in Mr. Friedman's library, Coffey offered the following to his interviewer, NSA historian Robert Farley.

COFFEY: My recollection was we went down and asked him [Friedman] for what he had, we didn't search his home or anything of that nature. He said “Hey, this is yours. Take it.” We took it.

FARLEY: Oh, he offered it to you and then he'd say, “This document belongs to you, take it.”

COFFEY: Oh, yeah, because we weren't in a position—as I recall he had a den where all of this stuff was in his residence and he was the one that identified what he had to my recollection.

FARLEY: Okay, so you didn't have to go through the library shelves and say, “This is ours!”

COFFEY: Absolutely not. Absolutely not.⁵³

Over 20 years after the event, Coffey remained certain that Friedman had no material classified higher than Confidential (i.e., nothing that was either Secret or Top Secret), nor were many Confidential items removed. He did not recall the material being inventoried at the time of its removal or a receipt provided to Friedman. He did remember Elizebeth being home and, while

⁴⁹Reynolds memorandum to Samford (untitled), 2 January 1959. NSA Friedman Collection, Document A99780.

⁵⁰NSA Oral History Interview, Donald Coffey (NSA OH 23-82), 4 November 1982. Available at https://www.nsa.gov/public_info/files/oral_history_interviews/nsa_OH_23_82_coffey.pdf.

⁵¹It is possible that Reynolds confused Coffey's name and noted it as Cook, an error which for whatever reason was repeated by Clark. I am indebted to Robert Simpson for suggesting this interpretation.

⁵²Coffey's interview indicates Friedman had a dim view of Reynolds. “I recall him saying some remarks about Wes Reynolds. He didn't appreciate Wes Reynolds.” Coffey Oral History, 4.

⁵³Coffey Oral History, 5.

remaining as cordial as her husband, also making clear “she was unhappy with this decision because it made her husband unhappy. And she thought, especially in view of his contributions, that this was a wrong decision to have been made.”⁵⁴ (Another of Friedman’s wartime colleagues, Abraham Sinkov, recalled 20 years later that the event “had caused Friedman some considerable distress, because he felt he had been treated pretty shabbily in this whole situation and was not very well at the time anyhow. So it had an effect on him.”)⁵⁵

An undated, handwritten (apparently, in at least two different hands), and unsigned ten-page document titled, “Inventory (WFF Files—Paul Gilliam)” and with a notation on one page in yet another hand (“Inventory of material taken from Friedman’s house by Coverdale, etc.”) lists the contents of six boxes of materials dated between 1919 and September 1958, or three months before the December visit.⁵⁶ A memorandum of 6 February 1959 signed by NSA Adjutant General, Colonel Paul Willard, records decisions of the NSA Classification Advisory Panel regarding these materials.⁵⁷ Members of this panel included Colonel Willard, Deputy Director of Security Jack Hilsbros, mathematician Robert Shaw, Friedman’s long-time fellow cryptanalyst Lambros Callimahos, and a Mr. Arnold.⁵⁸ This panel met again in mid-April 1959 and issued a second memorandum on the classification of the Friedman materials.⁵⁹

The two memoranda issued by the NSA Classification Advisory Panel differ in significant respects. Several documents, all judged to be Unclassified, appear in the second which are not in the first. The categorization used in the two varies, with the February memorandum using “Confidential,” “Confidential—Modified Handling Authorized,” and “For Official Use Only” to characterize the classification of the documents, while the April memorandum employs “Confidential—Because of Content,” “Confidential—Because of DOD 5200.1,” and “Unclassified—For Official Use Only.” Finally, and perhaps most notably, some documents which had been determined to be “For Official Use Only” by the Panel in February were in April deemed to be “Confidential,” whereas others previously judged “Confidential” became “Unclassified.” It is not clear why the documents added to the April memorandum did not appear in the February one, why the panel used different categorizations at its two meetings, and why it shifted documents between the “Confidential” and “Unclassified” categories. One explanation for the

⁵⁴Coffey Oral History, 14.

⁵⁵NSA Oral History Interview, Abraham Sinkov (NSA OH 02-79 thru 04-79), May 1979, 95. Available at https://www.nsa.gov/public_info/files/oral_history_interviews/nsa_OH_02_79_sinkov.pdf. See note 9. Sinkov was the third of Friedman’s original SIS recruits whose career continued beyond the creation of NSA, where like Rowlett he served as the head of cryptanalysis and communications security. He and Kullback retired in 1962. Rowlett did so in 1966, becoming the last of the SIS’s original cadre to depart the agency.

⁵⁶Undated NSA document, “Inventory (WFF Files—Paul Gilliam).” NSA Friedman Collection, Document A99794.

⁵⁷Memorandum to NSA Director Samford from Adjutant General Paul Willard, “Classification of Material Received From Mr. Friedman,” 6 February 1959. NSA Friedman Collection, Document A99783.

⁵⁸Arnold’s identity and position is not stated in the memorandum.

⁵⁹Untitled NSA Memorandum for the Record, dated 17 April 1959, signed by Paul Gilliam. NSA Friedman Collection, Document A99786.

latter might be that panel members applied new rules when reaching their April decisions. Alternatively, they simply may have changed their minds as to how to apply the guidelines which they had used in April to determine the classification of the documents.

Regardless of the manner in which they were reached, it was these latter determinations which were communicated to Friedman by Samford in a letter of 13 May 1959, which provided a listing of documents deemed “Confidential” and “Unclassified.” Samford added that notwithstanding the determination that the latter were “Unclassified,” they could not “be disseminated in any manner which would bring them into the public domain unless we [NSA] first get clearance from DOD for the particulars which are to be used.”⁶⁰

The materials which were removed from the Friedman home were somewhat eclectic but fell into several categories. The first consisted of studies written by various individuals regarding codes and ciphers used by the German military during the First World War, along with the study of the Zimmerman Telegram which Friedman had co-authored. These were systematically reclassified Confidential by the NSA Classification Advisory Panel. A second group, which the panel classified Confidential, comprised materials developed by Friedman between the wars to train personnel in the SIS. (As an exception, one series of these materials [a series of extension courses on cryptology for the Army] was initially deemed “Confidential” but then judged to be “Unclassified.” Interestingly, there is a note on the April 1959 Classification Advisory Panel memo [possibly in Friedman’s hand] claiming that these were “*never* classified” [emphasis original].) A third group of documents might be best characterized as mathematical papers on cryptology. It is difficult at a distance of 50 years to understand why some of these documents were assessed as “Confidential” yet others seen as “Unclassified.” The former set, however, included Friedman’s pioneering work, *The Index of Coincidence*. The decision to classify *The Index* was noteworthy as it had been available for years on the shelves of the Library of Congress and, separately, in a French translation.⁶¹

⁶⁰Letter from Samford to Friedman, 13 May 1959. NSA Friedman Collection, Document A98402.

⁶¹The version of *The Index of Coincidence* which NSA classified in the late 1950s was not the version published by Riverbank Laboratories in 1922 but rather one issued by the War Department in 1935. In the first footnote in the latter document, Friedman noted that “the present paper [i.e., the War Department publication] was prepared in 1923. It was a revision of an earlier paper with the same title, published in 1922 by Riverbank Laboratories, Geneva, Ill. The author takes the opportunity to thank Col. George Fabyan, of the Riverbank Laboratories, for his courtesy in granting permission to publish this revision. Although better methods have been elaborated since the revision was prepared, it has been deemed of interest historically to publish this paper in its 1923 form without change” (Friedman 1935, 1). This version was classified Confidential at the time of its issuance. Friedman misspeaks slightly, as the last word in the paper’s title changed from the original “cryptology” in the Riverbank version to “cryptanalysis” in the 1935 text. According to Ronald Clark, Friedman gave the manuscript to Fabyan in the summer of 1920. Fabyan sent it to General Francois Cartier, at the time head of the cryptanalytic section of the French General Staff, to have it printed in Paris, apparently as a cost-saving measure. Cartier did so, sending copies to Fabyan, but also rushed a French translation into print, which appeared before the Riverbank version. The English version Cartier had printed for Fabyan also failed to note Friedman as its author on its cover. Fabyan printed new covers with Friedman’s name for the Riverbank edition (Clark 1977, 77–78).

Friedman's relationship with NSA leadership continued to worsen through the early 1960s. Writing in early 1961 to his friend and colleague Boris Hagelin, a Swedish cryptologist with whom Friedman had become first acquainted in the years before the Second World War, and after learning that Hagelin would not be making a planned visit to the United States, Friedman indicated that

The only possibility that I see for a visit by us to see you in Europe would be if I were asked by the people here to go over and see you—and I am positive that I won't be asked. I certainly will not ask anybody here to authorize and pay for my visiting you; and, as much as I appreciate your good intentions, I could not possibly accept an invitation from you which does not have the approval and blessing of the people here, which I feel sure would not be granted. I say this for several reasons, into which I do not care to go at this time.⁶²

For its part, NSA continued to restrict Friedman's ability to access classified information. A 1960 memorandum by Adjutant General Willard, for example, noted that Samford's deputy, Louis Tordella, had determined that Friedman could not "withdraw any classified material higher than Confidential" from NSA's holdings. Only Samford or Tordella, Willard wrote, could approve exceptions to this policy.⁶³

The Friedman Collection and its transfer to the Marshall Library

It is not clear exactly when William and Elizebeth Friedman began thinking of the books, articles, artifacts, and correspondence related to cryptology which the two of them had accumulated as a "collection."⁶⁴ In a 1954 letter thanking a correspondent for sending a "little opus" on cryptology, which while not rare also was "certainly not to be found in many libraries of collectors," Friedman referred to the literature and artifacts he has amassed as "my collection" and noted that his current will left it to the Library of Congress.⁶⁵ Several years later, Friedman reiterated his wish that what he again characterized as his "collection" would after his death become the property of the people of the United States (Harris 1961).

⁶²Letter from Friedman to Hagelin, 8 January 1961. NSA Friedman Collection, Document A2263197. For a biographical sketch of Hagelin and his significance to cryptology, see Kahn 1996, 425–34. Friedman was aware of Hagelin and his work by the late 1920s. He visited one of Hagelin's cryptographic facilities in Sweden in the early 1930s but does not appear at that time to have met him. The first known meeting of the two came during a 1937 trip to Washington by Hagelin, during which Hagelin marketed his firm's cryptographic products to the U.S. military. See Clark 1977, 147.

⁶³Paul Willard, Memorandum for the Record (Untitled), 16 March 1960. NSA Friedman Collection, Document A68785.

⁶⁴For an overview of the Friedmans' personal collection, now at the Marshall Library, see Sheldon 2014, especially 74–76.

⁶⁵Letter from Friedman to Revilo Pendleton Oliver, 14 October 1954, NSA Friedman Collection, Document A64651. Oliver was a professor of languages at the University of Illinois-Champaign who later helped found the John Birch Society and became a supporter of white supremacist causes. It is unclear whether Friedman had any awareness of his political leanings.

The materials which he and Elizebeth had amassed reflected a breadth of interests which with time had come to range well beyond their government work and encompassed not just history's great cryptographic exemplars but also the appearance of codes and ciphers as a motif in the literary works of such writers as Jules Verne and Edgar Allen Poe. As previously noted, the Friedmans' extensive holdings of Shakespeariana supported their best known retirement project, which involved their resuming the work which had brought the couple together four decades previously at Riverbank Laboratories: the claim that enciphered messages in the works of William Shakespeare proved someone other than he was their author. The two also collected considerable materials regarding Mayan hieroglyphs intended to support another study, one which they were unable to complete due to William's deteriorating health and the increasing difficulty he had traveling outside Washington. Yet another project which the Friedmans and specifically William considered in retirement, one which would have relied extensively on what they had collected but also was overtaken by William's deteriorating health, was a history of cryptography, something he discussed with Hagelin. A final effort which must be discontinued due to ill health was Friedman's biography of Hagelin, one which ended with Friedman forwarding to Hagelin the notes he had taken for this endeavor although with portions of a draft.⁶⁶

In August 1966, Friedman informed Hagelin that he had decided the Marshall Library would receive his collection, citing reasons for his choice that institution's "safe storage under government supervision" and the fact that it possessed "adequate facilities for keeping the collection intact." Accordingly, Friedman had redrawn his will to name the Library as his beneficiary for the collection. Friedman knew his decision would disappoint Hagelin, as the two apparently had discussed moving the collection to Switzerland (Hagelin's then home and also the location of the headquarters of the company he had founded, Crypto AG) where it would be combined with Hagelin's own considerable archive.⁶⁷ "As you know," Friedman wrote to Hagelin, "at one time we thought that we should come over to Switzerland and stay for several years and bring my books with me." He now confessed to Hagelin that

⁶⁶Letter from Friedman to Hagelin, 19 April 1969. NSA Friedman Collection, Document A2263426. As early as 1955, Friedman offered to edit what he described as Hagelin's autobiography, writing to his Swedish friend, "I hereby offer my services as *editor* of your autobiography, an offer that I can make in all seriousness, seeing that I have retired. ... [emphasis original] As your self-appointed editor I would certainly scratch out all the parts in which you would belittle what you have accomplished. You are too modest. You have, in my opinion, made an outstandingly successful (both technically and financially) contribution to the cryptologic science and art." Letter from Friedman to Hagelin, 6 September 1955. NSA Friedman Collection, Document A2263114. Hagelin replied that he deeply appreciated Friedman's offer and would return to it later, "if I decide there will be anything worthwhile to edit." Hagelin to Friedman, 15 September 1955. Letter from Elizebeth Friedman to Hagelin, NSA Friedman Collection, Document A2263115.

⁶⁷Writing to Elizebeth Friedman in October 1964 to inform her of a planned trip to the United States the following year, Hagelin also informed her that a new facility he was building for his Swiss company, Crypto AG, was nearing completion and that "there will be a library, as planned, and I do hope that we could have a talk about Bill's library when we meet." NSA Friedman Collection, Document A2263303.

I have been much troubled by the inconsistencies in the behavior of “the authorities,” and for a long time I had hopes of this being straightened out, but they are worse than ever. And I cannot do what I thought I would be able to do. Even at this moment, I do not know what they regard as “classified.” They—the “authorities”—change their minds from time to time. And I just do not have the strength to fight.⁶⁸

Even accounting for the despair Friedman expressed elsewhere in this letter about his physical condition and his ongoing battle with depression, the fact that he must pull back from such commitments to a man, Boris Hagelin, whom he not only considered his professional peer but was one of his few personal friends and possibly the individual after Elizebeth and their children he may have felt closest to, must have pained him greatly.

In considering which institution should become the permanent home of the collection he and Elizebeth had assembled, Friedman had entered into discussions with the Marshall Library’s Executive Director, Forrest Pogue. Pogue paid several visits to Friedman’s Washington home in the mid-1960s, as did several of the Library’s staff. One, Mary Ann Knight, cataloged the collection using the 1,500 index cards which William and Elizebeth Friedman had compiled.⁶⁹ Although Friedman had told Pogue in 1966 that he intended to donate his collection to the Library, Pogue asked that Friedman wait until that facility had been certified by the U.S. Government for the storage of “valuable or classified documents.”⁷⁰

⁶⁸Letter from Friedman to Hagelin, 10 August 1966. NSA Friedman Collection, Document A2263326.

⁶⁹It is not clear when William and Elizebeth began cataloging the collection. A basic catalog, presumably one by author or title, may have been created by the latter half of 1956, with William at that time informing Hagelin that “cataloging of my library is practically complete.” Friedman also observed that he had “found this job much more laborious than I ever imagined it was going to be. This was largely because I didn’t really know how many thousands of items I had in the Collection.” Anticipating the annotated bibliography he and Elizebeth were to subsequently compile, he noted that “on many of these items I could write interesting comments, and maybe I will, as I continue to improve [after his three heart attacks in 1955].” Letter from Friedman to Hagelin, 25 September 1956. NSA Friedman Collection, Document A2263185. In late 1964, Elizebeth noted in a letter to Boris and Annie Hagelin that despite his mounting physical ailments, her husband was spending some time each day “trying to get some order out of the chaos in the library.” Letter from Elizebeth Friedman to Hagelin, 11 December 1964. NSA Friedman Collection, Document A2263305. Just over two years later, in early 1967 and as part of another letter to the Hagelins, Elizebeth reported that for several months she and William had spent 3–4 hours each day checking the card file which indexed the thousands of items he had collected before 1956 and adding to the annotated bibliography while also indexing and annotating the “few hundreds of items gathered” since that date. At that point, Elizebeth added, the two “still had a long way to go.” Letter from Elizebeth Friedman to Hagelin, 21 February 1967. NSA Friedman Collection, Document A2263347. In a letter to Hagelin a year later, Elizebeth indicated to Hagelin that she and William continued to “bore away at the still unfinished task of completing the annotated bibliography of the Collection.” Letter from Elizebeth Friedman to Hagelin, 29 February 1968. NSA Friedman Collection, Document A2263311. Elizebeth apparently was referring to Knight when, on 3 September 1967, she informed Hagelin that “we have a typist here 1 day a week, sent by the Marshall Foundation.” Letter from Elizebeth Friedman to Hagelin, 3 September 1967. NSA Friedman Collection, Document A2263394. Some of the “chaos” in the Collection to which Elizebeth referred in the first of these two letters was due to the fact that in late August 1964 the living room ceiling of their townhouse collapsed, something she attributed to construction traffic passing along the street while what is now Interstate 395 was being built less than a mile to the south of their home. According to Elizebeth, both she and William were in the room at the time, “and Bill was saved by the wings of the chair he was sitting in.” Advised that other ceilings were in danger of collapse, the couple relocated to a nearby hotel for several months while the entire house was repaired, a project which Elizebeth described as “practically a complete interior reconstruction.”

⁷⁰In late 1967, the Marshall Foundation and the U.S. Army signed an agreement authorizing the Research Library to hold classified materials related to national defense. NSA Friedman Collection, Document 2918581.

In August 1969, three months before he died, Friedman provided Pogue with written confirmation of the conveyance of the collection to the Marshall Library. “All of the items in The Collection,” Friedman informed Pogue, “are UNCLASSIFIED as of the current date.” Friedman cited three factors which had led him to settle on the Library, two of which (the likelihood that the Library would be authorized to hold sensitive materials and Pogue’s apparent agreement to keep the collection intact) are noted above. In addition, Friedman noted that he had “a great admiration for General Marshall.” He also professed respect for another individual associated with the Marshall Foundation: its then-President General Omar Bradley. “I was particularly pleased,” Friedman wrote, “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.”⁷¹

Elizebeth Friedman continued cataloging the collection after William’s death in November 1969. Their daughter Barbara had visited the Marshall Library in 1968 and was shown a room on its second floor that its librarian, Eugenia Lejeune, had set aside for the collection. It was moved from NSA’s Fort Meade headquarters to Lexington on 17 December 1970, with NSA providing security for the trip.

A series of NSA visits

NSA apparently did not perform a complete inspection and security review of Friedman’s collection prior to its transfer to the Marshall Library, notwithstanding any assistance it may or may not have provided to the Friedmans in cataloging it, either separately or in concert with the efforts of Mary Ann Knight (see below, note 86). In late January 1971, two NSA historians/archivists (Alfred Hesse and Vincent Wilson) visited the Library to review the collection, which had been placed in the vault and was still in its shipping cartons (although Library staff had opened these to ensure the materials had arrived intact). Working from two card files (one which they described as a “standard library card catalog” and the other as an “analytic file” [i.e., the annotated cards William and Elizebeth Friedmans’ had compiled to describe specific items and cross-reference them to other materials]), Hesse and Wilson reviewed the collection’s holdings to determine whether it contained any “classified or codeword material.” They reached the following conclusions:

On the basis of our selective sampling... there is no great danger of classified material, marked or unmarked, in the Friedman collection. We found no evidence of codeword material. If there are any requirements to protect some material by

⁷¹Letter of William F. Friedman to Forrest C. Pogue, 1 August 1969. NSA Friedman Collection, Supplementary Release, Document A2918414.

limiting access, the physical security arrangements are available and seem adequate.⁷²

More specifically, Hesse and Wilson found no materials with any marking higher than Restricted, no indication that any classification markings had been “removed or obliterated,” and no items which in their quick review suggested they should have been classified but were not marked as such. In fact, they observed, the only instance where they had come across a document marked Secret was one where they believed it had no official reason for being so classified. This document was a review of David Kahn’s *The Codebreakers*.⁷³

Hesse and Wilson were struck by one fact about the collection, or at least what they were able to see of it, but this involved not so much what they found as what they did not. Specifically, while they were aware that Friedman had corresponded with Hagelin, the index cards for the collection’s correspondence files contained no reference to any of their letters. Moreover, the correspondence files themselves contained no folders for letters exchanged between Friedman and Hagelin. “This,” Hesse and Wilson noted, “seemed strange.” They speculated that the correspondence might be in a locked four-drawer safe which was with the collection but to which only Elizebeth Friedman had the combination, “but this is mere conjecture.”⁷⁴

Hesse and Wilson recommended a return trip to Lexington to inspect the collection once it had been unpacked, sorted, and cataloged by the Marshall Library’s staff. Later in 1971, another NSA official, historian Edwin Fishel, travelled to Lexington. However, he apparently went there not so much to review the collection for classified information as to identify items which could be either loaned or copied by the Marshall Library for display at NSA. Fishel found two such pieces (“a Union Army codebook [pocket-sized] and a Civil War-style cipher disk used by the AEF [the First World War American Expeditionary Forces in France]) but no others he deemed suitable or of sufficient interest.⁷⁵ Moreover, he learned that the Library might be reluctant to lend any materials to NSA as to do so would be “running counter to Mrs. Friedman’s wishes,” presumably reflecting the Friedmans’ desire that the collection remain intact at a single location and, possibly, Elizebeth’s lingering resentment at NSA for the 1958 visit to the Friedman

⁷²“Trip Report of Alfred W. Hesse and Vincent J. Wilson, Jr. to The Friedman Collection at the George C. Marshall Research Library, Lexington, Virginia.” 25 January 1971. NSA Friedman Collection, Document A2918428.

⁷³It is not clear whether this review was from an official and classified government publication or had appeared elsewhere and a Secret marking applied subsequently.

⁷⁴Hesse and Wilson Trip Report. Why Hesse and Wilson would have been looking for letters between Friedman and Hagelin (or even known to look for them) is not clear.

⁷⁵Edwin C. Fishel, “Findings in Visit to Marshall Foundation Library (Dates of TDY: 10-11 Nov).” Memorandum dated 12 November 1971. NSA Friedman Collection, Document A2918447. Twenty-five years later, Fishel would publish a study of intelligence in the Civil War (1996). Rose Mary Sheldon’s catalog of the collection lists the AEF cipher disk and the Union codebook as items 6.1 and 186, respectively. See Sheldon, *The Friedman Collection: An Analytical Guide*, 19 and 97 (available on the George C. Marshall Foundation website, www.marshallfoundation.org).

home⁷⁶ and what she believed was the agency's general mistreatment of her husband in his later years.

However, what is noteworthy about the report on his visit which Fishel filed after returning to NSA is his characterization of the origins of some of the items in the collection. Specifically, he claimed that NSA itself had provided some of the materials. In certain cases, these were reproductions of originals which remained at NSA. As examples, Fishel cited "numerous photocopies of Civil War items that I had sent him [Friedman] over a long period." He also noted that some items which remained in the vault after the bulk of the collection was moved to the room on the Library's second floor "were classified ones we contributed recently."⁷⁷ Beyond the reproductions of Civil War photographs he had personally provided to Friedman, Fishel claimed more generally that "we (NSA) contributed a generous number of items to the collection" and that it "surely contains scores of items that the Agency contributed."⁷⁸

Interestingly, Fishel noted in his formal report that "NSA assisted in the cataloging [of the collection] in its early years, contributing the full time of one person for several months or a year or two."⁷⁹ Fishel might have believed that the same secretary/typist who General Canine had authorized to assist Friedman under NSA's 1955 contract helped him compile the original catalog which Friedman created in the 1950s, as it seems unlikely that anyone from NSA would have participated in the Friedmans' compilation of the annotated bibliography in the 1960s. There is no indication, however, that this individual cataloged the entire collection, rather than part of it, or understood the significance of any particular items or their classification. Regardless, the fact that the NSA officials who visited the Friedman home in late 1958 did not have

⁷⁶Elizebeth voiced her anger over the incident at the Friedman home in a letter she sent to Marshall Foundation President Marshall Carter shortly after the collection had been transferred to Lexington. "It is most kind of you," she wrote, "to arrange for a search in NSA files and library for additional items from my husband's Collection. I say 'from' advisedly. I was present when the two Security men from NSA did their search-and-seizure act, taking some articles out of the Army's own *safe* in this library [emphasis original]. (Later one of those two men was dismissed from the NSA for security reasons)." Letter from Elizebeth Friedman to Marshall Carter, 8 January 1971. NSA Friedman Collection, Document A2918420.

⁷⁷This upstairs room was at this time kept locked, however, with no public access except that which was to be afforded to William Friedman's official biographer. This apparently originally was intended to be Roberta Wohlstetter. The biography was written by British biographer Ronald Clark and published in 1977. The Marshall Library opened the room to the public in 1978. Fishel, "Findings in Visit to Marshall Foundation Library (Dates of TDY: 10-11 Nov)." The publisher of Friedman's biography, Little-Brown, apparently experienced some initial difficulties finding a writer willing to take on the project, with Elizebeth writing in 1971 that "Little-Brown very much wants to do the biography, but so far all of the 'name' writers they have approached have either been bound by one or two advances for already planned volumes; or the writer is afraid of the technicality of the subject." Letter from Elizebeth Friedman to Marshall Carter, 8 January 1971. Roberta Wohlstetter claimed to have had her own encounter with NSA years earlier, stating in a 1990 interview that in the late 1950s the agency had classified the manuscript of her book on Pearl Harbor (written while she was a Department of Defense contractor) in its entirety when DoD asked that it review the draft prior to publication. Wohlstetter also asserted that NSA refused to allow publication for five years and was only forced to change its position when new leadership came to the DoD in the Kennedy Administration. See Sullivan 2007.

⁷⁸Fishel, "Findings in Visit to Marshall Foundation Library (Dates of TDY: 10-11 Nov)."

⁷⁹Fishel, "Findings in Visit to Marshall Foundation Library (Dates of TDY: 10-11 Nov)."

a list of specific items to search for suggests NSA either had no awareness of any catalog or no access to one.⁸⁰

Fishel described the Marshall Library's Friedman collection as being as rich in cryptologic materials as one which NSA had assembled at its Fort Meade headquarters. He also noted that he had discussed, inconclusively, with Pogue and Marshall Foundation President Marshall Carter how, without displeasing Elizebeth Friedman, NSA might be able to use items in the Marshall Library.⁸¹ "Until that time," Fishel noted, "Dr. Pogue had not had a close idea of the utility of the collection to us." He left a request with Pogue for either a long-term loan or gift of seven documents or artifacts. Several of these were items of which, Fishel claimed, the collection had multiple copies.

Vincent Wilson, one of two officials who in July 1971 made NSA's first visit to Marshall Library after the Friedman Collection was transferred there, returned in July 1974 in the company of Lambros Callimahos, Friedman's longstanding colleague who 15 years earlier had been involved in the decisions regarding the classification of materials removed from the Friedman home. This visit focused specifically on identifying any classified materials in the collection and ensuring all such materials were in the Library's vault. A report on the visit filed by the two men indicated that they also had searched for classified materials among "a number of files and collection of loose papers" from the part of the collection not in the vault "but none were found." Separately, Callimahos had "reviewed the classified publications and documents and found nothing that was underclassified—except for the Military Cryptanalysis texts, Parts I–IV which had retained their original RESTRICTED marking." Copies of these texts were among those removed from the Friedman home in 1958 and upgraded to Confidential the following year by the NSA Classification Advisory Panel, of which Callimahos was a member. Now, however, Callimahos believed that "some of the War Department publications of the 1930s may ... be overclassified or misclassified." Accordingly, he and Wilson recommended that NSA's Classification Officer review these War Department publications, known after the color of their covers as "Black Books" for their current classification, something Callimahos was to follow up on.⁸²

⁸⁰It appears, however, that sometime prior to June 1976 and working from "an annotated bibliography of the Friedman Collection now in the Marshall Library ... prepared by Friedman himself," a copy of which the Library presumably had provided, two NSA catalogers "professionally cataloged" it for NSA by creating title, author, and subject cards for each item. One use NSA appears to have made of the bibliography, which was typewritten on letter-sized paper, was to locate in its own collections duplicates of items which Friedman had gifted to the Library. Memorandum to Vincent Wilson, 17 June 1976. NSA Friedman Collection, Document A2918506. Among the materials cited by this memorandum as being mentioned in the bibliography are ones related to Hagelin.

⁸¹Lieutenant General Carter had been a military aide to General Marshall during his 1945–1947 service as a special envoy to China, when Marshall tried but failed to reach a settlement between the warring Kuomintang government led by Chiang Kai-shek and Communist forces led by Mao Tse-tung. Carter was subsequently an aide to Marshall both as Secretary of State and as Secretary of Defense. He retired as Director NSA immediately prior to joining the Marshall Foundation as its President and himself donated papers to the Research Library.

⁸²"Trip Report: Visit to George C. Marshall Research Library, Lexington, Va. 22–24 July 1974." Undated memorandum signed by Vincent Wilson and Lambros Callimahos. NSA Friedman Collection, Document A2918454.

Wilson returned to the Marshall Library in July 1975, when “following NSA guidelines for declassifying,” he “reviewed and declassified several hundred books, pamphlets, documents, and other items in the Friedman Collection over 30 years old.” Wilson also delivered a captured German Enigma machine for display at the Library on an indefinite loan, as well as photographs of a recent ceremony at which an auditorium at NSA was named in Friedman’s memory. Finally, Wilson agreed during this visit to consider the possibility that NSA would assist the library in making a short video biography of Friedman.⁸³

Wilson’s July 1975 visit had been hosted by Marshall Library archivist Anthony Crawford. In early 1976, Wilson and Crawford ran into each other at a dinner in Washington. In May, Crawford wrote to Wilson that he had “not forgotten your request about a list of items in the Friedman Collection which show some level of classification.”⁸⁴ Later that month, NSA historian Robert Louis Benson made a research trip to the Library, one which mainly focused on items in its George C. Marshall Collection related to the General’s views on intelligence. Benson also made some unsuccessful efforts to locate certain materials in the Friedman Collection of interest to NSA.⁸⁵ Then, in July 1976, NSA “received for examination ... from the George C. Marshall Research Foundation, one complete photocopy set of the William F. Friedman-Boris Hagelin correspondence file from the William F. Friedman Collection.”⁸⁶

NSA officials paid two more visits to the Library in November and December 1976. Their purpose was to review the Friedman Collection’s correspondence files. When examining these materials, the NSA officials found an unspecified number of documents “which related, directly or indirectly, to the official and sensitive work of NSA.” Some information in these documents was considered by NSA to be classified. Crawford reportedly agreed to an NSA request that these should be relocated to a safe used by the Library to store classified information and not be made available to the public. However, while Crawford prepared a list of the files from which these documents were drawn, “neither the NSA reviewers nor the Library made detailed notes on the documents to be closed.”⁸⁷

An August 1978 phone call between Wilson and Crawford introduced yet another element into the discussions between the two institutions. One

⁸³“Trip Report: Visit to Marshall Library 24–25 July 1975.” Undated memorandum signed by Vincent Wilson. NSA Friedman Collection, Document A2918465.

⁸⁴Letter from Anthony R. Crawford to Vincent Wilson, 6 May 1976. NSA Friedman Collection, Document A2928477.

⁸⁵“Outline of Research at Marshall Library, 19 and 20 May 1976.” Memorandum from Robert Louis Benson to Vincent Wilson, 21 May 1976. NSA Friedman Collection, Document A2918494.

⁸⁶Receipt on George C. Marshall Research Foundation letterhead dated 19 July 1976, and signed by David R. Goodman. NSA Friedman Collection, Document A2918510.

⁸⁷Affidavit of Meyer J. Levin, *American Library Association et al., Plaintiff v. Lincoln D. Faurer, Defendant. United States District Court for the District of Columbia, Civil Action No. 84-0481*. Undated and unsigned. NSA Friedman Collection, Document A2920057.

document discussed by Wilson and Crawford was a diary of a trip which Friedman made to Europe after the end of fighting there in 1945. According to Crawford, Friedman had given the diary to NSA as part of his “official files.” According to the summary of the conversation, NSA had made the diary available to the Clark while he was working on the biography. Crawford asked Wilson for a copy of the diary as well as whether NSA would be willing to look for certain items which were missing from the Library’s Friedman holdings, presumably because they were noted in one or both of the card files prepared by the Friedmans. Wilson agreed to look for these missing materials based on a list to be provided by Crawford, as well as for any “personal” items which for whatever reason had ended up at NSA. He also said he would consider the possibility of making a copy of the diary, which must however undergo a classification review as would any other “official” materials before they could be copied for the Library. Finally, the two agreed that “it would be good for us [i.e., Crawford and Wilson] to assemble all of the information we can regarding the transfer of WFF items no matter when or under what circumstances.”⁸⁸

Wilson claimed that “except for one episode when NSA people removed classified material from the Friedman home, the Agency has never had access to or reviewed the collection.” In what appears to be the first reference to NSA having separately collected Friedman’s official papers at some point, Wilson noted that “the official items were never cataloged by the Friedmans and ... the numbering came after Friedman turned his official files over to NSA.” Finally, in an apparent reference to NSA’s 1958 visit to the Friedman home, Wilson indicated “WFF himself identified items in his possession as belonging in his official files and turned them over to NSA.”⁸⁹

Crawford formally requested the European trip diary in a letter to Wilson dated 2 November 1978, hoping since several years had passed since sections of it had been made available to Clark that it might be possible for NSA to release more of, if not the entire document.⁹⁰ Wilson provided a copy of the diary to Crawford in March 1979,⁹¹ a copy identical to one which NSA had sent to Friedman’s son John with permission that the latter could make it available to Clark, with redactions on three pages.⁹²

⁸⁸George C. Marshall Research Foundation Telephone Conversation Summary, 30 August 1978. Call from Anthony Crawford to Vince Wilson, National Security Agency. NSA Friedman Collection, Document A2918810.

⁸⁹George C. Marshall Research Foundation Telephone Conversation Summary, 30 August 1978. Call from Anthony Crawford to Vince Wilson, National Security Agency. NSA Friedman Collection, Document A2918810.

⁹⁰Letter from Anthony R. Crawford to Vincent J. Wilson, Jr., 2 November 1978. NSA Friedman Collection, Document A2918813.

⁹¹Letter from Vincent J. Wilson to Anthony R. Crawford, 22 March 1979. NSA Friedman Collection, Document A2918823.

⁹²“Friedman Diary (Oct 1946).” Memorandum from Vincent J. Wilson to Charles Sullivan, 20 February 1979. Approval to release the diary to the Marshall Library was given on 12 March. NSA Friedman Collection, Document A2918821.

The Friedman Collection and James Bamford's *The Puzzle Palace*

The question of which documents associated with Friedman were official government materials and which were personal papers contributed to the controversy about the collection which broke out in the early 1980s. Other factors which set the stage were ongoing issues with respect to the classification of specific documents and the apparent fact that while NSA had reviewed individual documents or specific sets of papers for their classification, it had never conducted a systematic survey and classification review of the full collection. Further complicating matters was the presence of both official and personal documents in the materials donated by Friedman to the Marshall Foundation, as well as the fact that Friedman had performed work that either was at the time known to be classified or subsequently determined to have been, done under contract to NSA after his retirement in the mid-1950s. In retirement, moreover, Friedman continued to correspond with wartime colleagues both in the United States and abroad, and with individuals of international importance in cryptology. As noted previously, one of Friedman's most frequent correspondents was Hagelin, who not only was a professional colleague of Friedman both during World War II and for more than two decades after, but along with his wife Annie had a close personal friendship with both William and Elizebeth.

The event with the most significant implications for the Friedman papers during this period was the 1982 publication of James Bamford's *The Puzzle Palace*. At the time, Bamford's book was the most extensive public examination of NSA and it was, in places, critical of the Agency. Bamford had used the Marshall Library's Friedman Collection as part of his research, but it was only one of a number of sources he had consulted and not necessarily one of the more significant ones.⁹³ Among the specific materials in the collection which Bamford cited in his book were letters sent by or to Friedman, some involving Hagelin, in connection with trips he made to Europe in 1957 and 1958. Bamford claimed that the purposes of these trips were, first (and following Ronald Clark), to mend relations between NSA and its British counterpart organization following the rift between the United States and the United Kingdom over the 1956 Suez War and, second, to meet with Hagelin in Sweden and in Switzerland, where Hagelin had relocated his company after the Second World War

⁹³For example, Bamford appears to have made more use of the collection of General Carter's papers at the Marshall Library, which seem to have been one of his primary sources of information about NSA during the late 1960s.

and incorporated it as Crypto AG, at the time the largest commercial manufacturer of cryptographic equipment in the world.⁹⁴

Clark had made a brief reference to Friedman's 1957 trip in his biography. However, he went to greater lengths in the book's introduction to claim that prior to its publication, NSA's concerns about what he would write about Friedman's travel were significant enough that the agency made several unsuccessful attempts to persuade him to allow its representatives to review his manuscript (Clark 1977, 3–6 and 237–39).⁹⁵ Bamford (1983, 406–10) argued that Clark actually knew very little about either trip, and in fact Clark devoted only a single sentence to the one in 1957 and made no reference to the one in 1958. Bamford (1983, 408) speculated that the purpose of the trip was to meet with Hagelin and that Friedman offered "some sort of deal" to Hagelin which might have involved asking him "to supply to the NSA details about various improvements and modifications made to the machines his company had supplied to other governments." Bamford also included a lengthy quotation from a letter Friedman wrote to recently retired NSA Deputy Director Howard Engstrom in 1958 which made reference to an unspecified "project" and also indicated that General Samford had instructed him not to discuss anything but social matters in any future letters to Hagelin. In the extract from the letter quoted by Bamford, Friedman also asked Engstrom for a letter from Hagelin which Friedman had forwarded to Engstrom while the latter was still in government service, but which Samford and his staff had indicated was no longer at NSA.

⁹⁴In a 2014 article posted to the website of the online publication *The Intercept*, Bamford recalled that he had "persuaded the library's archivist to give me access to the letters [i.e., those which Bamford indicates were 'locked away in a secure vault'], all of which were unclassified." See James Bamford, "The NSA and Me," *The Intercept*, 2 October 2014. Bamford's account is generally consistent with that provided in other sources but also differs in key points. There appears to be no evidence, for example, to support his claim that Friedman "deliberately left his papers to a research library at VMI to get them as far away from the NSA as possible," as Friedman's primary concern was to leave his collection to an institution which was certified to hold classified materials and would keep it intact. There also is little support for Bamford's assertion that "after Friedman's death, agency officials traveled to the library, pulled out hundreds of his personal letters, and ordered them locked away in a secure vault." In fact, at Elizebeth Friedman's direction, none of the Marshall Library's Friedman Collection was available to the public prior to the 1977 publication of Clark's biography. The only indication that NSA had requested the Library to restrict public access to any Friedman documents prior to 1981, when as we shall see NSA did ask that the Library remove some documents from its public shelves and place them in the vault, was at the time of its late 1976 review of the Collection's correspondence files. Like the remainder of the Collection, none of these documents were available to the public at that time. As noted above, NSA did request that an unspecified number of them be moved to a safe and not made available to the public when the collection was opened.

⁹⁵In a 3 August 1976 letter to Clark, NSA official Norman Boardman suggested that "there may be other facts and details that our historian could provide, if you would be kind enough to permit him to read your manuscript. I believe he could provide substantial assistance, and, because of the sensitive nature of Mr. Friedman's work, we would like him to read the manuscript, not only to assure factual accuracy, but also to help you avoid any statements that might unwittingly touch on sensitive matters. I should hasten to add that we certainly do not wish in any way to impede your progress in bringing your manuscript to completion." Letter from Norman Boardman to Ronald Clark, 3 August 1976. NSA Friedman Collection, Document A2919862. Clark had not responded as of two weeks later. In the interim, Boardman or one of his colleagues apparently had been told by William and Elizebeth Friedman's son, John, that his mother had received the manuscript from Clark and forwarded it to him with Clark's instructions that he not reveal it to anyone. John Friedman had indicated, however, that "he did not see anything that would be extremely sensitive."

Regardless of the accuracy of Bamford's interpretation of the significance of Friedman's 1957 and 1958 trips, his book along with Clark's earlier biography apparently prompted NSA to scrutinize the Friedman materials at the Marshall Library more closely. In June 1981, before *The Puzzle Palace* was published but possibly after NSA had learned of Bamford's work on it, Russell Fisher, an NSA Senior Archivist whose responsibilities included the review of historical records for purposes of their declassification, made a brief trip to Lexington in order to familiarize himself with the contents of the Friedman Collection. During this visit, Fisher later claimed, a member of the Library's staff, John Jacob, told him that he was reasonably certain that some of the Collection's classified documents (ones marked either Confidential or Restricted) were in that portion of the collection which had been opened to the public and thus were available to researchers. Fisher later stated that despite the brevity of his visit, he had had time to "scan" the Collection's correspondence files and saw "some papers which touched on sensitive issues." Fisher suggested to Library personnel that "until we [NSA] had time to review the correspondence files more thoroughly, they should not be made available to the public." It is not clear whether Fisher knew at this point, either because Jacob had told him or because of a general awareness at NSA of Bamford's work, that some of these materials might have been made available to Bamford. However, Fisher also noted that he had not actually seen any classified documents on the Library's open shelves.⁹⁶

Two months after Fisher's June 1981 visit to Lexington, his superior Charles Ware (who at the time was the head of both NSA's archives and its history program) wrote to the curator of the Marshall Library's collections, Royster Lyle, and provided a list of documents in the Friedman Collection "which are still considered sensitive thus requiring protection commensurate with their classification." These included the four volumes of the course in military cryptanalysis which Friedman had prepared in the 1930s to train Army personnel; a two-part course (also on cryptanalysis) which Friedman and Callimahos had developed in the 1950s and had been published by NSA; a 1934 paper by Kullback; a 1939 analysis of a Hagelin device; and other training materials in cryptanalysis and traffic analysis. Ware made no reference to any of the correspondence files about which Fisher expressed concern.⁹⁷

The Library's Lyle responded to Ware's letter several weeks later. He thanked Ware for documents about Friedman which NSA recently had sent as additions to the Library's holdings. He also indicated that he had removed from the Library's open shelves the documents which Ware had indicated

⁹⁶Affidavit of Russell G. Fisher, *American Library Association et al., Plaintiff v. Lincoln D. Faurer, Defendant. United States District Court for the District of Columbia, Civil Action No. 84-0481*. 16 April 1984. NSA Friedman Collection, Document A2919885.

⁹⁷Letter from Charles Ware to Royster Lyle, 7 August 1981. NSA Friedman Collection, Document A2918881. For Kullback's paper, see Kullback 1934.

remained, in Lyle's word, "sensitive." However, Lyle also provided copies of the title pages for four of the documents on Ware's list, each of which bore a declassification stamp from July 1975 signed by Vincent Wilson. The four were Kullback's paper, both volumes of the 1950s Friedman/Callimahos training course, and the 1939 paper on the Hagelin device. Saying that he recognized "these things [presumably the classification or declassification of documents] change from time to time," Lyle indicated that he would be "very glad for your guidance."⁹⁸

In response, Meyer Levin, the head of NSA's Information Security Division, informed Lyle that the documents declassified by Wilson in 1975 in fact should not have been and remained classified. Levin did not indicate whether Wilson had made an error in judgment, misunderstood the information in the documents, or lacked the necessary authority to declassify them. (Alternatively, Levin simply might have disagreed with what Wilson had done.) Regardless, Levin stated that each of the four which Lyle had provided (i.e., the two volumes of the Friedman/Callimahos course, the assessment of the Hagelin B-211 device, and Kullback's paper) should be marked Confidential. He also reported that separately, NSA had declassified Part I of Friedman's 1930s "Military Cryptanalysis" course and was reviewing Parts II, III, and IV. Copies of these had been provided to the Library by Wilson.⁹⁹

Levin also informed Lyle that Russell Fisher along with another member of NSA's Archives and History staff, Wallace Winkler, would return to the Marshall Library in October 1981 to "review documents you hold and advise you of their current classification."¹⁰⁰ In advance of that visit, NSA conducted a review of 199 "classified documents which are in the collection."¹⁰¹ It is not clear how NSA developed this list, nor is it obvious from which sources it was compiled. In creating it, NSA counted each chapter or section in two versions of an Army manual for cryptanalysts, published in the early and late 1940s, respectively, as individual documents. The 199 documents did not include any correspondence involving Friedman, nor for that matter anyone else.

Fisher and Winkler arrived in Lexington on 27 October and stayed two days. Their visit had two purposes:

- (1) To review documents in the William F. Friedman Collection which had been erroneously declassified in 1975 to determine the necessity for upgrading and restoring protection, and (2) to review all classified documents in the Collection

⁹⁸Letter from Royster Lyle to Charles Ware, 28 August 1981. NSA Friedman Collection, Document A2918887.

⁹⁹Letter from Meyer Levin to Royster Lyle, 10 September 1981. NSA Friedman Collection, Document A2918911. Levin later claimed that Wilson had declassified several hundred items in the Friedman Collection during a 1975 visit and reported that fact to NSA. When he made this claim in 1984, however, Levin added that "NSA has no record of the precise actions taken during this visit in July 1975," implying that Wilson had not made one. Levin searched for one but did not find any. Levin Affidavit, *American Library Association et al., Plaintiff v. Lincoln D. Faurer*.

¹⁰⁰Letter from Meyer Levin to Royster Lyle, 10 September 1981. NSA Friedman Collection, Document A2918911.

¹⁰¹NSA memorandum dated 15 September 1981, and signed by Charles R. Ware, "Classification of Documents in the William F. Friedman Collection, George C. Marshall Research Foundation." NSA Friedman Collection, Document A2918913.

to determine the feasibility of downgrading them, or continuing the protection of a classification.¹⁰²

In neither case was the intent of this visit to conduct a classification review of the entire Friedman Collection or to survey it to determine the presence of classified materials elsewhere in its holdings. Instead, Fisher and Winkler focused exclusively on the 199 documents on the list which had been developed by NSA. Twelve of these documents, for unspecified reasons, “were not immediately available for review.”¹⁰³ Of the remaining 187 documents, Fisher reclassified five which had been previously declassified.¹⁰⁴ These included the four discussed by Ware, Lyle, and Levin in their correspondence earlier in the year and one other not previously mentioned. This was a volume of six lectures on cryptography prepared by Friedman while he was under contract to NSA and published by the agency in 1965 (NSA 2006). (A sanitized copy was provided to the Library for its open shelves.) Fisher also declassified 57 documents and lined through the For Official Use Only caveat on 39 others. The remaining 85 documents had an original “Restricted” marking on them and were upgraded by Fisher to a classification of Confidential. The significant majority of these (76) consisted of the individual chapters or sections of the two versions of the Army’s manual for cryptanalysts. The other nine documents upgraded to Confidential were training materials and technical papers in cryptanalysis or analyses of cryptographic equipment.

NSA’s Ware confirmed the decisions made by Fisher during his visit in a November 1981 letter to the Marshall Library’s Lyle. Ware also indicated that among the items declassified in full were a three-volume study of World War II cryptography written by Wilhelm Flicke and published in translation by NSA in 1953 and 1954.¹⁰⁵ Flicke’s work apparently had not been flagged by Fisher while in Lexington because of “some questions as to the classification of certain pages” which required further study back at NSA. Upon completion of that review, however, Ware informed Lyle that Flicke’s work was “completely declassified” and could be moved to the part of the Library’s Friedman Collection open to the public. Ware asked Lyle to “draw a line through the RESTRICTED caveat and add ‘Declassified by NSA 1981.’” He also requested

¹⁰²Internal addendum, dated 25 November 1981, and signed by Russell Fisher, to letter from Charles Ware to Royster Lyle, 30 November 1981. NSA Friedman Collection, Document A2919331.

¹⁰³Internal addendum, dated 25 November 1981, and signed by Russell Fisher, to letter from Charles Ware to Royster Lyle, 30 November 1981. NSA Friedman Collection, Document A2919331.

¹⁰⁴There is an inconsistency in the number of documents reclassified as stated in Fisher’s addendum to Ware’s letter to Lyle, which states there were six, and the number noted as such in the document listing Ware attached to his letter, which only has five documents so annotated. The sixth document may have been a 1934 paper by Friedman, “Analysis of a Mechanico-Electrical Cryptograph, Part I.” Fisher declassified this document during his October 1981 visit to the Library in the company of Winkler. Returning to the Library with Levin in 1983, he reclassified it Confidential as a result of reviews NSA had conducted in the interim which determined that it contained classified information. Undated note from Russell Fisher to Meyer Levin. NSA Friedman Collection, Document A2919613.

¹⁰⁵Wilhelm Flicke served in the cipher section of the German Army. His history of its role in World War II was written largely from memory and obtained by NSA. See NSA Friedman Collection, Documents A59421 and A59332.

that Lyle forward copies of the 12 documents “which were not immediately available for the team” to NSA for review, promising that when the latter was completed he would inform Lyle of the outcome.¹⁰⁶

Ware concluded his summary of NSA’s decisions on the classification of items in the Friedman Collection with the following statement:

With the exception of the documents which the team members did not see [presumably, the 12 noted previously], and those which they specifically upgraded or reclassified, we consider that all the documents you have in the open shelving area are now completely declassified.¹⁰⁷

Fisher and Winkler had been accompanied to Lexington by an officer from Meyer Levin’s Information Security Division, who inspected the Marshall Library’s security arrangements. Writing to Lyle separately from Ware, this officer thanked him for his assistance and noted that the work which he, Fisher, and Winkler had done to limit the classified holdings in the Friedman Collection would “make it more manageable for you [Lyle].” Somewhat cryptically, he noted that “we [NSA] reviewed the classified materials John [Jacob] had shown me in the vault. We were unable to declassify any of them. However, upon reflection, I believe that we could provide you with sanitized copies,” an option which originally had been suggested for Flicke’s *War in the Ether* but was overtaken by its full declassification. While it is possible that the classified materials in the Library’s vault were among the 199 reviewed by Fisher, it seems equally possible that they were not, and with one alternative explanation being that they were correspondence files, possibly ones containing letters between Friedman and Hagelin. Another unusual statement in this letter to Ware was that the NSA officer reported that “John [Jacob] has stated that he has made a practice of sending TOP SECRET to Alan Thompson at NARS [the National Archives and Records Service]. Evidently, however, Alan can no longer do this for you.” This suggested to the NSA official that there were materials classified TOP SECRET in both the Library’s George C. Marshall Papers and the Friedman Collection, a higher classification than indicated previously.¹⁰⁸

When Bamford’s book was published, however, NSA noted the presence of material which clearly had come from the Library’s Friedman correspondence files, ones which the Agency had reviewed in 1976 and requested be removed from the public section. Accordingly, Levin and Fisher returned to Lexington in April 1983 and examined these portions of the collection. At that time, Levin learned that in 1979 Crawford had “without consulting NSA ... opened to the public” the materials which in 1976 NSA had deemed

¹⁰⁶Letter from Charles Ware to Royster Lyle, 30 November 1981. NSA Friedman Collection, Document A2919331.

¹⁰⁷Letter from Charles Ware to Royster Lyle, 30 November 1981. NSA Friedman Collection, Document A2919331.

¹⁰⁸Letter to Royster Lyle, 5 November 1981. NSA Friedman Collection, Document A2918986. The Library’s Marshall Collection contains numerous official papers originally marked Top Secret which were later fully declassified.

“sensitive.”¹⁰⁹ Aware of the possibility that these may have been “publically disclosed,” but realizing that he would not have sufficient time during this trip to the Library to review them, Levin asked that “certain materials” in the correspondence files be closed to the public as their “continued public availability could compound any damage that may have accrued to the national security as a result of the earlier unauthorized disclosure” in Bamford’s book. Levin also indicated that he had classified some of these materials.¹¹⁰

Fisher and Levin also agreed that the Friedman Collection’s correspondence files must be reviewed again to determine whether any of those files contained “sensitive material” and planned to return to Lexington in the fall. They also apparently reached an understanding with the Library on a three-part categorization of the Collection: open, sensitive and closed, and classified. Levin’s Information Security Division was to have followed up on this discussion with a letter to the Foundation clarifying the second category (“sensitive and closed”) “to avoid embarrassment to Foundation employees (and possibly to avoid FOIAs to us).” Fisher and Levin also reviewed those files at the Library containing the papers of General Carter, which had been deposited there after his retirement, with specific attention to those from his tenure as Director NSA. They found three items “which required protection.” Finally, the two promised letters to General Carter (apparently in his personal capacity rather than as President of the Marshall Foundation) and to the Foundation itself.¹¹¹

In February 1984, Levin returned to the Marshall Library to conduct a more thorough examination of the correspondence files he had asked be withdrawn from the publically available section of the Friedman Collection. Again, he was “not able to obtain and consider any specific information concerning the possible public disclosure of any of these the materials.” Levin authorized the Library staff to return to the public shelves all the materials which he previously had asked to be removed with the exception of 31 documents which he had determined contained information which was classified Confidential or Secret. These he asked the Library to continue to protect. He characterized this information as “cryptologic materials and activities used in the intelligence efforts of NSA,” specifically its “intelligence sources and activities.” Levin also noted that in addition to the 31 documents which needed further NSA review, he had identified four other documents from

¹⁰⁹There is no indication that Crawford’s action was malicious or intended to harm the reputation of either the Marshall Library or the NSA. More likely, presumably having seen no classification or other markings on the documents, he concluded there was no reason that Bamford could not have access to them. Moreover, as noted above, neither he nor NSA appears to have specifically noted exactly which documents deemed “sensitive” were to be withheld from the public, perhaps suggesting that three years later there easily could have been confusion in that regard.

¹¹⁰Affidavit of Meyer J. Levin, *American Library Association et al., Plaintiff v. Lincoln D. Faurer, Defendant*, paragraphs 11 and 12. NSA Friedman Collection, Document A2920057.

¹¹¹Undated note from Russell Fisher to Meyer Levin. NSA Friedman Collection, Document A2919613.

the correspondence files closed in 1976 which “were marked as classified or contained classified information of interest to other organizations.”

Media coverage and the American Library Association lawsuit

On 28 April 1983, Philip Taubman of *The New York Times* published an article entitled, “Security Agency Bars Access to Nonsecret Material, Library Records Show.” Taubman claimed, based on interviews with Marshall Library officials, that earlier in the month, two NSA officers had visited and stamped a number of letters written by Friedman “Secret.” Library personnel had informed Taubman that material used by Bamford had been marked in this way. Taubman (1983) further asserted that the NSA representatives had “instructed” Library staff to place the letters they had stamped Secret and “many” others which they had not stamped in the Library’s vault.

Taubman dated the correspondence which had been removed to the period from 1952 and 1969, and said Library officials believed it “dealt primarily with personal matters.” The *Times* asked to see “several of the Friedman letters mentioned in Mr. Bamford’s book” and was given the files in which they had been located. Taubman claimed, however, that in place of the letters were notices indicating “the material had been removed because it contained ‘security-classified information’ and had been designated ‘For Official Use Only’ by the security agency [NSA].” Taubman also reported that all of Friedman’s correspondence with Hagelin had been withdrawn from that part of the collection open to the public and that there were “several references to the Hagelin letters in Mr. Bamford’s book.” Finally, Taubman was informed by the Director of the Marshall Foundation, Fred Haskell, that General Carter earlier had asked that his papers be removed from the Library’s open shelves. Carter’s request followed publication of the book by Bamford, who while researching it had interviewed the retired General and apparently also accessed some of his papers in the Library’s collections (Taubman 1983).

Reaction from the historical and civil liberties communities was swift. Taubman quoted Mark Lynch, an attorney with the American Civil Liberties Union, as saying, “When the Government starts barring the public from seeing unclassified documents in private libraries, it’s an extraordinary form of censorship.” Samuel Gammon, executive director of the American Historical Association, observed that “the removal doesn’t make sense from the standpoint of reason, let alone scholarship.” Other academics argued the pointlessness of NSA’s action, given that the material already had appeared in Bamford’s book. Still others interviewed by Taubman indicated that they could not recall any other instance where records which had been open to the public and quoted or otherwise cited in a published study were subsequently closed or classified by the Government. Finally, Taubman (1983) noted a statement by Bamford that he had retained copies of all the Friedman

correspondence he had reviewed in preparing his book and “would make them available to anyone who asked to see them.”

The *Times* article also caught the attention of Congress. In a 5 May 1983 letter to the then-Director of NSA, Air Force Lieutenant General Lincoln Faurer, the Chairman of a House Committee on Government Operations subcommittee responsible for overseeing the handling of government information, Glenn English (D-Okla.), asked a series of questions regarding what he characterized as NSA’s direction to the Marshall Library to “halt public access to private papers that had been donated to and became part of the collection of the library.” English indicated the subcommittee was investigating NSA’s action “in preparation for possible hearings” and posed a series of questions to the agency. Most focused on which documents NSA had directed be closed to the public, its authority to classify or restrict disclosure of information in “private papers,” its specific instructions to the Library, and what the *Times* had described as NSA’s “continuing review of research materials used by author James Bamford.” English also asked Faurer whether NSA had ever provided funding to the Library and whether Friedman had entered into a “secrecy or prepublication agreement” with the government.¹¹²

In his response to Congressman English, Faurer cited “the long and mutually beneficial relationship” NSA had had with the Marshall Library and pointed out that the agency had both declassified a considerable amount of material in its Friedman Collection and provided copies of “other materials recently declassified for use in their [i.e., the Library’s] research program.” Faurer confirmed that NSA’s review of materials in the Library’s Friedman and Carter Collections had been prompted by the recent exposure of information from each that NSA had thought were in sections of the Library closed to the public. NSA had reviewed their correspondence files, Faurer said, and as a result recommended that “papers which had been exposed without the approval of the Marshall Foundation authorities . . . be closed again.” Faurer also noted that General Carter had requested that the entire set of his papers be closed to the public. Turning to NSA’s classification authorities, Faurer indicated that NSA had classified “approximately five pages” and marked several (“very few”) correspondence files “For Official Use Only,” which Faurer characterized as “having the effect of a recommendation to the Library staff that these papers remain in the secure vault.” All the documents reviewed by NSA had been in the vault, according to Faurer, and neither had it examined any materials in the Library’s public section nor did it remove any papers from the Library’s collection. Nor, for that matter, had NSA asked the Library to remove any papers from public access.¹¹³

¹¹²Letter from Glenn R. English to Lincoln Faurer, 5 May 1983. NSA Friedman Collection, Document A2919693.

¹¹³Letter from Lincoln Faurer to Glenn R. English, undated and unsigned draft. NSA Friedman Collection, Document A2919648.

As a basis for taking these actions, Faurer pointed to the classification authority given to NSA by E. O. 12356 and Public Law 86-36 (50 USC 402), the National Security Agency Act of 1957, which stipulated that NSA could not be compelled to disclose anything about its organization, activities, or personnel. He confirmed that the agency's "review of materials used by author James Bamford" was ongoing and characterized it as an instance of NSA's regular reviews of "published information to determine if classified information has been disclosed without authorization," noting in passing that such "reviews of materials' are always underway." As for the question of NSA's authority "to classify information in private papers," Faurer cited various statutes, Executive Orders, and Federal Regulations, as well as the oaths and non-disclosure agreements entered into by individual employees upon entry into Federal service as "assigning responsibility for classified or protectable sensitive information in private papers to the cognizant government agency" and that "such material in private correspondence remains 'official records.'" Concluding his answers to Congressman English, Faurer noted that NSA had never provided funding to the Marshall Library nor was it contemplating doing so and that Friedman had signed secrecy and prepublication review agreements with NSA. Faurer noted, however, that these latter records had been "retired," presumably meaning there was no longer easy access to them and the agency would attempt to retrieve them.¹¹⁴

In the late spring of 1983, Jay Peterzell, a researcher with the Center for National Security Studies, traveled to Lexington and asked the staff of the Marshall Library for access to the documents in the Friedman Collection which, in his attorney's later characterization, "had been withdrawn from the publically available portion of the collection." Peterzell was told, his attorney continued, that NSA had directed the Library to remove the materials and that they could not be provided to him without the agency's consent. In early January 1984, Peterzell phoned the Library to ask whether these documents in the interim had been returned to the open shelves and was informed that they had not been.¹¹⁵

Representing Peterzell as well as the American Library Association, the District of Columbia Libraries Association, the American Historical Association, and the Organization of American Historians, the American Civil Liberties Union's Lynch wrote to Faurer on 16 January 1984:

It is our position that NSA lacks legal authority to direct a private library to withdraw documents such as those contained in the Friedman collection from public access, particularly where the documents have been available to the public for a substantial period of time, and that such a direction violates the First Amendment

¹¹⁴Letter from Lincoln Faurer to Glenn R. English, undated and unsigned draft. NSA Friedman Collection, Document A2919648.

¹¹⁵Letter from Mark Lynch, American Civil Liberties Union Foundation, to General Lincoln Faurer, 16 January 1984. NSA Friedman Collection, Document A2920206.

rights of my clients and other members of the public who seek access to these documents. Accordingly, we ask that you withdraw NSA's direction that the Marshall Library must withdraw from public access documents in the Friedman Collection which at any time have been available to the public.¹¹⁶

Ten days later, NSA General Counsel Jon Anderson phoned Lynch to inform him that his request would not be granted. Acting on his clients' behalf, Lynch then filed suit in the United States Court for the District of Columbia seeking injunctive relief and asking the Court to allow access to the documents which had been "withdrawn."¹¹⁷

District Judge June Green issued the Court's decision in this case, *American Library Association et al. vs. Faurer*, on 27 March 1986. Green reviewed the four grounds which Lynch had cited in arguing his clients' case that they should be given immediate access to the documents in question:

- "NSA lacks legal capacity to direct a private library to withdraw unclassified documents from public access;"
- "NSA's direction to the Marshall Library to remove unclassified documents is an unwarranted interference with the First Amendment rights of the plaintiffs and other members of the public seeking access to the Friedman collection;"
- "NSA lacks legal authority to classify documents that have been available to the public and to direct a private library to withhold such documents from public access"; and
- "NSA's classification of documents which had been available to the public and the Agency's direction to the Marshall Library to remove documents from public access are an unwarranted interference with the First Amendment rights of plaintiffs and other members of the public who seek access to such documents in the Friedman Collection."

Judge Green also noted that in moving for summary judgment and immediate access to the documents at issue, the plaintiffs also argued that "NSA's classification decisions so far departed from the procedures required by relevant Executive Orders on classification that these decisions are void."¹¹⁸

In her decision, Judge Green ruled in NSA's favor with respect to each of the arguments Lynch had made on behalf of the American Library Association and the other plaintiffs. With regard to the claim that NSA lacked

¹¹⁶Letter from Mark Lynch, American Civil Liberties Union Foundation, to General Lincoln Faurer, 16 January 1984. NSA Friedman Collection, Document A2920206.

¹¹⁷In a press statement of 17 February 1984, the Marshall Foundation noted that as it did not know the details of the case and, as the matter was in litigation, it did not feel it could comment. It did note that "the Friedman collection consists of approximately 3,000 publications, 30,000 papers, cryptologic devices, and a number of personal artifacts. Well over 99% of the collection is available to researchers on an unrestricted basis. Less than ½% (twenty-nine publications and fifty-five pages of correspondence) have been given government classification of Confidential or Secret. These documents therefore are not available to general researchers. There are no other documents withdrawn from the public." NSA Friedman Collection, Document A2920133.

¹¹⁸*American Library Association, et al. v. Lincoln Faurer, Director, National Security Agency*. United States District Court for the District of Columbia. Civil Action No. 84-00481. Opinion by District Judge June L. Green, 27 March 1986.

sufficient authority to have directed the Marshall Library to withdraw documents from its public holdings, Green determined that the agency in fact had a basis both in law and in the form of Friedman's security oath for taking such an action. She also found that that the First Amendment "does not compel the Federal Government to provide access to classified documents, especially when such disclosure can be reasonably expected to cause damage to national security... even though the information has been previously in the public domain." Turning to whether NSA could "reclassify previously declassified information," Green said that it could as long as two conditions were met: (a) the information must be protected for national security reasons, and (b) "the information may be reasonably recovered."

Green went to some length to discuss the plaintiffs' final contention: that with respect to the documents in question, NSA had not followed Executive Branch guidance on classification and thus its decisions in this regard were invalid. Based on a classified affidavit from NSA Deputy Director Robert Rich, Green concluded that the agency had in fact classified the documents correctly as, in her assessment, "disclosure of this information could be reasonably expected to cause serious damage to the national security." While chiding NSA for the way in which it had handled classification of the documents ("The Court does not condone by any means NSA's cavalier attitude toward its classification determinations of the materials at issue, especially the thirty-one pieces of correspondence"), Green went on to state that "this factor alone should not be used as a means to accomplish by the back door what the Court would not permit by the front door—invalidation of NSA's classification decisions and disclosure of the information in question." "The threat to national security," Green concluded, "is just too great." Accordingly, she issued a summary judgment in NSA's favor.

The American Library Association and its fellow plaintiffs filed an appeal of Judge Green's decision with the U.S. Court of Appeals for the District of Columbia, with the case being argued in February 1987 before Judge Ruth Bader Ginsburg and two other judges.¹¹⁹ The Reporters' Committee for Freedom of the Press filed a friend of the court brief in support of a reversal of the lower court decision. Writing for the Court of Appeals, Judge Ginsburg upheld the lower court's dismissal of the case. In particular, while not reaching a decision on the merits of the case, she wrote that the plaintiffs lacked the necessary legal standing as "adequate representatives of the [Marshall] library's interests." Nor had they, she continued, "shown that they can reliably convey the private speaker's [Friedman's] will."

More specifically, Judge Ginsburg noted that one of the reasons Friedman had stated in his 1969 letter to Forrest Pogue describing his intent to transfer his collection to the Marshall Library was that the latter "would be approved

¹¹⁹*American Library Association et al., v William Odom, Director, National Security Agency*. United States District Court of Appeals for the District of Columbia Circuit, No. 86-5337. Opinion by Circuit Judge Ruth B. Ginsburg, 8 May 1987.

as an institution which could keep valuable or classified papers related to National Security or National Defense.” Additionally, while NSA and the Library had not entered into a written agreement on public access to the Friedman Collection, it appeared to Judge Ginsburg that each was satisfied with what she characterized as a “notably informal arrangement” and saw it as advantageous both to themselves and to the public. Finally, Ginsburg noted that although the Library had objected to NSA going beyond a division of the materials into classified and unclassified holdings to add a third category (which she characterized as “unclassified but nonetheless withheld papers”) and urged “firm decisions by NSA either to open documents or classify them,” it also “had never objected to classified reviews by NSA.” Moreover, in 1984, NSA had eliminated this third category and “either classified or opened to the public all Friedman Collection materials,” leaving only the 33 documents at issue in the suit in the classified section.

Aftermath: The Friedman papers today

Judge Ginsburg’s ruling ended litigation over the Marshall Library’s Friedman Collection. The Library went on to hold classified materials for five more years. At some point, however, it decided to return all such materials remaining in its collections to the Federal Government. In September 1991, Library Archivist Glenn Fine returned “34 folders in three boxes” to the National Archives Declassification Bureau. Among these were roughly 1,000 pages of documents from the Friedman Collection, including an unspecified amount of correspondence as well as government training manuals, analytic papers, and memoranda. Since that time, the Library has not held classified items. Its secure vault was decommissioned at some point after 1991.

A series of requests under the Freedom of Information Act following the decision in American Library Association case, many filed by Professor Rose Mary Sheldon of the Virginia Military Institute’s Department of History, resulted in the return of a number of items which either had been removed from the Marshall Library’s Friedman Collection or were otherwise determined to be missing. These included many of the items which NSA had said in the early 1980s either had been improperly declassified or must be upgraded from the old “Restricted” marking to Confidential. However, several items listed either in the Library’s catalogs of the Collection or in various listings of materials in it created by NSA over the years remain missing or are identified in such a general way as to make locating them difficult.

In early 2015, NSA released over 50,000 pages of Friedman’s official papers and related materials. While the documents which were made public were drawn from the full range of Friedman’s career, many dated to his post-World War II career as an Army civilian and then as a senior NSA official. NSA released 85% of the collection in full, redacting 13% to protect information

still classified for reasons of national security. The remainder was withheld in full for similar reasons. Among the items released were 25 of the 33 pieces of correspondence and documents at issue in the American Library Association case; all but one of these were provided in their full, unredacted form. Many were letters exchanged between Friedman and Hagelin. Of the remaining eight, NSA subsequently released seven. One was withheld in full as the information therein required the continued protection of classification for reasons of national security.

It would be a risky endeavor to attempt to extract from the history of the Friedman papers more general conclusions about government secrecy, the relationship between a public official's government and personal papers, the holding of classified materials by private institutions, the public's right to know, and related matters. There are many aspects of this history which are as unique as the life and personality of the individual at its center, William Friedman. Friedman was a complex, mercurial, and in some ways enigmatic individual, as much a government practitioner of cryptology as he was a scholar of cryptologic principles and history. He single-handedly created the Army's Signals Intelligence Service and led it to its earliest and in many ways greatest achievements, but was then moved into what were arguably less prominent roles as a technical expert, researcher, advisor, and teacher. Having served in the Army himself, in his later years he was increasingly the lone senior civilian among a crowd of military officers and clashed more and more frequently with them. He sought to make some of his writings available to the public but found himself swimming against the tide of the early years of the Cold War, when the government was tightening security and doing so with particular urgency in the areas of codemaking and codebreaking. Most strikingly of all, he saw his relationship with his former agency slowly deteriorate to the point at which the two appear to have simply gone their separate ways.

It is these final points which leave one with a feeling of sadness as one rounds the last bend in the twisting story of the Friedman papers and reflects on the path travelled, a sadness at the all-too-human foibles of many of those involved; at decisions made, not made, or made, reversed, and then reversed again; and at what may well appear from the perspective of today as tempests-in-teapots and passionate arguments about the seemingly small. Yet, any such sadness is tempered by what (when all is said and done) the papers themselves reflect: a time when individual genius and persistence, challenged to solve the seeming unsolvable at moments when humanity itself was in great peril, rose repeatedly to that challenge, and prevailed.

About the author

David Sherman is Associate Director for Policy and Records at the National Security Agency. The views expressed herein are his own and do not reflect

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