

TALES OF YARDLEY: SOME SIDELIGHTS TO HIS CAREER

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ABSTRACT: This paper contains little known vignettes in the life of Herbert O. Yardley which include the Cipher Bureau he established in New York, William F. Friedman, publication of *The American Black Chamber*, his work for the Canadian government, an effort to clear his name with the FBI, and a secret investigation of his loyalty by the Army's Counter Intelligence Corps during World War II.

KEYWORDS: Yardley, Friedman, Fabyan, Riverbank, Cipher Bureau, Stimson, Albright, Canadian codebreaking unit, FBI, Counter Intelligence Corps.

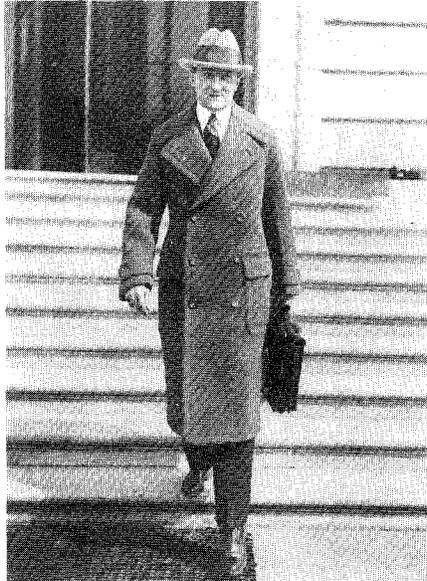
YARDLEY OFFERS EMPLOYMENT TO MR. AND MRS. FRIEDMAN

A potpourri of little known or unpublished historical information on American cryptologists Herbert O. Yardley and William F. Friedman and, to a lesser extent, on the man who closed Yardley's "Black Chamber," Secretary of State Henry L. Stimson, has emerged as a by-product of the research conducted for my article, "Stimson, The Black Chamber, And The 'Gentlemen's Mail' Quote."¹ Much of the material was not germane to the article and some became available after it was published. But all of the information sheds additional light on the characters and lives of these individuals and their interrelationships. It is presented in roughly chronological fashion.

In mid-April 1919, Yardley, then a captain in military intelligence, returned to Washington from a tour of duty in France full of ideas for the future. With the Great War over, he hoped to retain his codebreaking unit, MI-8, as an agency to serve the United States in peacetime. He sought to recruit two of the best cryptologists in the country. One was Friedman, who had written some breakthrough

¹Louis Kruh. 1988. "Stimson, The Black Chamber, And The 'Gentlemen's Mail' Quote," *Cryptologia* (April). p. 65.

technical papers while at the Riverbank Laboratories in Geneva, Illinois. He had served in France with the American Expeditionary Force's codebreaking section and then had returned to Riverbank. The other was his wife, Elizebeth Smith Friedman, who worked with William at Riverbank.



Library of Congress.

William F. Friedman in 1924.

April 28, 1919

Dear Friedman:

Just got back about 10 days ago and find fair prospect for permanent organization, but nothing will be known definitely until the Army bill is passed.

If everything goes as I hope I may be in a position to offer you:

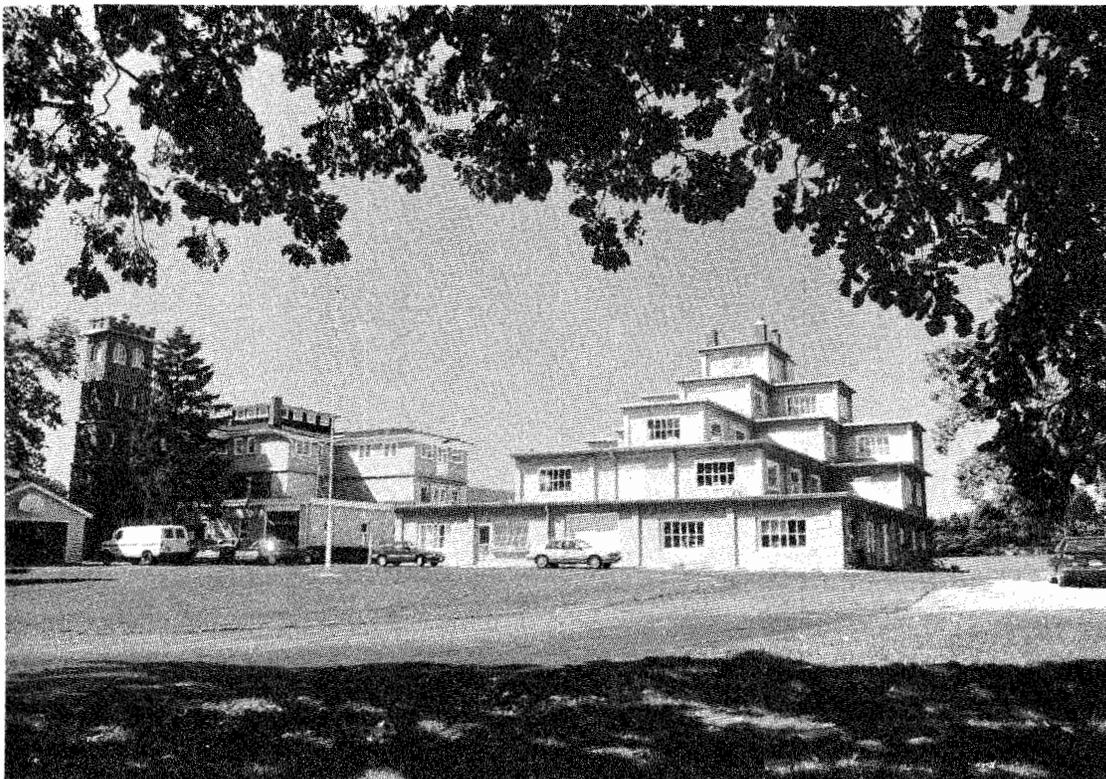
- (1) 1st Lt. in Regular Army
- (2) \$3000 per annum as civilian provided I can get Mrs. Friedman with you. I can offer her \$1520 per annum.

Please consider this as confidential and let me know, if foregoing is satisfactory, within how many days both of you could report.²

²Captain Herbert O. Yardley to William F. Friedman, 28 April 1919. Friedman Collection, George C. Marshall Foundation, Lexington, VA.

Friedman replied on May 1 that, "The proposition labelled number 2 ... is satisfactory" and that "We could report within a week after receipt of notice, and within less time if urgent."³

Yardley answered that, "The present indication is that there will be a permanent organization and I shall know definitely by June 30th."⁴



QPI photo by Jim Stocker.

Riverbank Laboratories today.

On June 30, Friedman received a telegram from Yardley, "Will probably wire you officially tomorrow" and advising him to tell Colonel George Fabyan, the owner of Riverbank, about his intention to leave Riverbank and accept MI-8's offer. "Realize your position but have always been frank with Fabyan. Believe that course will cause less friction."⁵

³Friedman to Yardley, 1 May 1919. Friedman Collection.

⁴Yardley to Friedman, 16 June 1919. Friedman Collection.

⁵Yardley to Friedman, 30 June 1919. Friedman Collection.



QPI photo by Jim Stocker.

Colonel George Fabyan, owner of Riverbank Laboratories.

Friedman wrote to Yardley on July 2 about his conversation with Fabyan.

In accordance with your advice I made a frank statement to Colonel Fabyan, telling him of the offer from MI-8 and my acceptance. He asked to see the letter, which I showed him, together with your wire indicating [Director of Military Intelligence] General [Marlborough] Churchill's approval.

He immediately came to the conclusion that the offer and its authorization was made with the direct object of getting me down to Washington on account of the AT&T cipher affair [see below] and it was only today that I found he did not even look at the date nor the address of your first letter to me. I straightened him out on that score, telling him

that if there was any blame due anyone it was due me, and nobody else. But he refuses to see it that way and in spite of the fact that, as I pointed out to him, I had nothing to do with the AT&T affair he expressed in no uncertain terms his intention of making it exceedingly uncomfortable for everybody connected with MI-8.

Otherwise, he has been no more upset than I expected him to be at the news. We are going to part on friendly terms, though I feel that he will not hesitate to hurt us if he could for what he chooses to insist on calling a 'breach of loyalty to Riverbank.'

In order to placate him as far as is possible under the circumstances I have agreed to finish one or two things for him, which may take two weeks. But I shall work day and night to finish up and report as soon as possible. Please advise me if this is satisfactory.⁶

The AT&T affair involved a modification of the teleprinter cipher invented in late 1917 by Gilbert S. Vernam, an engineer with the American Telephone and Telegraph Company. The modification electrically added together two punched tapes to produce a third tape that served as the key. The system was being tested by the Signal Corps, which saw it as more practicable than the true one-time tape, which required as much key as all the messages that would ever be sent. But Fabyan and Friedman claimed that, unlike the true one-time tape, Vernam's original idea, this method could be broken. Before a test could be arranged, however, Friedman had left for France.⁷ Fabyan expected that Friedman would break the cipher on his return. Therefore, when Friedman accepted the offer from MI-8 shortly after he came back to Riverbank, Fabyan regarded it as a plot by the Signal Corps to get Friedman to Washington, thus depriving Riverbank of credit for any work Friedman did on the two-tape system.

As it turned out, the Yardley offer was not confirmed⁸ and Friedman stayed at Riverbank for 18 months before succumbing to an offer from the Signal Corps. While he was there, Churchill wrote to Major General George O. Squier, the chief signal officer, that the two-tape system "is considered by this office [Military Intelligence] to be absolutely indecipherable." A few months later, in December 1919, Friedman broke it. This feat further enhanced his reputation and probably increased the pressure by Washington officials for him to enter government service.⁹

⁶Friedman to Yardley, 2 July 1919. Friedman Collection.

⁷Ronald W. Clark. 1977. *The Man Who Broke Purple*. Boston: Little Brown and Co. pp. 60- 63.

⁸Ibid. p.78.

⁹Ibid. pp. 74-76.

DID THE CIPHER BUREAU REALLY HAVE TO MOVE FROM WASHINGTON?

When Yardley's plan for a reorganized Cipher Bureau was approved, the State Department agreed to provide \$40,000 per year out of special funds. But, Yardley wrote in his classic, *The American Black Chamber*, "I was told that there was a joker in the Department of State special funds: they could not legally be expended within the District of Columbia."¹⁰ Yardley was right. The appropriations act for the fiscal year ending June 30, 1920, declares that, "No money appropriated by any other Act shall be used during the fiscal year 1920 for employment and payment of personal service in the Department of State in the District of Columbia."¹¹

But while this only supports Yardley's statement, it does not explain why the Cipher Bureau moved to New York instead of, say, Alexandria, Virginia.

The official history of U.S. cryptologic organizations suggests that Yardley wanted New York.

Who originated the suggestion that the reorganized MI-8 be transferred to New York City does not appear anywhere in the records, but apparently the plan was already in existence before the recommendations for rent, heat, and light had been inserted in General Churchill's memorandum. Had the unit remained in Washington, it would doubtless have occupied Government space and no such item would have been needed in the budget. That the move was Yardley's idea seems highly probable: during the War the Shorthand Subsection under F. W. Allen had operated in New York, and Yardley's close friendship for the chief of that Subsection may have led him to think of setting up the new MI-8 in the same city.¹²

In fact, Yardley, after receiving General Churchill's approval for rental of a particular building, found that his friend Allen had a property he was willing to rent for the same sum. So he substituted Allen's building without informing the general.¹³

¹⁰Herbert O. Yardley. 1931. *The American Black Chamber*. Indianapolis: Bobbs-Merrill Co. p. 240.

¹¹U.S. Department of State. 1920. *Laws of the Third Session of the Sixty-Fifth Congress Affecting the Department of State*. Washington: USGPO. p. 157.

¹²U.S. Army Security Agency. 1946. *Historical Background of the Signal Security Agency. Vol. III. The Peace 1919-1939*. Washington: Army Security Agency. p. 45.

¹³*Ibid.* p. 46.

YARDLEY'S PERSONAL VENTURES WHILE HEAD OF THE CIPHER BUREAU

Friedman told Assistant Secretary of State William R. Castle after publication of Yardley's *The American Black Chamber* that Yardley, while head of the Cipher Bureau, devoted most of his time to private enterprises "and he was having a 'field day' at Government expense."¹⁴ Friedman said Yardley was not worth the salary he got as he worked only about an hour a day on government codebreaking and at the same time "carried on a real estate business and a commercial coding section."¹⁵

Friedman had no direct contact with the Cipher Bureau and may not have known that Yardley's other activities were sanctioned. His bitterness toward him for publishing *The American Black Chamber* may have led him to overstate the situation.

Actually, in order to conceal its activity, the Cipher Bureau took the cover of the Code Compiling Company, Incorporated, which was established May 3, 1920, by Yardley and his partner in the venture, Charles J. Mendelsohn, a wartime cryptanalyst and professor of history at the City College of New York.¹⁶

That this and "other" work was authorized is also suggested by an official memorandum: "These activities of Mr. Yardley in New York were necessarily secret and were camouflaged by his operating as a compiling company for commercial codes with no apparent connection with the government."¹⁷ Further, the official history states that "... perhaps to give the cover name the verisimilitude which it suggested ..., he [Yardley] had engaged in commercial-code compilation, acted as a consultant for commercial firms in code matters, and was a licensed broker in real estate."¹⁸

Later, however, as intercepts became harder to obtain from the cable companies and cryptanalytic activity declined, Yardley's real estate business may have occupied more and more of his time.

¹⁴William F. Friedman. 1942. *A Brief History of the Signal Intelligence Service*. SRH 029 (N.P.). p. 8.

¹⁵William R. Castle Diaries. p. 482. (23 December 1931). Houghton Library, Harvard Library, Cambridge, MA.

¹⁶*Historical Background*. p. 48. The date was obtained from the incorporation certificate of the Code Compiling Company which is on file at the New York City Clerk's office. The certificate describes the purposes of the company and is signed by Mendelsohn and Yardley who have 49 shares each and William J. Magee, an attorney, who received two shares, presumably for his legal work.

¹⁷Lt. Colonel O. S. Albright to Colonel A. T. Smith, 24 March 1931. Mugar Memorial Library, Boston University, Boston, MA.

¹⁸*Historical Background*. p. 142.

CERTIFICATE OF INCORPORATION

-of-

CODE COMPILING COMPANY, INC.

We, the undersigned, all being of full age and at least two-thirds being citizens of the United States of America, and at least one being a resident of the State of New York, desiring to form a stock corporation pursuant to the provisions of the Business Corporation Law of the State of New York, do hereby make, sign, acknowledge and file this certificate for that purpose, as follows:

FIRST: The name of the proposed corporation is CODE COMPILING COMPANY, INC.

SECOND: The purpose for which it is to be formed are to carry on the business of making, compiling, editing and publishing codes, code books and other publications; buying, selling and dealing in such publications and in books, stationery and all kinds of personal property, and doing any and all things incidental to such business; to conduct such business in all its branches, or any part thereof, within the State of New York, and in any other states, territories and dependencies of the United States, and in foreign countries, and in general to do everything necessary, suitable and proper for the accomplishment of any of the objects hereinbefore set forth as fully as a corporation organized under the Business Corporations Law of the State of New York may lawfully do.

THIRD: The number of shares that may be issues by said corporation is One hundred (100), with no nominal or par value.

FOURTH: The amount of capital with which the corporation will carry on business if Five hundred dollars (\$500).

FIFTH: The principal office of the corporation is to be located in the Borough of Manhattan, City, County and State of New York.

SIXTH: Its duration is to be perpetual.

SEVENTH: The number of its directors is to be three (3), and it is hereby provided, pursuant to law, that directors need not be stockholders.

EIGHTH: The names and post office addresses of the director for the first year are as follows:

<u>NAMES</u>	<u>POST OFFICE ADDRESSES</u>
CHARLES J. MENDELSON	261 Edgecombe Ave., New York, N. Y.
HERBERT O. YARDLEY	3 East 38th St., New York, N. Y.
WILLIAM J. MAGEE	160 Broadway, New York, N. Y.

NINTH: The names and post-office addresses of the subscribers to this certificate and a statement of the number of shares of stock which each agrees to take in the corporation are as follows:

<u>NAMES</u>	<u>POST OFFICE ADDRESSES</u>	<u>NUMBER OF SHARES</u>
CHARLES J. MENDELSON	261 Edgecombe Ave., New York, N. Y.	49
HERBERT O. YARDLEY	3 East 38th St., New York, N. Y.	49
WILLIAM J. MAGEE	160 Broadway, New York, N. Y.	2

IN WITNESS WHEREOF, we have made, signed, acknowledged and filed this certificate in duplicate. Dated, this 3rd day of May, 1920.

Charles J. Mendelson
Herbert O. Yardley
William J. Magee



Secretary of War, Henry L. Stimson.

DID STIMSON OR THE WAR DEPARTMENT SHUT THE CIPHER BUREAU?

An anonymous letter postmarked Baltimore, which may have come from a knowledgeable employee of the nearby National Security Agency, claimed I exaggerated Stimson's part in determining Yardley's fate. The decision to close the Cipher Bureau was made by the War Department, the letter said, and not by Stimson, head of the Department of State. A closer examination of the events leading to the demise of the Cipher Bureau puts the role of each department into its proper perspective.

In July 1928, Major Owen S. Albright was placed in charge of the Military Intelligence Division's communications section. Among other tasks, it supervised Yardley's operation in New York. Albright soon recognized that War Department objectives for training and personnel rotation could not be accomplished by Yardley's unit in New York. Albright also found that the Signal Corps, MI-8 and the Adjutant General each had cryptologic responsibilities. By early 1929, he had begun an extensive investigation of the War Department's cryptologic work. He subsequently recommended a complete reorganization of this including a transfer of cryptanalytic work from the Military Intelligence Division (MID) to

the Office of the Chief Signal Officer. This meant that the Cipher Bureau would be closed in New York and its work shifted to the Signal Corps in Washington. Albright's recommendation was approved by General Charles P. Summerall, the Army's chief of staff, on April 5, 1929.¹⁹ On May 10, 1929, Army regulations were changed to give responsibility for all work connected with codes and ciphers to the Chief Signal Officer.

The preparation and revision of all codes and ciphers required by the Army, and in time of war the interception of enemy radio and wire traffic, the goniometric location of enemy radio stations, the solution of intercepted enemy code and cipher messages, and laboratory arrangements for the employment and detection of secret inks.²⁰



National Archives.

Major Owen S. Albright. His recommendation meant that the Cipher Bureau would be closed in New York and its work shifted to the Signal Corps in Washington.

On July 19, 1929, a conference was held in the Office of the Chief Signal Officer to determine how the unified cryptological responsibilities would be divided.²¹

¹⁹Bruce W. Bidwell. 1986. *History of the Military Intelligence Division, Department of the Army General Staff: 1775-1941*. Frederick, MD: University Publications of America. p. 329. Albright to Smith, 24 March 1931. *Historical Background*. pp. 140-142.

²⁰*Historical Background*. p. 182.

²¹*Ibid.* p. 183.

But it was not until autumn that “details of the new organization were worked out and Friedman visited New York to supervise the packing and shipping to Washington of the Black Chamber’s records.”²² Earlier in May, when Stimson learned that the State Department was helping support the Cipher Bureau he indignantly instructed “that the necessary funds of the State Department would be withdrawn at once.”²³ “It was necessary for the Assistant Chief of Staff, G-2 [Colonel Stanley H. Ford], to exert a considerable amount of pressure before the Secretary of State was dissuaded from this sudden and drastic course.”²⁴ It was finally agreed that the Cipher Bureau’s activity would end immediately but that the employees would be kept on the payroll during the period of reorganization.²⁵

Stimson thus played the principal role in determining Yardley’s fate. This is easily understood by imagining what would have occurred if Stimson had wanted Yardley’s work to continue after the Army had reorganized its cryptologic work and the Cipher Bureau was closed. The Army could only offer Yardley a temporary position at a salary much lower than he had been receiving because “War Department funds were not available to cover the loss of the State Department’s contribution.”²⁶ Yardley declined. On the other hand, Stimson would undoubtedly have retained Yardley in the State Department at his same salary if Stimson wanted his work to continue. Clearly, therefore, Yardley’s fate was determined by Stimson when he decided that it was unethical for the State Department to support cryptanalytic activities. His decision eliminated any possibility of the State Department retaining Yardley when the Army reorganization became a reality. Moreover, he probably forced the Army to implement its plans sooner than it intended when he acted quickly to end State Department funding for the Cipher Bureau.

According to a formerly classified lecture used to teach Army Security Agency personnel, the Army also believed that the State Department was responsible for closing the Cipher Bureau. It flatly states, “When the State Department in 1929 withdrew its support, the Cipher Bureau had to be discontinued.”²⁷

The anonymous letter also referred to the interesting marginal note by Friedman on page 370 of Friedman’s copy of *The American Black Chamber*. It is written near the paragraph in which Yardley tells of his learning that Stimson

²²Clark. p. 115.

²³Friedman. p. 10.

²⁴*Historical Background*. p. 144.

²⁵*Ibid.* p. 145.

²⁶*Ibid.* p. 186.

²⁷U.S. Army Security Agency. 1948. *The Origin and Development of the Army Security Agency 1917-1947*. Washington, DC: Army Security Agency. p. 7.

had totally disapproved of the Black Chamber and had ordered State Department support to stop. The last sentence in the paragraph is, "This of course spelled the doom of the Black Chamber which was now supported almost totally by State Department funds."

Friedman's handwritten comment is, "He [Yardley] remains discreetly silent as to the transfer of his office from MID to the Signal Corps, April-May, 1929, just before this episode. *HOY's* Black Chamber was doomed when this transfer was made."²⁸

Yardley does not mention the impending transfer in his book. Perhaps he did not know about it. More likely is that he knew of it but suppressed it to heighten his story's drama. Or perhaps he wanted to omit an embarrassment: knowing of the threat to the New York operation, he tried to preempt it by persuading Stimson to maintain a State Department Black Chamber in New York – and failed.

WHY WEREN'T THE EXPERIENCED CIPHER BUREAU EMPLOYEES TRANSFERRED TO WASHINGTON?

During its first year of operation, 1919-1920, the Cipher Bureau had at least 17 employees, including Yardley. This number declined to 15 at the end of 1921 and to eight by the end of fiscal 1923, i.e., June 1923. When the bureau closed in 1929, there were only six employees; three cryptanalysts – Yardley, Ruth Willson and Victor Weiskopf – and three clerks.²⁹

The Army did not want Stimson to withdraw State Department funds immediately and close the Cipher Bureau at once for perhaps two reasons. One may have been a humanitarian concern for its employees in the middle of a severe economic depression. These six people only had special training and experience in a field without a counterpart in the outside world. None had Civil Service status or any retirement benefits. The other reason was fear that dissatisfaction among the employees with the abrupt manner of their dismissal, or need for money on the part of unemployables, might result in indiscretions embarrassing to the government – a fear that later proved justified.³⁰

The Army consequently arranged for the personnel to remain on the payroll during the period of reorganization even though the actual work of the office would cease immediately, as Stimson wished. At the end of June 1929, the six employees were given three months' pay in advance. The lease on the office space

²⁸Yardley. p. 370. Friedman Collection, George C. Marshall Foundation, Lexington, VA.

²⁹*Historical Background*. pp. 57-60, 68-69, 144, 186, 188.

³⁰Friedman. p. 10.

and the salaries of MI-8 personnel were terminated as of November 1, 1929. In October, Friedman was sent to New York to take over the files and records. Friedman offered jobs to Willson and Weiskopf, but in Washington. Willson declined because she had a husband and a child in New York. Weiskopf also refused as he had a rare stamp business in New York. The clerical employees could not be transferred to Washington because they did not have Civil Service status.³¹

An offer of temporary employment was made to Yardley. But either because War Department funds were not available to cover the loss of the State Department contribution, or because the Army hoped Yardley would turn down the offer so that "a reorganization without 'entanglements from the past' would be possible," the Chief Signal Officer offered only \$300 per month – less than half Yardley's former salary of \$625 per month. Yardley declined. Eight months later, June 1, 1930, a second offer of appointment as a cryptanalyst at \$312.50 per month was made, but Yardley rejected this as well.³² The failure to hire Yardley was to have consequences more severe than any disagreement over funds or positions.

PUBLICATION OF THE AMERICAN BLACK CHAMBER AND OF ARTICLES IN THE SATURDAY EVENING POST

In the spring of 1931, about a year and a half after the Cipher Bureau was closed, Yardley published in *The Saturday Evening Post*, the leading mass circulation weekly of the time, three articles on cryptology as a kind of preview of his forthcoming book. The first, "Secret Inks," appeared on April 4, the second, "Codes," on April 18, and the third, "Ciphers," on May 9. On June 1, Bobbs-Merrill published his sensational *The American Black Chamber*.

On February 24, Yardley – undoubtedly to protect himself from legal prosecution – resigned his commission as a major in the Military Intelligence Reserve Corps. It took effect April 1, 1931.

On March 24, 1931, Albright, now a lieutenant colonel, sent a copy of Yardley's resignation letter and a lengthy memorandum of 12 numbered paragraphs to Colonel Alfred T. Smith, Acting Chief of Staff, G-2, on "Acivities of Mr. H. O. Yardley" in order that Smith be "fully informed concerning all of the past circumstances of this case . . ." ³³

³¹*Historical Background*. pp. 145, 187-188.

³²*Ibid.* pp. 146, 186, 188.

³³Albright to Smith, 24 March 1931.

Albright outlined Yardley's career from a code clerk in the State Department to head of the combined War and State Departments' Cipher Bureau in New York City. Then Albright reviewed his 1929 recommendations to consolidate Army code and cipher work in the Signal Corps, Stimson's almost concurrent withdrawal of State Department funds from the Cipher Bureau, and Yardley's resentment at the loss of his job. Albright continued:

10. In May 1930, Gen. [then Colonel] Stanley H. Ford, A.C. of S., G-2, told the undersigned that Mr. Yardley had recently approached a prominent publisher with a proposition to write for publication a full account of his activities while employed by the Military Intelligence Division. He also took the publisher entirely into his confidence and told him fully of his activities under the War Department before and after the armistice. The publisher, with whose identity the undersigned was not made acquainted, after conferring with Colonel Ford decided that such a publication would not be for the best interests of the United States and therefore declined to consider Mr. Yardley's proposition. In the meantime the undersigned got in touch with Mr. Yardley, who admitted that he was considering writing an account of his activities for publication. The undersigned pointed out to him that if he made public his activities after the armistice, it was possible that international unpleasantnesses might arise. He was reminded that he was a reserve officer and as such owed allegiance to the government. Mr. Yardley made vague and very indefinite promises that he would be careful, but would make no promise as to submitting his articles to the War Department for vise(sic) before publication. Since that time the Chief Signal Officer, [Major General George S. Gibbs] has communicated several times with Mr. Yardley concerning certain records of his former work, but nothing further concerning his intended publication has arisen.

11. The receipt of his resignation and the rather unusual manner of its expression considered in connection with the circumstances related above, might indicate that Mr. Yardley is making plans to get from under any War Department jurisdiction so that he may be at liberty to publish what he sees fit. Hence this full report of the matter is made at this time.

12. It is not known what steps in the matter could be taken, except to keep interested parties informed. At the time Mr. Yardley first consulted the afore-mentioned publisher, the undersigned recommended to General Ford that the State Department be told about the affair

so that if anything came of it that Department would be forewarned, and could also let Mr. Chief Justice Hughes know about it if they saw fit. Mr. Hughes was Secretary of State during Mr. Yardley's activities in New York, and Mr. Yardley has a letter signed by Mr. Hughes commending him for the information he gave the State Department during the first International Arms Conference held in Washington. It is thought that General Ford took the matter up with Mr. Lane of the State Department at that time, but this is not certain. Mr. Yardley, as yet, has committed no overt act which is reprehensible, and in fact may never do so. But there is a chance that he may do so. It seems that all that can be done at the present time is to know the facts, to report them informally to such interested parties as the A.C. of S., G-2, sees fit, especially the State Department, and to await further developments. There seems no purpose to be served by not accepting Mr. Yardley's resignation as Major in the Military Intelligence Reserve. However, his request is now being held pending instructions.³⁴

After Yardley's second article appeared, William Friedman alerted Albright that Yardley had revealed an embarrassing secret: that the United States had been intercepting and solving secret messages of Great Britain, a friendly power.

With reference to the second article in the series ... I ... call your attention to the fact that the photograph shown in the right-hand column of page 16 of the issue for April 18, 1931, is of special significance ... I ... find that the code designated in that photograph was employed in communications between the British Foreign Office and the British Ambassador in Washington in 1921.

... It is obvious that not only does this photograph prove that the Military Intelligence Division was working on British codes during peace time and had actually solved at least one, but also that the Division had access to the cables.

The photograph itself is an exact duplicate of a page in a book of official records now in possession of this Division.³⁵

Reaction of the British to this disclosure is not available but after publication of *The American Black Chamber*, relations between the United States and Great Britain were strained by its revelations.³⁶ The British were so outraged

³⁴Ibid.

³⁵William F. Friedman to Lt. Colonel Albright, 21 April 1931. National Archives, Record Group 165.

³⁶*Historical Background*. p. 148.

440	790Bj	00	50		
	320Ad	01	51		
		02	52		
		03	53		276 Bm
		04	54	Hunan	691 Bm
	147Bn	05 hotel	55		
		06	56	approve	183 Bm
		07	57	withdraw	443 Bm
		08 object	58		452 Bm
		09	59		452 Bm
	162 Av	10 desirous-desk	60		372 Bm
	374 Ah	11 Italian	61	quet	291 Ad
	574 Ah	12	62		
		13	63		577 Ah
		14	64		
	074 Ah	15	65	found-ation	190 Ax
		16	66		
	433 Ah	17	67		
		18	68		
		19	69		
	123Ad	20	70	called-anted	175 Ah
		21	71	Quebec	511 Am
	018Bj	22	72		
	050Ad	23 show-s	73	but will	405 Bm
		24	74		
	119Ad	25 no	75	it was	151 Ah
	217Am	26 did not	76		
		27	77		538 Ag
		28	78	ing	147 B2
	130Ad	29 abandon-ment	79	90	04 A2
		30	80	it has been	296 Bv
	150 Av	31 propose-d	81	joint-ly	624 Ad 1352a
	516s	32	82		
		33	83	fleet	190 Bv
	18d 54	34 stop	84		
	154 Bm	35	85	Can use house	445 Ah
	128 Bm	36 ble	86		
	166 Ah	37 was	87		
	168 Bm	38	88	1911	140 Ah
	437 Ah	39	89		
		40	90		716 Ah
		41	91		
		42	92		
		43	93	chain	317 Bm
	084 Bm	44	94		520 Ag
		45	95	amend-ment	030 Ag
	112 Ah	46 form-ed	96		076 Ah
		47	97	conditions	
		48	98		
		49	99		

Page from "skeleton code" of ten thousand words showing British Foreign Office code book during process of decipherment by the American Black Chamber. This is an example of a thoroughly disarranged code.

Illustration in Yardley's article which upset Friedman.

that Yardley had disclosed British intelligence secrets that ten years later, when Yardley was working for Canada's cryptanalytic unit, the British refused to collaborate with the Canadians as long as Yardley continued to work for them (see below).³⁷

After publication of his book, War Department officers decided that nothing could be done to prosecute Yardley, and even if some steps could be taken, "the danger was already done and could not be repaired."³⁸ The basic problem, which still exists today, is "that prosecution in open court would be most compromising and embarrassing to the Government."³⁹

FRIEDMAN MEETS YARDLEY AFTER PUBLICATION OF THE AMERICAN BLACK CHAMBER

On February 26, 1933, Friedman wrote a note for his file on a meeting he had with Yardley the evening before. It seems that Yardley had called him at his home saying "he merely wished to say 'hello' as he was leaving for Cincinnati to fill a lecture engagement there." Friedman invited him to his house but Yardley said it was "too far."

Friedman, thinking it would be good for the government "in the present situation" to maintain friendly relations, went to see him at his hotel. By "the present situation" Friedman very likely was referring to the impounding of Yardley's manuscript for his second book, *Japanese Diplomatic Secrets*, by the Department of Justice only five days earlier.

Y acted as though our personal relations were unimpaired, most cordial, friendly and frank. Re his acts in publishing, lecturing, etc. – most unruffled, brazen. Admitted without hesitancy his motives are merely to support himself and family; no animus or retaliatory motives re his having been let out. Kept reiterating he had to get money to pay grocery bills. When I brought up question of patriotism he replied that it was very questionable who had acted unpatriotically Mr. S[timson] when he closed the bureau and thus shut off the govt's source of authentic info in critical situation, or he himself who exposed what Mr. S had done to blind govt's secret eyes and deafen its secret ears.

Re present mss. (impounded) stated it contained no disclosures likely

³⁷ Wesley K. Wark. 1987. "Cryptographic Innocence: The Origins of Signals Intelligence in Canada in the Second World War." *Journal of Contemporary History*. Vol. 22, No. 4 (October). pp. 649-652.

³⁸ *Historical Background*. p. 155.

³⁹ *Ibid.*

to cause any trouble, none derogatory either to U.S. or J. Scholarly treatise on certain relations between U.S. & J of interest only to historians. Doubt whether 2000 copies would be sold. When I asked who was in best position to judge as to how dangerous publication would be, he or the govt, he asked 'Who is the govt?' 'Who there can judge such a thing.' The A. B. Chamber was pub two years ago and nothing happened. This book would be wholly innocuous. It contains only a bunch of hooey, bunk.

...

When D. J. [Department of Justice] agents said something re Y's having been an agent of the govt when he got his info, Y said 'How can you prove that? You'd have to call in men like present Chief J. U.S. S. Court [Charles Evans Hughes, Secretary of State during the Washington Disarmament Conference], present amb to J. Mr. Grew [Joseph C. Grew, Under Secretary of State, 1924-1927], Mr. Kellogg [Frank B. Kellogg, Secretary of State, 1925-1929], etc. That would look pretty, wouldn't it?'

If times had been or were normal wouldn't have had to do all this. I'm a hell of a lot smarter than the average & have always lived on my wits. But in times like these, go out and try to earn a living. I started earning a living by waiting on tables in Denver. When govt put me out what did they expect - I should go back to being a waiter after given [*sic*] up 15 best years my life to the work?'⁴⁰

WHY WAS YARDLEY HIRED BY THE CANADIAN GOVERNMENT AND FIRED ONLY SIX MONTHS LATER?⁴¹

In May 1941, Canada wanted to develop a cryptanalytic unit but had no experts of its own to run it. Two representatives went to see General Joseph O. Mauborgne, Chief Signal Officer, U.S. Army, in Washington, to ask for assistance. Mauborgne, who had been interested in cryptology since his days as a young lieutenant and had established the Signal Intelligence Service as an independent division reporting directly to him,⁴² did not have anyone to spare for the position. He suggested that Yardley had the technical competence and

⁴⁰William F. Friedman memorandum, 26 February 1933. Friedman Collection.

⁴¹Information in this section, except as noted, is taken from Chapter I, Part 2 and Chapter V, *A History of the Examination Unit 1941-1945*, G. de B. Robinson, ed., 1945, Department of National Defence, Ottawa, Canada.

⁴²David Kahn. 1967. *The Codebreakers*. New York: Macmillan Co. p. 6.

organizational ability to do the work and outlined a brief resume of his career. Yardley was interviewed and hired and in June he started to organize what was called the Examination Unit of the Department of External Affairs. As a cover, he used the name Herbert Osborn.



Canadian Consul General.

Lester B. Pearson. He was forced to dismiss Yardley.

Soon afterwards, Canadian authorities found that although Mauborgne had supplied some training material to Yardley in the early days of the unit, further assistance was not provided. Likewise, British sources for intercept material were no longer available. Neither country would risk exposure of their Purple and Enigma successes by working with a person who had betrayed their confidences in the past.

If the Canadians wanted to maintain a successful codebreaking unit, they had no choice but to dismiss Yardley delicately so he wouldn't have any reason to expose their secret unit. Two days after receiving confirmation that the British could provide an experienced replacement at the end of December (Oliver Strachey, a long-time member of the Government Code and Cypher School), Lester B. Pearson, an undersecretary in the Department of External Affairs,⁴³ met with Yardley on November 21, 1941. He explained that Canada wanted one of its own citizens to supervise the organization but Yardley refused to believe that story and became very bitter. Pearson described the meeting as "a painful half-hour

⁴³Pearson received a Nobel peace prize in 1957 and was Prime Minister of Canada 1963-1967.

interview with an outraged and angry Yardley.” And when the Examination Unit’s staff learned of his abrupt dismissal they also protested. One of the original members of the unit, Dr. Gilbert de B. Robinson, wrote to Tommy A. Stone, chairman of the committee supervising the Examination Unit, about Yardley’s ability “to command the interest and loyalty of the staff.” He said “he did not see how the office could carry on without Yardley who is the brains and the originality behind it.” Pearson became very concerned and went to Washington at the end of November 1941 to determine if the British were firm in their position against Yardley and to see if the Americans, who had originally suggested Yardley, might be willing to cooperate.



National Archives.

Rear Admiral Leigh H. Noyes, Director of Naval Communications.
If he had his way he would have put Yardley in jail.

Pearson found British officials unyielding. They felt that Yardley was unreliable and untrustworthy and not a very competent cryptanalyst, and they were sure that “neither the United States nor the United Kingdom could cooperate with the unit in Ottawa as long as it was headed by Osborn [Yardley] because of the general dislike of and distrust for him and his methods.” His report also emphasized “that the British were only too anxious to give full co-operation if this difficulty were removed” and they were ready to send a good man from London to replace him.

Separate meetings with Rear Admiral Leigh H. Noyes, Director of the U.S. Navy’s Communications Division which included the cryptanalysts, Major

General Dawson Olmstead, the Army's chief signal officer, who had succeeded Mauborgne, and William F. Friedman, produced similar opinions. Noyes was emphatic that the Navy would "not touch Osborn with a ten foot pole" and if he had his way he would put him in jail. Olmstead said he "would not employ him in any capacity" and "he would have nothing to do with this man." When he was reminded that Yardley had been employed on the recommendation of his predecessor he said he could not comment on anything his predecessor had done. Friedman felt that Washington officials were glad to see the problem caused by Yardley's return from China solved by his departure for Ottawa but pointed out that as long as Yardley was present "there would be no co-operation between Washington and Ottawa in this field."



U. S. Army Signal Center.

Major General Dawson Olmstead, Chief Signal Officer, 1941-1943.

It became obvious to Pearson that he had no option other than to let Yardley go, and despite intense efforts by Yardley to clear himself in Washington and save his job (this included "obtaining a statement from Stimson that he held nothing against him"). Yardley left Canada in early January 1942 and to the relief of Canadian officials he left quietly.

YARDLEY AND THE FEDERAL BUREAU OF INVESTIGATION (FBI)

A confidential internal FBI memorandum from Edmund P. Coffey, head of the FBI Laboratory Division, to D. Milton (Mickey) Ladd, assistant director of the Security Division January 28, 1941, reported a rumor that Yardley was back in Washington (He had been in China working on codes and ciphers for the Chinese government from the fall of 1938 to late 1940.) and that the State Department had hired him to reopen the Black Chamber.⁴⁴ The State Department denied this. Later, when Coffey met with Colonel Atkins of the Signal Corps on another matter, Coffey asked him about Yardley.

He stated in the highest confidence that it was true and that Yardley was back in Washington and that he had been hired under a very secret Government contract to do special work involving several of the Government departments. He stated that he wanted it understood that although the War Department was interested they were not employing him as a War Department employee. He again asked that the information be treated in the highest confidence.⁴⁵

In fact, on his return from China, Yardley was hired on a contract basis by U.S. authorities to write a report on "the fruits of his Chinese experience." Friedman had told this to Pearson, adding that those authorities did not feel they had got their money's worth.⁴⁶

Two weeks later, FBI Director J. Edgar Hoover wrote to Brigadier General Sherman Miles, Assistant Chief of Staff, G-2, to alert him to a report from a confidential informant that the press is intensely interested in Yardley. The press believes he recently moved from New York to Washington and is currently employed by the War Department in some confidential capacity.

The newspaper men are all carefully watching each other on this story, each one anticipating that someone else will break the story, after which everybody will 'go to town.' No one among the reporters can understand why the War Department or any other governmental agency

⁴⁴E. P. Coffey to D. M. Ladd, 28 January 1941, FBI files, Washington, DC.

⁴⁵Ibid.

⁴⁶Lester B. Pearson. "Memorandum on Visit to Washington to Inquire into the Situation Regarding H. O. Osborn." November 26, 1941. Department of National Defence. (When I filed Freedom of Information requests for Yardley's report with the U.S. Army Intelligence and Security Command, successor to the MID, and with the National Security Agency, successor to the Signal Intelligence Service, both agencies claimed the report could not be located.)

would hire Yardley for any confidential work after the disgraceful manner in which he sold out the Federal Government after his employment in a confidential capacity during the last war. When this story breaks, it will probably be in such a vein that it will ridicule those people who are responsible for Yardley's present employment.⁴⁷

A January 2, 1942, memorandum from Ladd to Hoover attached a summary of information in FBI files on Yardley, in response to Hoover's request. Hoover said that Colonel William Donovan, Roosevelt's Coordinator of Information, the future Office of Strategic Services, was planning to set up an American Black Chamber and intends to use Yardley as the head of the organization.⁴⁸

A memo to Ladd January 13, 1942 from George C. Burton, acting unit chief, Liaison Division, reports that Colonel Bissell (probably Colonel John T. Bissell, chief, Counter Intelligence Branch, MID), who had previously advised him of Donovan's intention to select Yardley to head an American Black Chamber and that Yardley's backing comes from the White House, "has now advised me that Mrs. Roosevelt was backing Yardley and that through the efforts of the Army, Yardley's appointment has been killed as far as Bissell knows."⁴⁹

Yardley wrote to Edward A. Tamm, assistant to Hoover, on January 22, 1942, to say that he had returned to Washington after seven months employment by the Canadian government organizing a confidential bureau. He talked of his success and attached letters from Canadian officials supporting that claim. He said that, "On January 10th I turned over my work to an Englishman who arrived from London . . . You are doubtless aware of some of the circumstances." A handwritten note at that point says, "I should like to explain them all." He wrote that his success was "due to new and original methods of approach" and offered to meet if there were any interest in these matters.⁵⁰

A meeting was in fact arranged on February 3 and a memorandum to Hoover on February 4 from Stanley J. Tracy, assistant director in charge of the Identification Division and Technical Laboratory, describes the meeting which included Charles A. Appel, Jr. document identification specialist, and Walter G. Blackburn, section chief, Cryptanalysis Section, FBI Laboratory Division, who were

⁴⁷J. Edgar Hoover to Brigadier General Sherman Miles, 14 February 1941. FBI files, Washington, DC.

⁴⁸D. M. Ladd to J. Edgar Hoover, 2 January 1942. FBI files, Washington, DC.

⁴⁹G. C. Burton to D. M. Ladd, 13 January 1942. FBI files, Washington, DC. Mrs. Franklin D. Roosevelt's role was probably mistaken and may stem from a letter she received five weeks earlier, December 5, 1941, from her literary agent, George T. Bye, who was also Yardley's agent. Bye asked her to help Yardley keep his job with the Canadian government. She referred the letter to the President's military aide, General Edwin M. "Pa" Watson, who reportedly said, "Nothing can be done." For further details see David Kahn, "Nuggets From the Archives: Yardley Tries Again," *Cryptologia*, April 1978, p. 139.

⁵⁰Herbert O. Yardley to Edward A. Tamm, 22 January 1942. FBI files, Washington, DC.

not impressed with Yardley or his methods. Yardley also took the opportunity to raise the issue of a "black list" which he felt various departments including the FBI had him on. He blamed Friedman for many of these problems.

With reference to Mr. Yardley's new and original method of approach to cryptographic analysis, we explored what Mr. Yardley had to offer at some length and Messrs. Appel and Blackburn state with reference to this:

"Mr. Yardley stated that "we" have worked out simplified superior procedure changes especially applicable in the decrypting of transposition of ciphers in which a grill is used and which "we" call the method of probabilities. Considerable conversation ensued concerning the exact method of using probabilities, and he stated that he means the mathematical probability of the combination of letters in digraphs, trigraphs, etc. as opposed to the traditional cryptographers' frequency tables of totals showing the normal frequency of combinations of letters in digraphs and trigraphs in a given language. In explaining how the probabilities are calculated he said the frequency of one letter as an "e" is multiplied by the frequency of another letter such as an "s" and this total is divided by the frequency of the digraph "es" yielding the "probabilities" which is to Messrs. Blackburn and Appel still a mysterious calculation. For this reason, he was pressed for details as to methods in general, and did not mention a detailed method of work from which it could be assumed that he knows personally how to attack current cryptograms used by Germans and other agents. . . . Referring to his China work, he stated he had a great deal of success with Japanese cryptograms. He was asked if they had any success with codes, and he stated he had a great deal of success in solving codes, mentioning the Kana Code and talked at great length but without particularity. Codes are not solved in this way by mathematics or original thought. Solutions actually depend upon luck, investigative work, and the procurement of a code book. [Messrs. Appel and Blackburn apparently knew little about solving codes and their next conclusion is improperly based.] Therefore his claim is a clear indication that his other statements are boastful and for the purpose of impressing the Bureau with the need for his services."

It was quite apparent that Mr. Yardley had an axe to grind or was seeking something.

...

As the conference was nearing its conclusion, Mr. Yardley stated that he would like to take an additional five minutes to discuss a personal subject, and he was advised we would be happy to listen to him. He then stated that he wanted to be removed from the "black list." I told him that I did not understand his question. He continued that he was on the "black list" of the War Department, Navy Department, State Department and the Federal Bureau of Investigation. I suggested that he enlarge his statement as I did not understand him. He then went on into a historical dissertation covering his service during the past World War and personal differences he has had with Mr. Freedman [*sic*] who succeeded him in the Cryptographic Section in the Signal Corps, U.S. Army. He stated that Freedman had done everything possible to discredit him and his name and that he was still doing so. He advised that the State Department, when he attempted to publish certain documents in New York City following publication of his book, took action to stop him although the matter was entirely harmless . . . Mr. Yardley advised that he has been unable to make a connection in the Army, in the Navy, in the State Department, and that he would like to offer whatever talents he has to his government during the present emergency. He said he is not seeking a position as he is not in need of one, that he is financially independent so to speak.

...

It was apparent that Mr. Yardley's attempts to see the Director were for the purpose of getting himself off the "black list" as he called it. He is on a fishing expedition to find out all he can concerning his inability to secure a position with the Army, Navy, or State Department. It is also obvious that he would like to be in charge of a Cryptographic Section during the present emergency. He is a good talker. However, as pointed out by Messrs. Appel and Blackburn he does not have too deep a knowledge of his subject. Mr. Appel feels that Mr. Yardley's secretary [Edna Ramsaier Hackenburg, later Mrs. Yardley] who has been with him for many years is probably the one who has been carrying on the detailed cryptographic analysis work for him.⁵¹

Yardley had apparently turned to the FBI to re-establish his credentials as a cryptanalyst and to clear his name in a "last-ditch" effort to get a government job as a cryptanalyst. Unfortunately for Yardley, the FBI was as unforgiving of him as were other government intelligence agencies. To make matters worse, the

⁵¹S. J. Tracy to J. Edgar Hoover, 4 February 1942. FBI files, Washington, DC.

FBI technicians who interviewed him seemed not competent enough to evaluate his cryptanalytic talents.

SURVEILLANCE OF YARDLEY BY THE COUNTER INTELLIGENCE CORPS

An ominous sounding, confidential internal memorandum on the letterhead of the War Department, Military Intelligence Division, July 23, 1942, reported an informant's suspicions about Yardley and the restaurant he had opened in downtown Washington.

Information has been received from a reliable source that subject is operating a restaurant at 1306 H Street, N.W., Washington, D.C., which is being used as a 'hang-out' for pro-Axis persons. Subject is reported to be very disgruntled with the War Department and with the Military Intelligence in particular because they will not avail themselves of his services.

Subject is the author of the 'Black Chamber' and other books wherein confidential information has been included of events happening during World War I.⁵²

This brief note resulted in a comprehensive investigation of Yardley by the Counter Intelligence Corps (CIC). It included undercover surveillance of his restaurant at least 13 times between August 6 and August 28, 1942. The surveillance consisted of watching the restaurant, patronizing it, observing other customers, eavesdropping when possible, and engaging Yardley and his employees in conversation to try to obtain information. On a couple of occasions agents used offices on higher floors in neighboring buildings and "a pair of powerful Army binoculars" to inspect the second floor apartment above the restaurant where Yardley lived.⁵³

In addition, they conducted interviews with eight informants and visited the Alcoholic Beverage Control Office, Civil Service Commission, Department of State, Department of Justice, Pentagon, FBI and the Metropolitan Police Department to check personnel records and other files they might have on Yardley. The Alcoholic Beverage Control file included a report from Worthington, Indiana, Yardley's home town which noted that, "He attended public school for 12 years

⁵²MID internal memorandum, 23 July 1942. FBI files, Washington, DC.

⁵³CIC Agent surveillance reports: 6 August 1942, 11 August 1942, 13 August 1942, 20 August 1942, 21 August 1942, 22 August 1942 (2), 25 August 1942 (3), 28 August 1942 (3). FBI files, Washington, DC.

and it is recalled to this day [report dated April 11, 1942] by faculty members that Yardley was one of the most brilliant students in the above town.”⁵⁴

Agents also visited the Washington Times Herald to review the clipping file on Yardley. At his bank they inspected his record of deposits and withdrawals dating back to August 12, 1940.⁵⁵

On September 7, 1942, a five page report covering fourteen points summarized the results of the investigation. It concluded that, “Nothing was revealed during this investigation pertaining to suspected disaffection of the Subject or any indication that the Rideau Restaurant is being used as a meeting place for pro-German sympathizers.”⁵⁶

Its recommendations included suppositions and innuendoes but no call for further action although a copy was sent to the FBI.

This agent recommends that the case be closed as the Subject is not a member of the War Department or the Army; this agent feels that Yardley is a very shrewd man and that he is capable of performing subversive acts against the Government if he desired. It seems difficult to believe that this man, with his background of cryptography, codes and ciphers is satisfied to remain inactive during the present world crisis. It is highly possible for Yardley to use the above restaurant as a front to pursue some other endeavor.

If . . . this case is re-opened, it is recommended by this Agent that an Agent of Nordic appearance be used to enter into conversation with Subject, as this Agent, who is dark complexioned, failed to converse with Yardley, who appears to have a dislike for Semetics [*sic*].⁵⁷

Official investigatory files show that Yardley was a frequent subject of interest both inside and outside the government. Informants provided information, sometimes misguided, about his alleged activities to various agencies. With the CIC, it led to an extensive 4-week investigation which found no evidence of anything amiss.

Ironically, despite the animosity toward Yardley by various government agencies, when Yardley’s restaurant failed he was hired by a wartime government

⁵⁴CIC Agent interviews and investigatory reports: 13 August 1942 (2), 15 August 1942, 18 August 1942 (2), 20 August 1942, 24 August 1942, 25 August 1942 (2), 28 August 1942, 3 September 1942 (4), 7 September 1942, 10 September 1942, 14 September 1942. FBI files, Washington, DC.

⁵⁵CIC Agent investigatory reports: 21 August 1942, 31 August 1942. FBI files, Washington, DC

⁵⁶MID report on Yardley, 7 September 1942. FBI files, Washington, DC.

⁵⁷Ibid.

agency, the Office of Price Administration, as a meat inspector.⁵⁸ And, in 1949, he underwent a loyalty check by the FBI (a standard practice at that time) before being hired as a Sales Assistant by another government unit, the Housing and Home Finance Agency, Public Housing Administration. His Loyalty Data Form was stamped "No Disloyal Data FBI Files, Apr. 14, 1949."⁵⁹

AN ONGOING SAGA

The closing of the Cipher Bureau constitutes one of the most amazing chapters in the history of American intelligence. Its uniqueness in the 20th-century, the controversy around it, the events it unleashed, the dominant personalities involved such as Yardley, Friedman and Stimson, produce a fascinating story difficult to match in fiction.

As a result of writing *The American Black Chamber*, Yardley was viewed as a traitor by his peers and treated harshly by the government he served so well. After he successfully organized a codebreaking unit in Canada, ran it well and was well liked, U.S. officials forced his dismissal. And after the attack on Pearl Harbor, he offered his cryptanalytic talents to the Army, Navy, State Department and William Donovan, who was setting up the Office of Strategic Services – all without success. He believed he was on a blacklist and sought to re-establish his credentials with the FBI but to no avail. He would never again break codes for his country.

Did Yardley deserve his ostracism? He claimed that he wrote *The American Black Chamber* because his family needs left him no other recourse and that the war was long past and he did not feel it was detrimental to national defense to publish what he did. The official history goes on to say, "Moreover, and this he apparently sincerely believed, it was necessary to make clear to the American people the bureaucratic stupidity which, by closure of his bureau, resulted in depriving our Government of its most valuable source of secret information." He was convinced that cryptanalytic work was being abandoned and "the sincerity of his belief in this regard leads to taking a bit more charitable view of his actions, for his patriotism in other respects has never come into question."⁶⁰ And Friedman, who was greatly upset when Yardley published his book, said, in 1941, that Yardley "was not dishonest and would not deliberately betray his Government." He also felt that "he [Yardley] was treated badly by the United

⁵⁸David Kahn. 1983. *Kahn on Codes*. New York: Macmillan Publishing Company. p. 70.

⁵⁹Request for Report of Loyalty Data on Herbert O. Yardley, April 14, 1949. FBI files, Washington, DC.

⁶⁰*Historical Background*. p. 170.

States Government.”⁶¹

But, given the ultra sensitivity of cryptanalytic work, no government can be criticized for taking extreme measures and being overcautious to protect the secrecy of its codebreaking operations.

With Yardley, who had disclosed damaging secrets once before – knowingly or not or even with the best intentions – the danger of exposure was multiplied and hiring him was not worth that risk. There also may have been graver reasons for keeping Yardley distanced from cryptologic work. In his 1967 book, *The Broken Seal*, Ladislav Farago made the shocking charge, backed by Japanese records, that in 1928, for \$7,000, Yardley sold the secrets of the Cipher Bureau to Japan. This included his methods for breaking their codes, copies of his work sheets and his solutions of other codes. According to Farago he even agreed to reduce his work on Japanese messages.⁶²

Perhaps U.S. officials had an inkling of this treachery and it played a part in his treatment. We do not know. The charge itself remains controversial because the Japanese Foreign Ministry, to offset heavy criticism after *The American Black Chamber* was published in Japan, tried to discredit Yardley and brand him a traitor and its documents reporting this incident, which were written after the publication of Yardley’s book, may have been part of its scheme.⁶³

In Yardley’s view, Secretary of State Stimson “shut off the government’s source of authentic information in a critical situation” when he closed the Cipher Bureau. Stimson, of course, shut the Cipher Bureau because he believed that cryptanalytic work did not belong in the State Department. Nevertheless, it is most ironic that after the attack on Pearl Harbor, Stimson, as Secretary of War, felt that the Japanese diplomatic intercepts had not been sufficiently studied.⁶⁴ In fact, this irony was recognized by Stimson in his autobiography where he discussed Military Intelligence and said, “. . . the matter of principal importance here was the development of the very operation of attacking foreign codes and ciphers which Stimson had banished from the State Department in 1929.”⁶⁵ Moreover, he also believed that a special agency was needed to analyze cryptanalytic intelligence “in a more thoroughgoing fashion than previously had

⁶¹Pearson Memorandum. pp. 6-7.

⁶²Ladislav Farago. *The Broken Seal*. New York: Random House. pp. 56-58.

⁶³Lesta V. Turchen. 1969. “Herbert Osborne Yardley and American Cryptography.” (Unpublished Master’s Thesis, University of South Dakota.) pp. 81-82, see Farago, p. 394 for document dates.

⁶⁴Alfred McCormack. 1943. *Origin, Functions and Problems of the Special Branch, M. I. S.* SRH-116 (N.P.). p. 5.

⁶⁵Henry L. Stimson and McGeorge Bundy. 1947. *On Active Service in Peace and War*. New York: Harper & Brothers. p. 454.

been thought necessary.”⁶⁶ And had such an agency existed in 1941 it “might well have given warning of the degree of Japanese interest in the fleet at Hawaii.”⁶⁷ Within six weeks of the Japanese attack, Stimson had taken steps to establish such an agency.⁶⁸ Thus, in a broad sense, Yardley could feel vindicated for his actions ten years earlier which had “exposed what Mr. S[timson] had done to blind govt’s secret eyes and deafen its secret ears.”⁶⁹

Another consequence of closing the Black Chamber has been generally overlooked.

The Military Intelligence Division was providing financial support to the Black Chamber and when it was shut, MID’s allotment became available for other purposes. On December 16, 1929, \$6,666.68 of these funds were transferred to the Chief Signal Officer for staff salaries. Friedman used these funds to hire Frank B. Rowlett, Abraham Sinkov and Solomon Kullback as the first cryptanalysts of the Signal Intelligence Service.⁷⁰ This might raise the question of whether it would have been better to continue Yardley’s Cipher Bureau or to use the funds destined for Yardley to develop the fledgling cryptanalytic unit directly serving the War Department. Given the documented success Friedman and his staff achieved and the highly professional National Security Agency they spawned, the answer must be self-evident.

There are other aspects of this unforgettable episode in American cryptologic history which are still unanswered or perhaps unknown. Suspicions still linger about Stimson’s motives in closing the Black Chamber; there are questions about Yardley’s actions and what he knew about the Chamber’s closing and when he found out about it; and did Friedman have any role in MID’s recommendation to shut the Cipher Bureau in New York and transfer all cryptanalytic work to the Office of the Chief Signal Officer in Washington, and did he play any part in Yardley’s inability to find another codebreaking position. Perhaps one day a definitive biography of Yardley will be written which will explore these questions and provide the information to put all speculation to rest. Certainly, his audacious and almost daredevil life deserves a comprehensive examination.

⁶⁶McCormack. p. 5.

⁶⁷Stimson and Bundy. p. 455.

⁶⁸McCormack. p. 6.

⁶⁹Friedman memorandum, 26 February 1933.

⁷⁰*Historical Background*. pp. 201-203.

BIOGRAPHICAL SKETCH

Louis Kruh has been fascinated by cryptology for more than 40 years and he continues to enjoy researching its history and collecting its memorabilia. He has BBA, MBA, and JD degrees and is co-author of *Machine Cryptography and Modern Cryptanalysis* (Artech House, Inc. 1985). He is Director of Advertising for New York Telephone.

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