

A Failure of Policy:  
How U.S. Leaders Neglected to Shape,  
Lead, and Leverage Intelligence Concerning  
Japan During the Interwar Period,  
1918-1941

By  
Sean-Patrick Lane

Claremont Graduate University

2020

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## **Approval of the Dissertation Committee**

This dissertation has been duly read, reviewed, and critiqued by the committee listed below, which hereby approves the manuscript of Sean-Patrick Lane as fulfilling the scope and quality requirements for meriting the degree of Doctor of Philosophy in History.

Janet Farrell Brodie, Committee Chair

Claremont Graduate University

Professor of History

Charles A. Lofgren

Claremont-McKenna College

Professor Emeritus of American History & Politics

Ralph R. Rossum

Claremont-McKenna College

Professor of Government

## Abstract

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This dissertation explores the perspective and performance of U.S. intelligence professionals and the intelligence organizations in which they served concerning Japan during the interwar period, the timespan ranging approximately from the conclusion of World War I in November 1918 through the entry of the United States into World War II in December 1941. Research for this dissertation focused predominantly on official and other primary documents, including U.S. intelligence reports and memoranda; intercepted, decrypted, and translated Japanese cablegrams; personal letters by and concerning U.S. intelligence professionals; and other primary source materials related to intelligence professionals and services available via the U.S. National Archives in College Park, Maryland. Some of these official and other primary documents were available from a number of online repositories providing access to U.S. intelligence documents concerning Japan during the interwar period. The published memoirs of particular key intelligence professionals, who focused particularly on Japan, and other

actors, also proved important primary resources to completing this dissertation.

Secondary sources augmented and occasionally corroborated the events related in the primary documents and memoirs.

U.S. intelligence professionals produced intelligence informing U.S. civilian and military leaders of the increasing competition between U.S. and Japanese national interests and commercial objectives in the Asia-Pacific region, in addition to Japan's perspective concerning the growing impasse. Particular intelligence professionals, whose exploits and experiences focusing particularly on Japan during the interwar period, provided an important foundation for this dissertation. These intelligence professionals took seriously the increasing threat that Japan posed to U.S. interests. For approximately two decades, they acquired intelligence from Japanese counterparts; defended U.S. interests against Japanese counterintelligence threats; and endeavored to influence their Japanese counterparts, often intelligence professionals and officers in Japan's armed services, into reducing their concern regarding U.S. objectives in the Asia-Pacific region, particularly regarding Japan.

In the end, war arrived in the form of a widespread and shocking series of Japanese attacks and invasions by sea, air, and land, reaching as far east as the waters just off of the California coast and targeting U.S., British, and Dutch military bases and colonies. The most famous aspect of the Pacific War's start was the multiple air and sea attacks against Pearl Harbor and other U.S. military installations in the Hawaiian Islands, which sank of the U.S. Pacific fleet, claimed 2,403 lives, and caused the United States to declare war against Japan. Although some U.S. civilian and military leaders realized that

war was increasingly likely as negotiations with Japan failed to yield solutions to U.S.-Japanese disagreements, the United States remained unprepared for war with Japan.

Ultimately, the failure of U.S. leaders to use intelligence resources at their disposal and to empower intelligence collectors, in order to prepare the United States for a war with Japan, constituted a comprehensive leadership failure, rather than an intelligence failure.

## Acknowledgements

Completing this dissertation would have been impossible without generous support from a number of individuals, who were kind enough to invest their time, energy, patience, and even financial resources in order to enable my eventual success. I am and shall remain indebted to each.

My dissertation committee members dedicated significant time and effort toward my cause, in spite of considerable competing priorities. They ensured that I received support vital to completing each draft of each chapter as I developed an increasingly refined and cohesive product, helping me hone my arguments and evidence and the manner in which I presented them.

I owe a great debt of gratitude to Dr. Janet Farrell Brodie for assuming the project's helm as committee chair and guiding me toward formulating a genuine and practicable path toward completing my dissertation. As I assembled my qualifying examinations committee, Dr. Charles A. Lofgren pledged to serve as a member of my dissertation committee. Dr. Lofgren delivered on his promise and provided me valuable feedback during the long process of writing and revision. He proved experienced and concerning the topic, scholarship, and associated legal and constitutional issues. Dr. Ralph R. Rossum, who generously served both as a member of my qualifying examinations committee and dissertation committee, even though I had never taken any of his courses or otherwise studied under his guidance, provided important feedback, especially concerning legal and constitutional aspects of the dissertation. Dr. Rossum also helped me strike an appropriate balance between presenting my arguments via facts and evidence, and doing so through enough narrative to render the story more interesting.

My father and mother were kind enough financially to support my long pursuit of the degree that this dissertation's completion has enabled, when each might rather have contributed their financial resources toward themselves. They were neither obliged, nor perhaps wise, to have done so; yet each did. I remain indebted to them for that and much more. They guided my development through childhood, into adulthood, and my mother continues to do so even now that I am a parent in my own right, encountering many of the choices that my parents confronted raising me. I lament, however, that my father, my best friend, did not live long enough to see me complete this degree program, whose pursuit he supported so faithfully and generously, and whose completion he longed to witness. In the interest of my own offspring, I hope that I will prove as wise and generous as my parents were as they enabled me to secure a brighter and more rewarding future than I otherwise would have experienced.

Finally, I greatly appreciate the support and space that my wife, Jessica, so unselfishly provided me. She permitted me to invest the time, effort, and other resources necessary in order to complete this dissertation, encouraging me to finish. Even my baby daughter, Zephyrine, was generous enough to nap periodically, when I required time and the capacity to dedicate undivided attention in order to complete this dissertation.

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## Table of Abbreviations

ONI: Office of Naval Intelligence

MID: Military Intelligence Division

MI-8: Military Intelligence, Section 8

SIS: Signal Intelligence Service

OP-20-G: Office of Chief of Naval Operations (OPNAV), 20th Division of the Office of Naval Communications, G Section / Communications Security

FBI: Federal Bureau of Investigation

DOJ: Department of Justice

SIGINT: Signals Intelligence

HUMINT: Human Intelligence

CI: Counterintelligence

G-2: U.S. Army Intelligence

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**Introduction**

Between the end of World War I in November 1918 and the entry of the United States into World War II on December 7, 1941, U.S. civilian and military leaders, who were responsible for U.S. national security, assessed that Japan posed a greater threat to the United States than did Germany overall, and the greatest threat to U.S. interests in the Asia-Pacific region. As the interwar period progressed, U.S. military leaders and intelligence officials anticipated that increasing tension between the United States and Japan eventually would result in a major conflict between the two countries. The U.S. Navy even drafted several war plans during the early twentieth century and periodically conducted major naval exercises in an effort to anticipate how Japanese forces would attack, and in order to determine how the United States would respond.<sup>1</sup>

By the early 1930s, U.S. military officials, and particularly naval strategists, anticipated that Japan would begin a war against the United States with a surprise attack

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<sup>1</sup> For insight into U.S. Navy war planning concerning Japan, refer to Edward Stanley Miller, *War Plan Orange: The U.S. Strategy to Defeat Japan* (Annapolis, MD: Naval Institute Press, 1991).

against the greatest concentration of U.S. naval forces and that the conflict largely would be fought at sea, fundamentally similar to the beginning and early course of the 1904-05 Russo-Japanese War. Accordingly, foreknowledge of when Japan would attack and, short of acquiring such specific information, insight into the capacity of Japan's armed forces to begin and then wage such a war, as well as the capacity to detect signs that Japanese forces were preparing to do so, became preeminent intelligence requirements among some national security-focused leaders and intelligence professionals, including Japan-focused intelligence professionals. Accordingly, acquiring sensitive, non-public information revealing Japanese activities, plans, and intentions vis-à-vis U.S. interests, elevated the importance of Japan-focused U.S. intelligence professionals, despite the broader failure of U.S. leaders effectively to support or benefit from them.

Civilian and military leaders during the interwar period should have enabled and ultimately leveraged intelligence services and, more importantly, through them those intelligence professionals serving in them, in order to acquire sensitive information illuminating Japan's sensitive plans and intentions concerning the United States. Unfortunately, too many U.S. civilian and military leaders did not understand how good intelligence could facilitate advantages over foreign competitors and reduce U.S. disadvantages, and ultimately help those U.S. leaders avoid unwanted surprises.

In contrast, although publicly available information normally provides good insight into what foreign states and leaders have done, it rarely conveys what those foreign leaders intend to do next or reveals their underlying objectives, especially when the government in question shrouds its plans and intentions in secrecy. Regarding Japan between the world wars, good intelligence was vital in order for U.S. leaders to anticipate

threats against U.S. interests. Therefore, it was incumbent on U.S. leaders to create, empower, and leverage capable intelligence services. Unfortunately, before World War II, too few U.S. leaders understood this.

This dissertation will focus on the performance of U.S. intelligence services and intelligence professionals during the interwar period, particularly concerning Japan. The series of significant defeats that Japanese military forces inflicted against the United States in December 1941, commonly represented by the Japanese attack against the U.S. Pacific Fleet based at Pearl Harbor, in the Hawaiian Islands, during which Japanese forces sank most of the fleet, has commonly been ascribed to an intelligence failure. The principal responsibility for the disasters that the United States endured at Pearl Harbor and throughout the Asia-Pacific region, however, actually resided with U.S. leaders, who failed to use good intelligence at their disposal throughout 1941. U.S. leaders failed to support, understand, and capitalize on the intelligence at their disposal; they did not understand intelligence fundamentally. Yet, U.S. intelligence professionals produced this intelligence, in addition to excellent insight into Japanese civilian and military perspectives, concerns, and objectives guiding Japan's foreign, economic, and military policy, employing strong intelligence tradecraft and overcoming inadequate U.S. government support and often poor leadership.

Chapter One of this dissertation will focus on U.S. signals intelligence (hereinafter SIGINT) from World War I through 1929, examined through the career and experiences of Herbert O. Yardley. Yardley began his intelligence career when the United States entered the Great War in 1917. Then, following the Versailles Peace Conference, from 1919 through 1929 he directed the first significant U.S. cryptanalytic

intelligence service during peacetime, called the Cipher Bureau, or Black Chamber, until it was terminated by Secretary of State Henry L. Stimson. The most important insight into Yardley's career from World War I through the Cipher Bureau's dissolution resides in *The American Black Chamber* (1931), on which Chapter One's account and analysis to a great extent relies. Recognizing that Yardley should not, however, be trusted for an entirely accurate account of his career in the 1910s and 1920s, however, Chapter One was influenced by additional primary resources, including a version of *The American Black Chamber* annotated by William F. Friedman, a tough critic of Yardley; a series of letters between Yardley and Friedman available in the U.S. National Archives in College Park, Maryland; in addition to other primary documents available via the National Archives in College Park's "Herbert O. Yardley Collection."<sup>2</sup>

An important secondary source concerning Yardley is David Kahn's biography of Yardley, *The Reader of Gentlemen's Mail: Herbert O. Yardley and the Birth of American Codebreaking* (2004). Khan, a preeminent signals intelligence historian, relied predominantly on the primary resources highlighted above. Therefore, Kahn's account and analysis of Yardley, his assessment of Yardley's ability and accomplishments, shortcomings and failures, reinforced the information and conclusions that the primary source material cited above already had yielded throughout the chapter.<sup>34</sup>

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<sup>2</sup> U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection.

<sup>3</sup> David Kahn, *The Reader of Gentlemen's Mail: Herbert O. Yardley and the Birth of American Codebreaking* (New Haven, CT: Yale University Press, 2004).

In order to fact-check and assess Yardley's account of his experiences working in the Department of State Code Room, including noteworthy individuals with whom he interacted and particular events in which he was involved, Edward S. Kaplan, *U.S. Imperialism in Latin America: Bryan's Challenges and Contributions, 1900-1920* (1998), provided information validating aspects of Yardley's memoir. Walter Vinton Scholes, in *The Foreign Policies of the Taft Administration* (1970), provided helpful historical background and context concerning Yardley's descriptions of particular individuals and events.<sup>56</sup> Finally, information concerning signals intelligence during World War I was available in John F. Dooley's *Codes, Ciphers, and Spies: Tales of Military Intelligence in World War I* (2016).<sup>78</sup>

Chapter Two focuses on the successor SIGINT agency to Yardley's Cipher Bureau: The U.S. Army Signal Intelligence Service (hereinafter SIS). The most complete and reliable source concerning the origins and development of SIS and its progress against Japanese code and cipher systems from 1930 through 1941 is former SIS cryptographer Frank B. Rowlett's memoir: *The Story of Magic: Memoirs of an American*

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<sup>4</sup> Herbert O. Yardley, *The American Black Chamber*, annotated by William F. Friedman, 21, accessed August 22, 2015, [http://marshallfoundation.org/library/wp-content/uploads/sites/16/2014/06/American-Black-Chamber\\_II\\_watermark.pdf](http://marshallfoundation.org/library/wp-content/uploads/sites/16/2014/06/American-Black-Chamber_II_watermark.pdf).

<sup>5</sup> Edward S. Kaplan, *U.S. Imperialism in Latin America: Bryan's Challenges and Contributions, 1900-1920* (Westport, CT: Greenwood Press, 1998).

<sup>6</sup> Walter Vinton Scholes, *The Foreign Policies of the Taft Administration* (Columbia, Missouri: University of Missouri Press, 1970).

<sup>7</sup> John F. Dooley, *Codes, Ciphers, and Spies: Tales of Military Intelligence in World War I* (New York: Copernicus Books, 2016).

<sup>8</sup> Martin Gilbert, *The First World War: A Complete History* (New York: Henry Holt and Company, 2004).

*Cryptologic Pioneer* (1998).<sup>9</sup> Unlike Yardley's Cipher Bureau, in addition to solving the codes and ciphers of foreign countries, SIS was also responsible for creating encryption systems to protect sensitive, non-public U.S. telegraphic communication.<sup>10</sup>

Augmenting Rowlett's account, primary documents from the U.S. National Archives in College Park, Maryland, Record Group 477, particularly the Historic Cryptographic Collection, National Security Agency (NSA)/Central Security Service (CSS), provided additional insight concerning SIS's development, key personnel, and accomplishments.<sup>11</sup> Furthermore, primary documents concerning the application of MAGIC intelligence, including the Army Military Intelligence Division (hereinafter MID), the Office of Naval Intelligence (hereinafter ONI), and the Federal Bureau of Investigation (hereinafter FBI) intelligence reports and memoranda, was available via

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<sup>9</sup> Frank B. Rowlett, *The Story of Magic: Memoirs of an American Cryptologic Pioneer* (Laguna Niguel, CA: Aegean Park Press, 1998).

<sup>10</sup> As will be described extensively in Chapter One, in 1940, SIS's Japanese diplomatic section solved the most advanced Japanese diplomatic cipher system, which SIS dubbed PURPLE. Then, MID created an intelligence code-word for PURPLE intercepts and intelligence products predicated on them, called MAGIC. From late 1940 through December 1941, and then through the end of the Pacific War, SIS's achievement yielded the limited number of high-level U.S. officials read into MAGIC significant insight into Japanese intelligence and propaganda activity against the United States, as well as into global Japanese diplomatic and intelligence activities, plans, and intentions. In 1977, shortly after the intercepts and many of the products based on them were declassified, U.S. government published a significant body of PURPLE intercepts and MAGIC intelligence summaries predicated on the intercepts in a five-volume set titled *The "Magic" Background of Pearl Harbor*.

<sup>11</sup> U.S. National Archives, College Mark, Maryland, Record Group 457, National Security Agency/Central Security Service; Entry # A1 9032: Historic Cryptographic Collection, Pre-World War I Through World War II.

particular [www.internment.org](http://www.internment.org).<sup>12</sup> The documents reflect that U.S. intelligence and law enforcement agencies took MAGIC information seriously enough to include significant content from it *verbatim* or paraphrased in their intelligence reports and memoranda.

Ronald Clark's biography of Friedman, titled *The Man Who Broke PURPLE: The Life of William F. Friedman, Who Deciphered the Japanese Code in World War II* (1977), provided detailed insight into Friedman's formative experience as a cryptographer before World War I; his subsequent experience as a U.S. military SIGINT officer during the war; and his creation, development, and direction of SIS.<sup>13</sup> Meanwhile, David Alvarez's account of U.S. SIGINT from 1930 through the end of World War II, *Secret Messages: Codebreaking and American Diplomacy, 1930-1945* (2004) provides a good overview of the U.S. government's SIGINT-related activity during SIS's tenure.<sup>14</sup>

Chapter Three examines the application and distribution of MAGIC intelligence that SIS ultimately enabled, including SIS's collaboration with ONI and its SIGINT branch, OP-20-G, in 1940 and 1941, as Japan pursued a two-tier plan of seeking to resolve its differences with the United States diplomatically, while preparing a military alternative, particularly via aggressive intelligence collection operations.

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<sup>12</sup> Additional information is available via these sites, each of which provides primary documents related to Japanese intelligence activity targeting the United States during the late 1930s and early 1940s, accessed May 21, 2015, <http://home.comcast.net/~eo9066/1941/41-12/IA254.html> and [http://www.internmentarchives.com/showdoc.php?docid=00254&search\\_id=127621&pagenum=003](http://www.internmentarchives.com/showdoc.php?docid=00254&search_id=127621&pagenum=003).

<sup>13</sup> Ronald Clark, *The Man Who Broke PURPLE: The Life of William F. Friedman, Who Deciphered the Japanese Code in World War II* (Boston: Little, Brown and Company, 1977).

<sup>14</sup> David Alvarez, *Secret Messages: Codebreaking and American Diplomacy, 1930-1945* (Lawrence, KS: University Press of Kansas, 2000).

While Frank Rowlett's *The Story of Magic* and Ronald Clark's *The Man Who Broke PURPLE* provided insight into crucial intelligence contributions to U.S. counterintelligence (hereinafter CI) focused against Japanese offensive intelligence operations targeting the United States, *The "Magic" Background of Pearl Harbor* (1977), published by the Department of Defense in eight volumes, contains hundreds of formerly classified Japanese diplomatic cables, transmitted between the Japanese Foreign Ministry and Japanese embassies and consulates throughout the world between 1939 and early 1942. The MAGIC cables constitute exceptionally valuable primary source material demonstrating the extent and substance of Japanese espionage plans, intentions, and activities as Japan prepared for war against the United States and other countries in the Asia-Pacific region.

Finally, concerning the sources related to Japanese intelligence and ultimately the December 7-8, 1941, Japanese attacks against Pearl Harbor and other U.S. locations in the Asia-Pacific region, Roberta Wohlstetter's *Pearl Harbor: Warning and Decision* (1961), provides an illuminating, serious analysis of decisions, miscalculations, and failures among U.S. intelligence officials and civilian and military leaders that enabled Japan to surprise the United States on December 7, 1941.<sup>15</sup>

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<sup>15</sup> Roberta Wohlstetter, *Pearl Harbor: Warning and Decision* (Stanford, California: Stanford University Press, 1961). An fundamental shortcoming of Wohlstetter's otherwise insightful and extensive investigation is that she published it at least 15 years before the U.S. government declassified the preponderance of U.S. intelligence documents illuminating Japanese intelligence activities against the United States in the late 1930s and early 1940s, especially the MAGIC cables and the MID, ONI, and FBI intelligence reports and memoranda largely predicated on them.

Conversely, John Toland's *Infamy: Pearl Harbor and Its Aftermath* (1982) and Robert Stinnett's *Day of Deceit: The Truth About FDR and Pearl Harbor* (2000) each was predicated on declassified U.S. intelligence products that were unavailable to Wohlstetter. Stinnett was especially attentive to SIGINT and other U.S. intelligence capabilities and information in crafting his examination of the decisions and events that he argued caused the U.S. failure. Toland and Stinnett each alleged that President Roosevelt and some other members of his administration, furthermore, were more aware of the impending Japanese attacks, but desired that the United States enter the European conflict and viewed a Japanese attack as a means toward that end.<sup>16</sup>

Chapter Four examines human-enabled and human-conducted intelligence collection and counterintelligence (hereinafter CI) principally through the exploits and experiences of two U.S. intelligence officers who focused on Japan throughout the 1920s and 1930s, and ultimately through the end of the Pacific War. The War Department's Army Military Intelligence Division (hereinafter MID) sent Sidney Forrester Mashbir to Japan in 1920 as an assistant U.S. Army attaché in order to learn the Japanese language and to learn about Japan and the Japanese people, but also to collect intelligence and to protect U.S. interests against Japanese intelligence gathering.

Virtually concurrently, in 1920, the U.S. Navy Department's Office of Naval Intelligence (hereinafter ONI) dispatched Ellis M. Zacharias to Japan in order to pursue similar responsibilities on the U.S. Navy's behalf. Mashbir and Zacharias became friends personally and professionally during their assignments in Japan and ultimately

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<sup>16</sup> John Toland, *Infamy: Pearl Harbor and Its Aftermath* (Garden City, NY: Doubleday & Company, Inc., 1982); Robert B. Stinnett, *Day of Deceit: The Truth About FDR and Pearl Harbor* (New York: The Free Press, 2000).

collaborated throughout the 1920s and 1930s, in order to acquire intelligence from Japanese counterparts; defend U.S. interests against increasingly aggressive Japanese intelligence activity; and influence particular Japanese counterparts in an effort to reduce Japanese suspicion of the United States.

Mashbir and Zacharias each published a memoir that included detailed account of his experiences during the interwar period and each included extensive content on their collaboration against the Japanese intelligence target between the world wars. Zacharias published *Secret Missions* (1946), just after World War II, while Mashbir later published *I Was an American Spy* (1953).<sup>17</sup>

Secondary sources that provided insight into ONI activities during the first half of the twentieth century include Jeffrey Dorwart's *The Office of Naval Intelligence: The Birth of America's First Intelligence Agency, 1865-1918*, published in 1970, and Dorwart's *Conflict of Duty: The U.S. Navy's Intelligence Dilemma, 1919-1945* (1983). Captain Wyman H. Packard's *A Century of U.S. Naval Intelligence* (1996), provided a more extensive account of ONI during the twentieth century.<sup>18</sup>

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<sup>17</sup> Sidney Forrester Mashbir, *I Was an American Spy* (New York: Vantage Press Inc., 1953); Ellis M. Zacharias, *Secret Missions* (Annapolis, MD: Naval Institute Press, 2003). Intelligence reports from the period were also available via the U.S. National Archives in College Park, Maryland. These primary documents ultimately reinforced some of the information that Mashbir and Zacharias conveyed in their respective memoirs, thereby validating their accounts to some extent.

<sup>18</sup> Jeffrey Dorwart, *The Office of Naval Intelligence: The Birth of America's First Intelligence Agency, 1865-1918* (Annapolis, Maryland: Naval Institute Press, 1979); Jeffrey Dorwart, *Conflict of Duty: The U.S. Navy's Intelligence Dilemma, 1919-1945* (Annapolis, Maryland: Naval Institute Press, 1983); and Captain Wyman H. Packard, USN (retired), *A Century of U.S. Naval Intelligence* (Washington, D.C.: Government Printing Office, 1996).

Bruce W. Bidwell's *History of the Military Intelligence Division, Department of the Army General Staff: 1775 – 1941* (1986), provides a good general overview of MID during World War I, when MID received ample support from Congress to pursue intelligence requirements, and then the transition to peace, when MID suffered a considerable reduction in such support from Congress, in addition to a severe deficiency in public support for intelligence activities more generally.<sup>19</sup>

Chapter Five focuses on Mashbir's pursuit, often with assistance from Zacharias and other U.S. intelligence professionals with whom Mashbir and Zacharias collaborated throughout the 1920s and 1930s, of implementing the M-Plan. The M-Plan was a non-governmental intelligence operation intended to target Japan, which Mashbir designed in 1921 at the request of the U.S. naval attaché to Japan, Zacharias's direct superior. Notably, on receiving his assignment to Japan in 1920, Mashbir's superiors in MID had also requested that he consider how the United States could acquire intelligence from within Japan during a war against Japan and, if possible, create a plan addressing the contingency.

Since Mashbir and Zacharias each assessed that war with Japan was inevitable, each strongly believed that someone must address the outstanding and vexing intelligence requirement regarding which Mashbir ultimately designed the M-Plan. The preponderance of the information describing the M-Plan and Mashbir's nearly two decade-long effort to implement the M-Plan was available in Mashbir's and Zacharias's

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<sup>19</sup> Bruce Bidwell, Colonel U.S. Army (retired), *History of the Military Intelligence Division, Department of the Army General Staff: 1775 – 1941* (Frederick, MD: University Publications of America, 1986).

respective memoirs. Unfortunately, this dissertation's author's efforts to locate a draft of the M-Plan via the U.S. National Archives proved unsuccessful.

In the end, despite the relative dearth of sources beyond the memoirs of Mashbir and Zacharias, the chapter illustrates Mashbir's ingenuity and dedication and other U.S. intelligence professionals to defending U.S. interests against what he assessed was an increasing Japanese threat, in addition to showcasing the support that he received from Zacharias and other U.S. intelligence professionals in his efforts. The chapter also describes how poorly prepared were U.S. intelligence agencies and U.S. leaders were to enable and support the operation. That the M-Plan failed to thoroughly arguably was due to a failure of U.S. leadership.

The following five chapters collectively will address the widespread and ongoing failure of U.S. leaders to enable and then capitalize on good intelligence in order to craft more informed foreign policy decisions concerning Japan during the interwar period, spanning from approximately 1919 through December 1941. The chapters detail the accomplishments of particular U.S. intelligence professionals and the intelligence services in which they served during the period. Good intelligence was available that could have enabled U.S. leaders to understand Japan, the Japanese, and particularly the perspectives, objectives, and actions of Japanese leaders to a more nuanced and sophisticated degree. In spite of receiving inadequate support from leaders who did not understand intelligence or its role in policy formulation, however, intelligence professionals performed commendably.

Leaders did not empower their U.S. intelligence community adequately enough to provide the intelligence support vital to protecting U.S. national interests. When

intelligence professionals nevertheless delivered good intelligence and profound insight concerning Japan, U.S. leaders failed to use it effectively. As the following five chapters will demonstrate, U.S. intelligence professionals nevertheless produced good intelligence results concerning Japan and adroitly thwarted Japanese intelligence activity against the United States. U.S. foreign policy, however, did not capitalize appreciably from their successes. Leaders failed to support intelligence adequately and to use effectively what intelligence services nevertheless produced.

Perhaps the United States was incapable of viewing itself on December 6, 1941, as a world power possessing international commercial, economic, and security interests and responsibilities that inevitably imposed on the national interests of other states, such as Japan in the Asia-Pacific region. Notwithstanding a brief departure from the general trend during World War I, when Congress allocated ample resources to intelligence, perhaps U.S. leaders operated within an outdated paradigm, domestically and internationally, in which they could not accept that the United States had, at least since 1898, represented an increasing threat to foreign actors whose national interests abutted those of the United States.<sup>20</sup> Perhaps appropriate respect for intelligence and the need for government to enable it was impossible until Pearl Harbor's implications became evident not only to the U.S. leaders who had failed to anticipate the massive series of Japanese attacks in Asia and the Pacific Ocean. Regardless, this dissertation will demonstrate that, before December 7, 1941, good intelligence was available to U.S. leaders, regardless of whether they were able or willing to exploit it, and that the disasters that befell the United

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<sup>20</sup> Bidwell, *History of the Military Intelligence Division, Department of the Army General Staff: 1775 – 1941*, 250.

States in December 1941 were attributable to policy failures, rather than to intelligence failures.

## Chapter One

### Herbert O. Yardley, the “Black Chamber,” and U.S.

#### Cryptography From World War I Through 1929

Herbert Oliver Yardley began his U.S. government career working in the Department of State’s Code Room from 1913-1917, where he acquired his first experience in the field of cryptanalysis, as well as ambition to advance in it. When the United States entered the Great War in 1917, Yardley created an opportunity for himself to build and direct the Department of War’s premier intelligence service, formally titled Military Intelligence Division, Section 8, but abbreviated and more commonly referred to as MI-8.<sup>21</sup> Under his direction, MI-8 provided cryptanalytic and other intelligence

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<sup>21</sup> Herbert O. Yardley, *The American Black Chamber* (Mattituck, NY: Amereon House, 1931), 20. Yardley published *The American Black Chamber* in 1931 in order to improve his financial condition, which suffered considerably due to the termination of the Cipher Bureau in 1929 and the impact of the Great Depression on his business interests, which resided largely in the real estate industry. Undoubtedly, Yardley also published the memoir in order to vindicate his pride and reputation, and as reprisal against those who forced closed the Cipher Bureau and effectively ended his career as a U.S. intelligence professional. *The American Black Chamber* is the most complete source concerning Yardley’s career during his tenure in the State Department Code Room, as director of MI-8, and as Cipher Bureau director, which collectively represent the period on which this chapter is focused. Additional primary source material concerning Yardley is available via the U.S. National Archives in College Park, Maryland, in Record Group 457, National Security Agency, “Herbert O. Yardley Collection.” These materials include books concerning cryptography and other intelligence fields that Yardley collected, documents from MI-8 and the Cipher Bureau containing decryption work related to foreign codes and ciphers, Yardley correspondence, including regarding Riverbank Laboratory and William F. Friedman. The facsimile copy of a volume of *The American Black Chamber*, annotated by William F. Friedman based on his and former Cipher Bureau cryptanalysts observations, analysis, and opinions, which is highly critical of Yardley, provided compelling counterpoints to some of Yardley’s accounts and claims in his memoir. Finally, David Kahn, *The Reader of Gentlemen’s Mail: Herbert O. Yardley and the Birth of American Codebreaking* (New Haven, CT: Yale University Press), is the only full biography of Yardley. Regarding the period on which this chapter

support to the U.S. military during the conflict. Then, immediately following the war, Yardley and MI-8 provided intelligence support to U.S. diplomats and intelligence collectors during the post-war Versailles Peace Conference.<sup>22</sup> Following the Versailles Peace Conference, Yardley returned to the United States and created the Cipher Bureau, the first major peacetime U.S. signals intelligence (hereinafter SIGINT) service in U.S. history.<sup>23</sup> He directed the Cipher Bureau from July 1919 through September 1929, when Secretary of State Henry L. Stimson ordered State Department funding to the service

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is focused, Kahn's account is based largely on *The American Black Chamber* and documents from the "Herbert O. Yardley Collection" in the U.S. National Archives.

<sup>22</sup> "Cryptographic," derived from "cryptography," refers more broadly to the use of code and cipher systems to encrypt and protect sensitive information transmitted in radio telegrams, also referred to as cablegrams, or more simply as cables. "Cryptanalysis" is employed to decrypt, or solve codes and/or ciphers of foreign states or actors, in order to access sensitive information from the cables of a target. During the interwar period, cables were the chief means through which U.S. diplomatic and military sites throughout the world communicated with one another and with Washington, similar to most governments, in an effort to prevent foreign countries from reading a cable bearing sensitive information, the U.S. government encrypted it via a code, cipher, or even some combination of each encryption means. A government transmitting information important to its interests, including its security, via cables normally placed a premium on protecting its encryption systems from the eyes and ears of foreign actors, while the same government often endeavored to purloin or solve the codes and ciphers of its antagonists and even allies, in order to extract intelligence information from their cables.

<sup>23</sup> Signals intelligence, abbreviated as SIGINT, is derived from communication via signals, signs, or indicators between individuals or entities. Often the communication is encrypted and, therefore, must be decrypted. The information that is extracted from signals communication becomes intelligence when a party not intended to receive or understand the signals does so and the content proves advantageous to a foreign entity acquiring or receiving it.

terminated, forcing the Cipher Bureau to close and ending Yardley's storied U.S. intelligence career.<sup>24</sup>

Yardley was born in 1889, in Worthington, Indiana, and on graduating from high school in 1907 went to work as a railroad telegrapher. Responsible for communicating the railroad dispatcher's instructions to the various trains operating in his district in order to manage their movement, he worked in different parts of Indiana, eventually landing in Indianapolis. In 1912, he scored first on the U.S. government's civil service examination in telegraphy and was hired by the U.S. Department of State.<sup>25</sup>

As an entry-level code clerk at Foggy Bottom, he engrossed himself in cryptography, particularly cryptanalysis, gaining his first cryptanalytic experience through decrypting incoming U.S. diplomatic cables during slow shifts in the Code Room. He learned firsthand how poorly inadequate encryption systems secured U.S. diplomatic communication.<sup>26</sup>

In order to understand the development of U.S. cryptography during the first decade after World War I, and to grasp the foundation of the dramatic U.S. cryptanalytic successes against Japan during the 1930s and the Second World War, one must examine

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<sup>24</sup> The Cipher Bureau formally was under the direction and within the structure of the Army Military Intelligence Division, the War Department's intelligence organization. Anticipating that it would benefit from the Cipher Bureau's intelligence production, however, the Department of State agreed to provide approximately 60% of the Cipher Bureau's funding, although it required that Yardley establish the service outside of Washington, D.C.

<sup>25</sup> David Kahn, *The Reader of Gentlemen's Mail: Herbert O. Yardley and the Birth of American Codebreaking* (New Haven, CT: Yale University Press, 2004), 5-8.

<sup>26</sup> Yardley, *The American Black Chamber*, 8-9.

Yardley's cryptanalytic accomplishments against Japan during the 1920s. Yardley's accomplishments, especially early during the Cipher Bureau's tenure, were foundational to succeeding U.S. SIGINT successes.

Accordingly, this chapter will focus on Yardley's career as a U.S. SIGINT leader, beginning with his experience with "Diplomacy and Cryptography in the State Department Code Room"; through his creation and leadership during the Great War of "Military Intelligence Division, Section Eight"; during service by "Yardley and MI-8 in Europe"; through a decade of Yardley leading "Peacetime SIGINT," when in 1919 he created and undertook directing the Cipher Bureau; through the Cipher Bureau's proudest period, "targeting Japan's diplomatic codes and ciphers"; and finally through "the end of reading gentlemen's mail," the Cipher Bureau's termination in 1929.

#### *Diplomacy and Cryptography in the State Department Code Room*

As a State Department Code Room telegraph clerk, Yardley was excited about the important diplomatic cables that he received and transmitted on behalf of department officials, although he recalled that to most of his colleagues, important international events only seemed to result in longer and busier workdays. "Daily history passed through their hands in one long stream," Yardley observed, "and they thought less of it than of the baseball scores."

Yardley found the work even more interesting when he began working night shifts. "Minor officials and sometimes the Secretary [of State] himself made the Code Room a loafing-place," he observed, recalling that a variety of officials, specializing in

different countries, regions, and topics, regularly visited the Code Room to review telegrams or complain about the Secretary of State's "'damn fool' policies."<sup>27</sup>

Yardley considered only the Chief of the Division of Latin American Affairs, William Doyle, to be exceptional. Doyle effectively had continued the dollar diplomacy of President William Howard Taft's administration, despite at least rhetorical opposition of the policy from President Woodrow Wilson and Secretary of State William Jennings Bryan.<sup>28</sup> Yardley described Doyle as "neither a politician nor a member of the diplomatic corps," since he "had received his training by hard knocks in South America instead of in the drawing-rooms of European courts." Possibly, Yardley's praise of Doyle reflected a self-consciousness on his own part concerning his lack of education, experience, and respect more common among the State Department's usual cadre, at least from Yardley's perspective. When Yardley published his memoir, perhaps he identified with Doyle, a talented outsider, who managed to excel before being cast aside.

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<sup>27</sup> Yardley, *The American Black Chamber*, 1-2. According to Yardley's account, one or more visiting officials judged the Secretary of State's policies as "damn fool." This was not Yardley's assessment as expressed in *The American Black Chamber*.

<sup>28</sup> Yardley did not name William Doyle in *The American Black Chamber*, but Yardley's description matched Doyle's position at the time, and his background. Early during his tenure at Secretary of State, Secretary Bryan replaced Doyle, the Department of State's Chief of the Division of Latin America Affairs, who was a holdover from the administration of William Howard Taft, with Boaz Walton Long. Although President Woodrow Wilson and Secretary Bryan had opposed the Taft administration's pro-business "dollar diplomacy" foreign policy approach to Latin America, both Doyle and Long had strong business ties to Latin America, and Long continued pursuing "dollar diplomacy" in the region, according to Edward S. Kaplan, *U.S. Imperialism in Latin America: Bryan's Challenges and Contributions, 1900-1920* (Westport, CT: Greenwood Press, 1998) 40-41, 44. For further information regarding the foreign policy of the Taft administration regarding Latin America, see Walter Vinton Scholes, *The Foreign Policies of the Taft Administration* (Columbia, Missouri: University of Missouri Press, 1970).

During his evening visits to the Code Room, Doyle recited for Yardley tales of intrigue from his experiences in Latin America. Once Doyle had departed, Yardley would read the telegrams related to those events, including America's role in Panamanian independence, the agreement with Panama that enabled the construction of the Panama Canal, the Venezuelan incident, when the United States and Great Britain nearly went to war against one another, "and other great moments of American nationalism," as Yardley termed it. Regarding Doyle's dismissal, ostensibly because of his connection to Taft's foreign policy, Yardley observed: "From that day I never heard the words 'dollar diplomacy,' nor on the other hand did I observe any change in policy, although I read a great deal about it in the newspapers."<sup>29</sup>

Yardley recalled one evening in particular, when he was directed to receive and decrypt an important cable from the U.S. mission in Mexico City, concerning "whether Mexico would salute our flag." About half of President Wilson's cabinet was present, including Secretary of the Navy Josephus Daniels. Daniels awaited the message impatiently and declared, as Yardley produced it: "Gentlemen, we are now receiving the most vital message ever confronted by this Administration." Mexico, as it turned out, had refused. The United States undertook military and naval operations into Mexican territory and waters during this period.<sup>30</sup>

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<sup>29</sup> Yardley, *The American Black Chamber*, 2-3.

<sup>30</sup> General John "Black Jack" Pershing, who eventually would lead the American Expeditionary Force in France, pursued the Mexican guerrilla leader Pancho Villa into Mexico in 1914, in response to Villa's raids into U.S. territory during the 1913-1914 period. In 1914, Wilson sent naval forces to occupy the Mexican port of Veracruz, after Mexican authorities detained nine U.S. naval personnel. Additionally, during this period, the Mexican government, under President Victoriano Huerta, was combatting a revolutionary movement that actually unseated Huerta in 1914. Yardley's particular

As Yardley reviewed these cables, he wondered whether the diplomatic communication of the United States was “safe from prying eyes.” U.S. cryptanalysts had solved the diplomatic and military codes and ciphers protecting the diplomatic communication of a number of foreign states. Yardley assumed, therefore, that cryptanalysts of foreign states were experiencing similar success against U.S. code and cipher systems. The likelihood motivated Yardley to pursue a career in cryptography and, thenceforth, he sought the means to prepare himself for this path.

Yardley examined the limited information on codes and ciphers available in the Library of Congress. He studied the primary textbook of the Army Signal Corps School at Fort Leavenworth, Kansas, which described how to solve military cipher systems.<sup>31</sup> Yardley concluded that “the types of cipher it explained were so simple that any bright schoolboy could solve them without a book of instructions.” Unsatisfied with the existing cryptography literature, he determined that he must educate himself in the field.

Yardley acquired “copies of code and cipher communications dispatched by various embassies in Washington” from contacts in the U.S. SIGINT community, whom he did not specify in his memoir, and endeavored to decrypt the cables. His progress was slow, in part due to significant clerical work inherent in cryptography, but ultimately he

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mention of Navy Secretary Daniels may indicate that the cable concerned U.S. naval activity related to the U.S. occupation of Veracruz.

<sup>31</sup> According to William F. Friedman, the U.S. Army pamphlet to which Yardley referred was Captain Parker Hitt’s “Manual for the Solution of Military Ciphers.” Herbert O. Yardley, *The American Black Chamber*, annotated by William F. Friedman, 21, accessed August 22, 2015, [http://marshallfoundation.org/library/wp-content/uploads/sites/16/2014/06/American-Black-Chamber\\_II\\_watermark.pdf](http://marshallfoundation.org/library/wp-content/uploads/sites/16/2014/06/American-Black-Chamber_II_watermark.pdf).

solved some of the encrypted messages.<sup>32</sup> During one slow evening shift, as Yardley attempted to decrypt one of these cables, he witnessed the telegraph operator in New York inform the White House telegraph operator that he had received a 500-word cable from Colonel Edward Mandell House, President Wilson's premier advisor on European politics and diplomacy, who was in Germany to meet with Kaiser Wilhelm II. Yardley made a copy of House's encrypted message in order to solve it.

Yardley assumed that the cable would provide a challenging decryption opportunity, but recalled: "Imagine my amazement when I was able to solve the message in less than two hours!" The message had been transmitted via British cables and, because the British Navy's Code Bureau retained a copy of each cable that the United States transmitted, was adept in solving foreign code and cipher systems, and considering his own success, Yardley assumed that the British were reading House's private correspondence with President Wilson, probably in addition to other sensitive diplomatic cable traffic.

Yardley burned the cable and did not share his discovery with anyone, fearing that reporting it would jeopardize his career. Shortly after World War I, Yardley discovered that the Wilson administration had employed elementary encryption systems or, as Yardley referred to them, "school-boy ciphers," for transmission of high-level communication. Furthermore, in reviewing most of the U.S. diplomatic cable traffic during the early postwar period, before he created the Cipher Bureau, Yardley observed

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<sup>32</sup> Whether providing or receiving these encrypted messages at the time was illegal is unclear. Yardley does not provide insight into the nature of the cables or their classification(s), although they were still encrypted when he received them.

that the encryption systems employed were elementary.<sup>33</sup> While his criticism inevitably justified his contributions to U.S. cryptography during World War I and the 1920s, before World War I the United States did not invest adequately in securing its non-public communication.

Yardley produced an essay describing the inadequacy of U.S. diplomatic communication security. He described the treatise to his superior as an “exposition on the ‘Solution of American Diplomatic Codes’.”<sup>34</sup> When Yardley’s superior doubted that U.S. diplomatic communication was so vulnerable, Yardley explained that he had produced the study after approximately “one thousand hours of concentrated analysis and tedious detailed labor” over nearly two years. Notably, Yardley’s superior had created the encryption system that Yardley declared insufficient.

Yardley’s superior reviewed Yardley’s assessment and summoned him several days later. He acknowledged that Yardley had demonstrated that diplomatic traffic was inadequately protected and asked Yardley not to discuss the issue with anyone. Then, as the meeting ended, he said: “We already know by our telegrams from London that England maintains a large bureau for solving diplomatic correspondence.” He paused, and then asked: “Do you believe they could solve our code?” Yardley answered: “For the sake of argument, I always assume that what is in the power of one man to do is also in the power of another.” Then, according to Yardley, he praised Yardley’s “masterly

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<sup>33</sup> Yardley, *The American Black Chamber*, 3-5.

<sup>34</sup> Yardley did not identify his superior.

piece of analysis.” One month later, Yardley’s superior introduced a new, more advanced encryption system, which Yardley solved within several weeks.<sup>35</sup>

### *Military Intelligence Division, Section Eight*

On April 6, 1917, the United States declared war on Germany.<sup>36</sup> Yardley viewed the U.S. entry into the European conflict as an opportunity to begin a career in cryptography, but determined that he must secure a U.S. Army officer commission in order to do so. He would not advance were he to remain a telegraph clerk in the State Department Code Room. Accordingly, he requested a “memorandum expressing my qualifications as a cryptographer” from his superior. Yardley’s superior reluctantly provided the letter, but told Yardley that Assistant Secretary of State William Phillips would not release him. Next, Yardley acquired similar letters of recommendation from several Army and Navy officers whom he knew.

Finally, Yardley met with Phillips to request release from the Department of State. The War Department would not accept Yardley without one. “Secretary Phillips was the flower of the American diplomatic corps,” Yardley recalled, “wealthy, young, handsome, cultured, suave, ingratiating, a pleasant smile, a low musical voice, a slender athletic figure, inscrutable eyes.” He probably intended the description as criticism of an elitism that he associated with Phillips, and perhaps which Phillips exhibited. Phillips denied Yardley’s request. He complimented Yardley’s strong performance in the Code

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<sup>35</sup> Yardley, *The American Black Chamber*, 7-9.

<sup>36</sup> The United States declared war on Austria-Hungary on December 7, 1917. The United States never declared war against the Ottoman Empire.

Room as the reason, citing the department's need to retain capable staffing due to the war and dangled a salary increase.

Military contacts advised Yardley to appeal to Colonel George Sabin Gibbs, Chief Signal Officer of the U.S. Army Signal Corps, for a release. Yardley secured a meeting with Gibbs, during which Gibbs interrupted Yardley's pitch: "Have you seen Major Van Deman?" Yardley had not. "He isn't much of anything right now," Gibbs said, "but he will be heard from. He's the father of Military Intelligence in the Army. He can use you. Go see him. Tell him I sent you. You will find him at the War College, and let me know what he says."<sup>37</sup>

Yardley proceeded directly to the Army War College. "I hurried past the guard who let me by at the mention of Van Deman and in a few moments stood before the father of Military Intelligence," Yardley recalled. Van Deman had a staff of just two, "a thin-faced Captain and his secretary." But the U.S. entry into the war against Germany would change this. "Almost overnight this small force was to grow into an efficient organization with thousands of officers, clerks and agents, until its long tentacles circled the earth," Yardley recalled.<sup>38</sup>

Yardley had by then honed his argument. "I had lost my trepidation and began my story in a confident tone," Yardley recalled. "Rapidly outlining my history I gave him details that would convince him of my knowledge of codes and ciphers and their solution." Van Deman "was intensely interested and I boldly came to my point." The

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<sup>37</sup> Yardley, *The American Black Chamber*, 12.

<sup>38</sup> Ibid.

State Department knew that foreign powers dedicated significant resources to solving the codes and ciphers of their adversaries and even those of allies. “It was immaterial to America whether I or some one [Sic] else formed such a bureau. But such a bureau must begin to function, and at once.”<sup>39</sup>

Yardley observed that on the Western Front German forces employed encrypted wireless communications. Accordingly, General Pershing must demand that the American Expeditionary Force (hereinafter AEF) intercept and decrypt those messages and extract intelligence contained therein. Thus, the AEF required cryptanalysts. Although Van Deman was concerned about the 27-year-old code clerk’s youth, he handed Yardley a note to take to Colonel Gibbs and instructed Yardley to “tell him I said to get your commission through at the earliest possible moment. Can you start Monday?” Van Deman added that Gibbs would secure Yardley’s release via Phillips.<sup>40</sup>

On April 11, 1917, just five days after the United States declared war against Germany, the head of the Army War College advised the Army general staff to establish a military intelligence unit. The Army Chief of Staff in turn directed the Army War College to oversee military intelligence and, on May 3, the Secretary of War approved the proposal. The Chief of Staff selected Van Deman to lead the new intelligence organization. The U.S. entry into the European war was changing War Department intelligence significantly. Yardley’s timely pitch to Van Deman and Gibbs had all but assured him a substantial role in it.

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<sup>39</sup> Ibid, 12-13.

<sup>40</sup> Yardley, *The American Black Chamber*, 11-13.

Signals Intelligence did not receive adequate attention during the early stages of the War Department's intelligence reorganization. Among the memoranda concerning the reorganization, only one generally considered "analyzing the enemy's codes and ciphers." Van Deman, however, was aware of the War Department's SIGINT deficiency. He realized that neither the Departments of War nor State possessed adequate expertise in the field.

Van Deman did not plan to establish a specific SIGINT unit before Yardley approached him, mostly because he lacked the necessary personnel to lead it. Crucially, three of the U.S. Army's premier intelligence officers, Captain Parker Hitt, Lieutenant Joseph O. Mauborgne, and Frank Moorman, each of whom possessed general expertise in cryptography, were unavailable to lead Army SIGINT operations. Therefore, Van Deman reluctantly had decided to outsource cryptanalysis, the targeting of foreign codes and ciphers, to Riverbank Laboratories, a small, private-sector research firm located outside of Chicago, in Geneva, Illinois. Shortly after his meeting with Yardley, however, Van Deman decided that the Army general staff required its own cryptanalytic unit. Gibbs arranged Yardley's release from the Department of State and, on June 29, the Army commissioned Yardley a first lieutenant in the Army Signal Corps.<sup>41</sup>

On July 5, Yardley was moved to active duty and on July 11 he received orders to report to the War College Division. There, he received limited space in the War College building, where he built and assumed responsibility for MI-8, the first U.S. intelligence agency dedicated entirely to cryptography. Because Yardley lacked the staff required to

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<sup>41</sup> Ibid, 20-21.

operate the new service, however, Army cryptanalysis continued to reside at Riverbank for the time being.<sup>42</sup>

George Fabyan, a wealthy high school dropout, had started his cryptanalytic program at Riverbank in order to test the theory that Francis Bacon had produced the literary works commonly attributed to William Shakespeare. Fabyan hired ten women to search for hidden messages that would prove Bacon's authorship. Although the theory was never proved, Fabyan's cryptanalysts gained experience in the craft.

On March 15, 1917, just a few weeks before the United States declared war on Germany, Fabyan traveled to Washington, met personally with Van Deman, extended the War Department access to his collection of books and other materials on cryptology, and offered to host someone from military intelligence to inspect the materials at Riverbank at Fabyan's own expense. Van Deman accepted the offer and Lieutenant Joseph O. Mauborgne, the Army Signal School chief, soon visited Riverbank. Impressed by what he observed, Mauborgne urged his superiors in Washington to accept Fabyan's offer and, largely on that basis, Van Deman did so. Then, Van Deman contacted the Justice and Navy Departments, the postal service's censorship contingent, and other organizations, offering them Riverbank's assistance.

Soon, U.S. government agencies were mailing and telegraphing intercepted, encrypted messages to Riverbank, where a group of four men and three women analyzed them in Engledeew Cottage. They gained experience and were largely successful. When necessary, Fabyan invested additional resources in these operations. For example, in order to solve a particular series of encrypted diplomatic messages exchanged between

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<sup>42</sup> Ibid, 21.

Mexico and Germany, Fabyan hired one German and two Spanish linguists. Meanwhile, Yardley struggled to build MI-8.<sup>43</sup>

Riverbank's greatest product was William F. Friedman. Friedman was a graduate of Cornell University, where he had studied agriculture, focusing particularly on genetics. Fabyan hired Friedman originally to improve his farm's agricultural products. Because of his skill as a photographer, however, Friedman became involved in the Bacon project, photographically enlarging portions of Shakespeare's text for analysis.

Friedman became acquainted with one of the cryptanalysts working on the project, Elizebeth Smith. Both had begun to doubt Fabyan's Baconian theory; but Friedman gained experience in cryptanalysis working on the project and his relationship with Elizebeth grew closer. They married on May 21, 1917, and Friedman became head of Riverbank's Department of Ciphers which, in the ten months following the U.S. entry into the war, had expanded to employ between 25 and 35 cryptanalysts. Additionally, Friedman produced technical papers on cryptography, which Fabyan published and dubbed the Riverbank Publications. The Riverbank Publications became important resources in the field of cryptography.

#### *Military Intelligence, Section Eight*

"It is all very well to talk about forming a Cryptographic Bureau: to organize one is a different matter," Yardley reflected more than a decade after establishing MI-8. As MI-8 gained its footing and increasingly solved foreign code and cipher systems, the War Department relied decreasingly on Riverbank. Yardley likened his challenge to one of

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<sup>43</sup> Ibid, 22-23.

establishing a hospital, swiftly accumulating patients, but finding it difficult to recruit trained medical staff to service those patients. “My beds were soon filled with patients; the code messages literally rolled into the War College,” he wrote. “Only one course of action was possible: let the patients die while doctors, or at least nurses, were trained. But how would you go about finding more doctors?”<sup>44</sup>

Yardley found that there were simply too few experienced cryptographers available to staff MI-8. In an effort to address the resulting shortage of cryptanalytic experience, and assuming that MI-8’s British, French, and Italian counterparts had accumulated considerable SIGINT material from their work against the Central Powers, he cabled London, Paris, and Rome requesting that allied SIGINT services send cryptanalytic advisors to Washington and pouch to MI-8 “a few hundred examples of such messages and all available exposition on their solutions.” Yardley’s outreach to liaison intelligence partners to leverage their expertise and experience probably was unprecedented for a U.S. intelligence service, although the practice would become far more common during World War II and especially thereafter.

The British responded with some “examples of German military code and cipher intercepts together with explanations.” The British would not spare experienced cryptographers, however, especially in wartime. Later, when recalling working with MI-8’s British counterparts in London, Yardley observed that “an English Colonel told me that Captain Hitchens, their most brilliant cryptographer, was worth four divisions to the British Army.”<sup>45</sup> Still desperate for cryptographers, Yardley searched War College

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<sup>44</sup> Ibid, 26-27.

<sup>45</sup> Yardley, *The American Black Chamber*, 14.

records for promising candidates. Eventually he settled for “a few scholars who appeared to have superficial knowledge of ciphers” and secured them military commissions. Then he developed a training program for them.<sup>46</sup>

Perhaps in another example of Yardley resenting those with a more traditional background for diplomatic or intelligence work, Yardley argued: “Scholarship, I suddenly discovered, was nothing more than the capacity to absorb learning.” He also highlighted the apparent assessment among his students that Yardley possessed “native intelligence.” Yardley argued that his aspiring cryptographers would encounter “not a great deal of learning to absorb.” Rather, they “would be obliged to make their own discoveries.” Yardley ultimately concluded that “most of them were dismal failures.”<sup>47</sup>

There were exceptions, however and, although tending toward self-promotion and often disparaging those who may have been objectively more qualified than he, Yardley acknowledged the ability of some of his cryptographic trainees. For example, he credited Dr. John M. Manly, who had been head of the English Department at the University of Chicago, with possessing “the rare gift of originality of mind – in cryptography called ‘cipher brains’.” Yardley observed that Dr. Manly was “destined to develop into the most skilful [Sic] and brilliant of all our cryptographers.” Yardley even conceded: “It was to Captain Manly that I owe a great measure of the success I achieved as head of the War Department Cipher Bureau.”<sup>48</sup>

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<sup>46</sup> Ibid.

<sup>47</sup> Ibid, 14.

<sup>48</sup> Ibid, 14-15.

As Yardley assembled MI-8, he received a memorandum from London warning that the British considered the War Department's encryption system insecure, which was accompanied by a British assessment that the Germans were reading U.S. cable traffic. Yardley observed that were the British allegation true, then Germany knew the AEF's plans and intentions, including General Pershing's tactics and stratagems. Investigating the British claim, Yardley discovered that a U.S. Army codebook had been lost during the 1914 "Punitive Expedition" into Mexico, and that German intelligence reportedly had received a copy. Furthermore, in examining the codebook, Yardley determined that the encryption could easily have been broken without the codebook. He drafted a report on the subject for his superiors, who in turn directed Yardley immediately to replace all of the War Department's codes and ciphers.

Yardley delegated managing a new MI-8 subsection responsible for creating code and cipher systems to protect War Department cable traffic to a subordinate whom he knew from the State Department Code Room, securing him an Army officer's commission. The subsection developed codes, ciphers, and other tools required to secure the communications of military intelligence officers, special agents, military attachés, and military leaders in Washington, London, and Paris, including General Pershing himself. According to General Orders, the Signal Corps should have undertaken the task. Yardley argued, however, that the Signal Corps was ill-prepared. He secured responsibility for the task for MI-8, further expanding its importance to the War Department. Over the course of the war, MI-8's responsibilities expanded until it included five subsections:

Code and Cipher Compilation; Communications; Shorthand (solution of intercepted shorthand documents); Secret-Ink Laboratory; and Code and Cipher Solution.<sup>49</sup>

U.S. intelligence was still transitioning from the nineteenth century to the twentieth century. Demonstrating the backwardness of some U.S. government officials toward intelligence tradecraft, when Yardley briefed a U.S. military attaché accredited to a Western country, the attaché objected to using more advanced encryption, observing: “During the Spanish-American War we didn’t do all those things. We just added the figure 1898 to all our figure code words, and the Spaniards never did find out about it.” Yardley correctly observed that there was a great difference between Spain in 1898 and Germany in 1917, but did not express this to his interlocutor, who outranked Yardley.<sup>50</sup>

According to Yardley, the attaché’s perspective was all too common, including on the Western Front in France. A young SIGINT officer, whom MI-8 trained and sent to France soon after the United States entered the war, discovered that the Army’s codes and ciphers at U.S. General Headquarters (hereinafter GHQ), France, were insecure, including General Pershing’s own telegraphic communications encryption system.

The MI-8 officer proved his case to his Army hosts by deciphering encrypted U.S. cables within a few hours, a performance accompanied by troubling implications. The War Department assumed that Germany maintained a robust, highly skilled cryptographic unit supporting its forces on the Western Front, and that German cryptanalysts likely had at least the capacity to solve U.S. codes and ciphers that the

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<sup>49</sup> Ibid, 20.

<sup>50</sup> Ibid, 17.

recently trained and relatively inexperienced MI-8 officer had just demonstrated.

Furthermore, once German cryptanalysts solved one message encrypted via a particular system, they would be able to solve other messages encrypted via the same or similar systems more easily.

Yardley produced a memorandum on the topic that alarmed Army General Staff in Washington. He pointed out that the U.S. cables had described the disposition of AEF troops along the St. Mihiel salient, including details of the divisions and even when U.S. forces planned to launch a major attack in the area.<sup>51</sup> If German cryptanalysts solved the same U.S. cables, German forces either would fortify positions that Pershing intended to attack or withdraw forces from the area in order to avoid the AEF offensive. As it turned out, Germany began to withdraw from the St. Mihiel salient before Pershing's assault began on September 12, 1918. The withdrawal, however, was incomplete when the AEF attacked, rendering German forces actually more vulnerable and resulting in an even more lopsided AEF victory in the campaign. Yardley argued, however, that the partial German withdrawal ultimately reduced German casualties.<sup>52</sup>

Differing somewhat from Yardley's account, British military historian Martin Gilbert observed that German General Erich Ludendorff ordered German forces to withdraw from the St. Mihiel salient on September 8, days before the U.S. offensive began. According to Gilbert, the U.S. attack caught German forces as they were

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<sup>51</sup> The St. Mihiel salient was a German position that disrupted the French lines, or a bulge that extended into the French lines, between Verdun and Toul. The French more than once had failed to force German forces from the salient, which French military leaders assessed represented a pocket of weakness in the French lines.

<sup>52</sup> Yardley, *The American Black Chamber*, 16-19.

executing their withdrawal and consequently inflicted an even greater defeat on Ludendorff's forces than otherwise probably would have occurred. In his account, Gilbert did not contemplate the possibility that Ludendorff had learned of the impending U.S. attack through intercepted and decrypted U.S. cables.<sup>53</sup> Yardley, in this case, either did not understand what transpired along the San Mihiel salient in mid-September 1917, or interpreted what occurred in a manner that supported his postulation that inadequate encryption security enabled Germany to read secret U.S. Army telegraphic communications, and that MI-8 stepped in to address the problem.

Yardley and MI-8 managed to convince military leaders that AEF communication security probably was compromised and to permit MI-8 to rectify the problem. Then, the War Department rewarded MI-8's cryptographers and clerks for that contribution. Members of MI-8's Code and Cipher Compilation Subsection received letters of recognition. War Department leaders praised the creativity, skill, and hard work that had produced new, more secure encryption systems. Yardley conveyed to MI-8's cryptographers and clerks that the Secretary of War and his Chief of Staff were aware of their important contributions.

Each time the War Department required intelligence support, Yardley ensured that MI-8 responded, rendering it an indispensable intelligence facilitator. When military intelligence officers acquired sensitive information abroad and submitted it to Van

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<sup>53</sup> Martin Gilbert, *The First World War: A Complete History* (New York: Henry Holt and Company, 2004), 460-67. According to Gilbert, a German withdrawal to a second defensive position, the Hindenburg Line, preceded the AEF attack against the St. Mihiel salient. Gilbert did not conclude that this withdrawal limited the AEF attack's impact, but highlighted instead that German forces were too weak by that point in the war to resist the forces that the United States introduced to the Western Front.

Demam and other intelligence officials in Washington to be evaluated and disseminated to consumers, and when Van Demam and other intelligence officials communicated instructions to collectors abroad, the War Department required secure means of communication. Yardley ensured that MI-8 provided the solution, when necessary creating and staffing another MI-8 subsection for the purpose.<sup>54</sup>

MI-8, however, was not the only U.S. government cryptographic organization. The Department of Justice and the Department of State operated their own respective cryptographic divisions and there were other War Department intelligence units that performed cryptographic duties. The Navy Department also operated a cryptographic bureau called the Navy Signal Office, of which, Yardley maintained, the Navy was protective. The Navy Signal Office created the codes and ciphers that protected the U.S. Navy's telegraphic communications and, Yardley claimed, maintained a good relationship with MI-8. Periodically, the Navy Signal Office requested that MI-8 inspect its methods as an additional security measure, although it expressed confidence that its codes and ciphers were secure. During the war, the U.S. and British navies communicated during joint operations and, toward this end, the U.S. Navy submitted its most sophisticated encryption system to the British Royal Navy, which judged the encryption secure.

MI-8 solved this advanced U.S. Navy encryption system, however, without any assistance. Consequently, the Navy improved it. Yardley judged, however, that "since they obviously knew very little about cryptography their changes were of no value as far as maintaining secrecy was concerned." He resented that the U.S. government had such

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<sup>54</sup> Yardley, *The American Black Chamber*, 20.

great faith in the Navy's communications security that "the Navy encoded the President's and the State Department's messages." Yardley "offered to make a substantial wager [against his Navy counterparts] that the technique I developed while in Washington would still solve their messages" and claimed that "they admittedly privately that I was probably right." Yardley observed that "there is no such thing as an indecipherable code or cipher constructed along conventional lines," a law to which, presumably, he and MI-8 were also subject.<sup>55</sup>

Despite Yardley's good working relationship with the Navy Signal Office, he complained that a separate Navy cryptographic service, the Navy Cryptographic Bureau, refused to cooperate with MI-8, although Yardley also acknowledged that ordinarily the Navy Signal office would have relied on the Navy Cryptographic Bureau rather than the Military Intelligence Branch for support.<sup>56</sup> Nevertheless, Yardley characterized the Navy Cryptographic Bureau's refusal to cooperate with MI-8 as peculiar. Neither signals nor human intelligence services normally are inclined to collaborate with one another, regardless of whether they serve and are funded and empowered by the same

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<sup>55</sup> Yardley, *The American Black Chamber*, 127-28.

<sup>56</sup> The Military Intelligence Division, previously referred to as the Military Information Division and then the General Staff Second Division, was the United States Army and United States Department of War's military intelligence branch between May 1917, as the Military Intelligence Section and, then, beginning in February 1918, as the Military Intelligence Branch. Then, in June 1918, the War Department re-named it the Military Intelligence Division, which it remained until 1942. Before May 1917, it was called the Military Information Division and then the General Staff Second Division. Finally, in March 1942, the War Department re-organized the service and called it the Military Intelligence Service. Accordingly, during World War I, the Military Intelligence Division was effectively synonymous with the Military Intelligence Section and the Military Intelligence Branch.

government. This was especially so during Yardley's tenure in U.S. intelligence. Furthermore, one intelligence service's suspicion of another represents an important instinct that enables it to acquire intelligence covertly and protect clandestine sources, methods, and information, even as the tendency obstructs what could be beneficial collaboration. Counterintelligence threats often surface within and among intelligence services of the same country, even inadvertently.

In July 1918, the War Department arranged for Lieutenant William McIntyre Elkins of the Office of Naval Intelligence (hereinafter ONI) to visit MI-8, and instructed Yardley to provide Elkins a tour of the organization and to read him into MI-8's activities. Yardley was uncomfortable with briefing Elkins into MI-8's sensitive tradecraft and operations and asked Elkins what he sought from MI-8. Elkins was candid, confessing that he knew nothing about cryptography and said that he was not there to represent the Navy Cryptographic Bureau. Rather, he had come on behalf of the Director of Naval Intelligence who, dissatisfied with the Navy's performance in cryptography, had instructed Elkins to inspect the Navy Cryptographic Bureau and MI-8 and report what he learned. Elkins observed that the Navy Cryptographic Bureau had "failed so far to decipher a single cipher or code message or to develop a secret-ink letter," despite receiving considerable personnel and funding.

Yardley was exhilarated. The Navy's failure constituted another opportunity for MI-8 to excel. Exercising the principal of "give to get," he promptly became more forthcoming with Elkins about MI-8's work, providing him a copy of a report detailing MI-8's first year's accomplishments that he had prepared for Van Deman. He also informed Elkins that since its creation in June 1917, MI-8 had grown from a staff of just

himself and two civilian employees to over 200 personnel. Yardley detailed that MI-8's Code Compilation Subsection was handling more than 200,000 words per month; the Shorthand Subsection had acquired significant linguistic breadth and could read thirty distinct shorthand systems; and MI-8's Secret-Ink Subsection examined 2,000 letters each week and had deciphered more than 50 secret-ink letters dispatched by foreign governments.<sup>57</sup>

Yardley boasted to Elkins that the Solution Subsection had solved thousands of messages from Argentina, Brazil, Chile, Costa Rica, Cuba, Germany, Mexico, Spain, and Panama, and was working toward solving the systems of the remaining Latin American states. Finally, Yardley's report described MI-8's ongoing effort to train new cryptographers, and he led Elkins on a tour of MI-8's subsections and permitted him to examine examples of MI-8's work. Ultimately, partly due to the impression that Yardley and MI-8 made on Elkins and then, via Elkins, on the ONI director, the Navy Cryptographic Bureau turned its secret-ink equipment over to MI-8 and placed a liaison officer with MI-8. Clearly, once he had realized that ONI had extended him an opportunity to promote MI-8, Yardley exhibited transparency with Elkins in order to capitalize.

The ONI director recognized MI-8's success in a letter of introduction addressed to Yardley, as Yardley prepared to depart for France for official duty: "This office has turned over to the Military Intelligence Branch all work along the lines of breaking enemy cipher and code messages," it began, "being represented in their office by a

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<sup>57</sup> Yardley, *The American Black Chamber*, XX.

Liaison Officer who looks after the interests of the Navy.” Regarding the ONI director’s admission, Yardley could not resist crowing about the success at the expense of a competitor: “For once, the Navy Department, ever jealous of its prestige, admitted failure.”<sup>58</sup>

### *Yardley and MI-8 in Europe*

In July 1918, Van Deman’s successor as head of the Military Intelligence Branch, Brigadier General Marlborough Churchill, a distant relative of future British Prime Minister Winston Churchill, directed Yardley to design a small SIGINT bureau to accompany U.S. forces preparing to depart for Siberia. As Yardley and several MI-8 cryptographers prepared to leave for Siberia, however, General Pershing requested SIGINT support for the AEF in France. Accordingly, Churchill directed that Yardley travel to France and the other Entente capitals in order to support SIGINT support to the AEF and establish liaison relationships with allied SIGINT services. Churchill tasked Yardley to learn as much as possible from U.S. allies and prepare the way for a peacetime SIGINT service.

Churchill acquired letters of introduction for Yardley from the Departments of State and of the Navy, as well as from the French High Commission. He drafted letters of introduction for Yardley to use with the U.S. military attachés in London, Paris, and Rome, and provided Yardley letters of introduction to present to the U.S. Ambassador to Great Britain, Walter Hines Page, and the U.S. Ambassador to France, William Graves

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<sup>58</sup> Ibid, 128-32.

Sharp.<sup>59</sup> Furthermore, Yardley would represent both the Departments of War and State during his mission.<sup>60</sup>

Yardley arrived in London in late August 1918 and tried for weeks to establish a working relationship with his British counterparts, who initially failed to cooperate with MI-8. Yardley recalled, however, that “finally, Captain Brook-Hunt of the British War Office submitted to me for examination a combination substitution and transposition cipher.” The British intended to use the new system to encrypt cables transmitted to and from the Western Front. Yardley solved the cipher, convincing the British to replace it with a more advanced system and cooperate more closely with MI-8 thenceforth.<sup>61</sup>

Yardley also developed a limited liaison relationship with the British Admiralty Code and Cipher Bureau, whose director, Admiral William Reginald “Blinker” Hall, “stood next to [British Prime Minister] David Lloyd George in power,” Yardley claimed. According to Yardley, Hall “consented to give me, personally, several copies of a certain neutral government’s diplomatic codes and a copy of a German Naval code in two volumes,” in order to help MI-8 improve its SIGINT capability.<sup>62</sup>

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<sup>59</sup> Office of the Historian, U.S. Department of State, “Foreign Relations of the United States, 1917-1972, Public Diplomacy, World War I,” accessed December 27, 2014, <http://history.state.gov/historicaldocuments/frus1917-72PubDip/persons>.

<sup>60</sup> Yardley, *The American Black Chamber*, 132-34.

<sup>61</sup> Yardley, *The American Black Chamber*, 135-39. For further information concerning British intelligence during World War I, see John F. Dooley, *Codes, Ciphers, and Spies: Tales of Military Intelligence in World War I* (New York: Copernicus Books, 2016).

<sup>62</sup> Yardley, *The American Black Chamber*, 139-40.

Yardley also learned that the British Admiralty Code and Cipher Bureau benefited from regular access to telegrams during both war and peace. MI-8 enjoyed a similar advantage only during the war and then only because of censorship measures imposed temporarily by the executive branch, as a war measure. “I did not wonder that England was a great power, for she read practically every code telegram that passed over her cables,” Yardley observed. Furthermore, Britain had ready access to most of the world’s cable traffic, since it enabled and supervised the international communication infrastructure through generous government subsidies and other support. “Unlike MI-8 in Washington,” Yardley pointed out, “the Admiralty Cipher Bureau was not founded as a War Measure.” Great Britain maintained a robust intelligence capacity during peacetime, as well as during war. Yardley asserted that it should inspire the U.S. government to support a post-war, peacetime SIGINT service similarly.<sup>63</sup>

If Yardley experienced exhilaration from his success collaborating with his British counterparts, he was deeply disappointed by his experience in Paris. He realized early during his visit to Paris “that France had no intention of permitting me to have even a peek into *La Chambre Noir*,” France’s premier SIGINT service. Yardley, however, deemed this setback inconsequential. With the war’s end, his role in Europe had changed. Yardley received orders to relocate to Versailles in order to support the U.S. mission to the approaching peace conference. There, Yardley reported to Colonel Van Deman, the newly appointed MID director.

Van Deman instructed Yardley to establish the intelligence infrastructure necessary to support the U.S. mission to Versailles. In turn, Yardley requested a handful

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<sup>63</sup> Ibid, 139-41.

of officers and field clerks from GHQ and secured two rooms for the intelligence branch at 4 Place de la Concorde, the U.S. delegation headquarters for the Paris Peace Conference. The expectations for his mission remaining largely undefined, Yardley prepared both to secure secret U.S. telegraphic communication and to solve intercepted foreign cables. His premier customers included retired U.S. General Tasker H. Bliss, who was the U.S. Permanent Military Representative to the Entente Supreme War Council and Plenipotentiary at the Paris Peace Conference, and U.S. Secretary of War Newton D. Baker, whose cables MI-8 encrypted, in addition to intelligence collectors serving Colonel House's diplomatic mission and the broader U.S. intelligence community at Versailles.

MI-8 targeted the secret telegraphic messages of Entente powers. Although Yardley did not address the degree of success, MI-8 in Washington provided strong support. For example, when the House mission's intelligence collectors required encryption to protect its privileged communication, Yardley cabled Washington detailed instructions describing the codes and ciphers required. MI-8 provided a separate encryption system for each collector within three weeks. Furthermore, the collectors in Europe usually prepared for their meetings in MI-8 spaces.

According to Yardley, MI-8 intercepted intelligence on a range of topics. One was a Serbian plan to annex Montenegro. Although the United States learned of the plot, neither America, nor Great Britain, nor France acted to prevent Serbia from following through. MI-8 also learned about the plans and intentions of foreign states to use female agents to provoke romantic encounters with foreign officials and then blackmail those officials. Yardley claimed that he even received a tip concerning "an Entente plot to

assassinate President Wilson either by administering a slow poison or by giving him the influenza on ice.” Yardley implied that the plot may have been executed, citing what he claimed were “undeniable facts”: “*President Wilson’s first sign of illness occurred while he was in Paris, and he was soon to die a lingering death.*”<sup>64</sup> It is virtually impossible to prove or, for that matter, disprove, Yardley’s claims. Regardless, because MI-8 did not conduct human intelligence operations, its involvement in these topics probably was limited to preparing it for transmission to Washington.<sup>65</sup>

Wilson’s arrival in Paris significantly reduced MI-8’s workload in Paris.<sup>66</sup> According to Yardley, at that point, “the whole Peace Conference now developed into one grand cocktail party.” Yardley used the respite to begin planning for a postwar SIGINT service:

Messages trickled in now and then from Washington about the status of MI-8. We were all dreaming now of a powerful peace-time Cipher Bureau, and at last, late in March, when it was obvious that MI-8 was rapidly disintegrating, General Churchill ordered me to proceed to Rome to see what information I could pick up there about codes and ciphers, and then to hurry to Washington to draw up plans for a peace-time organization.<sup>67</sup>

#### *Peacetime SIGINT*

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<sup>64</sup> Yardley’s italics.

<sup>65</sup> Dooley, *Codes, Ciphers and Spies*, 18.

<sup>66</sup> Bruce W. Bidwell, Colonel U.S. Army (retired), *History of the Military Intelligence Division, Department of the Army General Staff, 1775 – 1941* (Frederick, MD: University Publications of America, 1986), 247-249.

<sup>67</sup> Yardley, *The American Black Chamber*, 148-153. In his memoir, Yardley did not elaborate on what transpired in Rome or even whether he actually traveled there.

Following the Paris Peace Conference, Yardley disbanded his intelligence branch in Versailles and returned to the United States. On returning, he lamented: “When I reached Washington in April, 1919, I found MI-8 in a sad state,” and observed: “There were no funds available to hold the civilian cryptographers and clerks, and a great many of the officers were anxious to return to civilian life.” Yardley, however, intended to convert MI-8 into a new, peacetime SIGINT service. He believed that enough MI-8 intelligence officers would join the new SIGINT service based on the importance of the mission that it would pursue. Furthermore, Yardley argued that U.S. leaders, especially military leaders, “recognized that the Great Powers maintained Cipher Bureaus, and that if the United States was [Sic] to be placed on an equal footing it would be necessary to finance a group of skilled cryptographers.”<sup>68</sup> Furthermore, General Churchill supported the concept and had told Yardley that with the “added knowledge of codes and ciphers obtained abroad, MI-8 would have no equal in the science of cryptography.”<sup>69</sup>

Yardley met with officials at the Departments of State, War, and Navy, collectively his main consumer base, and elicited their intelligence requirements as he began designing MI-8’s peacetime successor.<sup>70</sup> This was an appropriate early step, since

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<sup>68</sup> Ibid, 155.

<sup>69</sup> Ibid, 148. Yardley’s account of the Cipher Bureau’s creation at the conclusion of the Great War is corroborated to some extent by written correspondence between Yardley and William F. Friedman who, as detailed earlier in this chapter, Yardley had encountered at Riverbank Laboratories. Portions of the letters will be examined in the following pages. The letters are available in the Records of the National Security Agency/Central Security Service, Record Group 49, the Herbert Yardley Collection, at the U.S. National Archives in College Park, Maryland.

<sup>70</sup> Bidwell, *History of the Military Intelligence Division, Department of the Army General Staff, 1775 – 1941*, 253.

an intelligence service exists in order to provide its consumers with the sensitive information that they require to understand and anticipate the activities, plans, and intentions of foreign adversaries and even allies. The new service's responsibilities would be narrower than those of MI-8. Yardley retained only the Code and Cipher Solution Section for the new service, which would be called the Cipher Bureau. The Cipher Bureau would be dedicated entirely to solving the codes and ciphers of foreign states.<sup>71</sup>

Yardley recommended that the Cipher Bureau's annual budget be at least \$100,000. Accordingly, the Department of State agreed to allocate \$40,000, derived from special funds, on the condition that the Navy Department would be excluded from the organization and that the new SIGINT service would be based outside of Washington. Then, once the Army Military Intelligence Division (hereinafter MID) had briefed Congressional leaders on the Cipher Bureau, Congress allocated the remaining \$60,000 to MID to fund the new SIGINT service.<sup>72</sup> Yardley established it in New York City and staffed it with clerks and cryptographers from MI-8.<sup>73</sup>

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<sup>71</sup> In excising intelligence responsibilities for the new service, Yardley disbanded the Shorthand Subsection and Secret-Ink Subsection; transferred the Code Compilation Subsection was to the Signal Corps, which, according to Army regulation, was required to compile codes and ciphers to protect U.S. telegraphic communications, and restored responsibility for Military Intelligence Communications to the Adjutant-General of the Army.

<sup>72</sup> The Army Military Intelligence Division, or MID, was the U.S. Department of War's intelligence service, within whose structure the War Department's different intelligence disciplines, including SIGINT, human intelligence, and counterintelligence were organized and pursued.

<sup>73</sup> That the Department of State financially supported the Cipher Bureau, which formally resided under MID, may appear surprising a century after the fact. MI-8, however, had provided vital intelligence support to the State Department during the Great

Recognizing his talent in the field of cryptography, Yardley attempted to recruit William F. Friedman to join the Cipher Bureau. Beginning with a handwritten letter dated April 28, 1919, Yardley asked Friedman to join the Cipher Bureau as a cryptanalyst. He offered Friedman an annual salary of \$3,000 and, recognizing that both would be valuable acquisitions, also offered Friedman's spouse, Elizebeth, a job, at \$1,520 per year. Friedman initially accepted the offer but, then, delayed formally accepting it.<sup>74</sup>

In the end, William Friedman refused Yardley's offer. Instead, he sought a War Department appointment that would enable him to remain at Riverbank Laboratories.

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War and the Paris peace negotiations and there was no comparable intelligence service available outside of ONI, which the Department of State specifically mandated must not be affiliated with the Cipher Bureau.

<sup>74</sup> April 28, 1919 letter from Herbert O. Yardley to William F. Friedman. U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17; May 18, 1919 letter from William F. Friedman to Herbert O. Yardley. U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17; June 16, 1919 letter from Herbert O. Yardley to William F. Friedman. U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17; July 1, 1919 telegram from Herbert O. Yardley to William F. Friedman. U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17; Undated telegram from Herbert O. Yardley to William F. Friedman. U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17; August 14, 1919 letter from Herbert O. Yardley to William F. Friedman. U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17; October 16, 1919 letter from Major Joseph Oswald Mauborgne to William F. Friedman. U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17.

General Mauborgue, however, refused to accede to Friedman's request. Mauborgne instead observed that the War Department's Code and Compilation Section had not developed according to plan and wrote to Friedman that he was the only remaining candidate suitable to run it. Friedman, however, indicated that he did not want to seek a commission as a military officer, preferring to avoid taking the requisite examination, whereupon Mauborgue suggested that he accept a position as a civilian employee, which Friedman eventually did.<sup>75</sup>

Yardley staffed and opened the Cipher Bureau in New York City. "Practically all contact with the government was now broken," Yardley recalled. "All the employees, including myself, were now civilians on secret pay-roll. The rent, telephone, lights, heat, office supplies – everything was paid for secretly so that no connection could be traced to the government." Yardley had his peacetime SIGINT service. The Cipher Bureau would intercept and decrypt the secret communications of foreign governments in order to provide U.S. policy makers and military leaders with SIGINT concerning the activities, plans, and intentions of foreign states.<sup>76</sup>

The Cipher Bureau's cover company, the Code Compiling Company, was a private firm that produced commercial code systems for other private companies. It published Yardley and Charles Mendelsohn's *Universal Trade Code* journal, and located in the Cipher Bureau's front spaces. Yardley and Mendelsohn founded the company with \$500

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<sup>76</sup> Hereinafter, throughout this chapter, the reader should consider "Cipher Bureau" and "Black Chamber" synonymous with one another. Each name represents the SIGINT organization that Herbert Yardley created and directed from 1919 until 1929 in New York City.

in capital and each owned 49 percent of its stock.<sup>77</sup> It justified Cipher Bureau's existence, while cloaking its actual purpose.

One important issue, however, still required resolution. With the war's end the government's censorship of telegrams ceased. Private companies again supervised their own telegrams without government oversight or restrictions. Consequently, Yardley had to figure out how to obtain the cables that the Cipher Bureau must solve, recalling: "We employed guards, replaced all the locks and were ready to begin our secret activities. But there were now no code and cipher telegrams to work on!" Although he did not provide direct insight in his memoir concerning how the Cipher Bureau acquired cables for decryption, soon it was deciphering secret Soviet transmissions. Yardley observed that these were far more difficult to solve than the codes and ciphers that MI-8 had encountered during the war.

#### *Targeting Japan's Diplomatic Codes and Ciphers*

"By July, 1919, we were all comfortably seated behind bolted doors, and had begun the work of attempting to make ourselves indispensable to the United States Government," Yardley recalled of the Cipher Bureau's first days in its Brownstone building in New York City. Yardley noted that he had "assigned the diplomatic code and cipher telegrams of various governments to different groups of cryptographers, and had

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<sup>77</sup> Kahn, *The Reader of Gentlemen's Mail*, 83. A more detailed examination of Charles Mendelsohn's role in the Code Compiling Company and his broader relationship with Yardley is available in David Kahn, *How I Discovered World War II's Greatest Spy and other Stories of Intelligence and Code* (Boca Raton, FL: CRC Press, 2014), Chapter 25, "Charles J. Mendelsohn and Why I Envy Him."

for myself selected the most difficult task of deciphering those of the Japanese government.”<sup>78</sup>

U.S. relations with Japan had been complicated since U.S. Commodore Matthew Perry and his “Black Ships” opened Japan in 1853. U.S. civilian and military leaders were concerned about Japanese ambitions in the Asia-Pacific region vis-à-vis U.S. interests there.<sup>79</sup> Yardley had acquired “about one hundred Japanese diplomatic code messages from and to different Japanese posts throughout the world.” He intended to solve these messages as a gateway to breaking Japan’s diplomatic encryption system. When Yardley’s customers in Washington, whom he described as “especially concerned about the Japanese codes,” urged him to “turn all my efforts to the unraveling of Japanese secrets,” he pledged that within one year he would succeed.<sup>80</sup>

For five months, Yardley worked intermittently to solve Japan’s diplomatic cipher until, in July 1919, he launched “a serious and methodical analysis” of the intercepts. General Churchill frequently visited New York to receive progress reports on the Cipher Bureau’s high-priority tasking. Finally, the Cipher Bureau solved the Japanese diplomatic cipher which, he assessed, pleased Churchill and other senior officials in Washington greatly.<sup>81</sup> The breakthrough swiftly produced dividends. Intercepts yielded

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<sup>78</sup> Yardley, *The American Black Chamber*, 163.

<sup>79</sup> For an extensive account regarding United States war planning concerning Japan during the first half of the twentieth century, refer to Edward S. Miller, *War Plan Orange: The U.S. Strategy to Defeat Japan* (Annapolis, MD: Naval Institute Press, 1997).

<sup>80</sup> Yardley, *The American Black Chamber*, 163.

<sup>81</sup> *Ibid*, 163-179.

important information concerning early planning by the British and Japanese for an international conference, which eventually developed into the 1921-1922 Washington Naval Disarmament Conference.

“The first telegram we deciphered which pointed definitely to the opening of the Pacific Conference between the Great Powers to settle disputes in the Far East was telegram No. 813, dated July 5, 1921, from the Japanese Ambassador in London to his home government in Tokio [Sic],” Yardley recounted in *The American Black Chamber*.<sup>82</sup> The cable conveyed the substance of a recent discussion between Great Britain’s Lord John Curzon, then Secretary of State for Foreign Affairs, and the Japanese Ambassador to Great Britain, Baron Hayashi Gonsuke. The main topic was the Anglo-Japanese Alliance, a priority issue for U.S. leaders. Curzon had attempted to convince Hayashi that Japan, Great Britain, and the United States should conduct a “Pacific Conference” to settle common Pacific Basin issues, and invite China, France, and South American states also to participate. Curzon initially wanted to learn Japanese priorities from his counterpart in order to communicate them to U.S. Ambassador to Great Britain George Harvey.

Hayashi conveyed Curzon’s proposals to Tokyo and assessed that Curzon represented the British government’s perspective. Hayashi argued that, although the U.S. government’s outlook regarding a potential conference remained unclear, it would participate if Japan agreed to Great Britain’s proposals. Then, in telegram no. 825, transmitted three days later from London to Tokyo, Hayashi reported that Curzon had

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<sup>82</sup> Ibid, 187.

suggested to Ambassador Harvey that the United States should host a Pacific Conference and invite Japan, Britain, France, and China. Curzon had suggested to Hayashi that the conference should appear to have been a U.S. rather than British idea.<sup>83</sup> From the British perspective, if the United States proposed and hosted the conference, Great Britain would appear less responsible for any damage to the Anglo-Japanese Alliance resulting from the conference.

In Japanese diplomatic cable no. 386, transmitted on July 10 from Washington to Tokyo, Hayashi detailed the U.S. proposal for a conference “on the question of reduction of armaments,” hosted by United States. According to the Hayashi, U.S. Secretary of State Charles Evans Hughes sought the Japanese government’s opinion regarding the concept, whereupon Hayashi pressed Hughes regarding whether “reduction of armaments” would also apply to the Japanese Army. Hughes affirmed that it would, Hayashi reported. Then, as Japan carefully considered the prospect of participating in such a conference, the Japanese Ambassadors in Paris, London, and Washington urged Tokyo to decide soon whether to participate and asked repeatedly how they should approach the subject with their host governments. Ultimately, Japanese leaders determined that they must participate. Failure to do so would open Japan to the charge that it had refused seeking diplomatically to reduce tension in the Asia-Pacific region.

The Cipher Bureau solved these messages, providing U.S. policy makers crucial insight into the Japan’s deliberations regarding the potential conference as well as into the Anglo-Japanese diplomatic relationship. Furthermore, the Cipher Bureau had

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<sup>83</sup> Ibid, 188.

managed to solve 16 succeeding Japanese diplomatic ciphers.<sup>84</sup> Then, Japan's Foreign Ministry introduced a new cipher that the Cipher Bureau could not so easily break; but, after six weeks of consternation and hard work, Yardley's team solved it and recommenced delivering valuable intelligence to Washington consumers.<sup>85</sup> The intelligence provided invaluable, detailed insight into Japanese plans, intentions, and assumptions regarding the United States, Great Britain, and the Asia-Pacific region. It enabled U.S. officials to plan their approach to the approaching conference and to ensure particularly that it would be advantageous to U.S. policy goals.<sup>86</sup>

Dramatizing the Cipher Bureau's performance during this period, Yardley recalled a decade later:

Thousands of messages pass through our hands. The Black Chamber, bolted, hidden, guarded, sees all, hears all. Though the blinds are drawn and the windows heavily curtained, its far-seeking eyes penetrate the secret conference chambers at Washington, Tokio [Sic], London, Paris, Geneva, Rome. Its sensitive ears catch the faintest whisperings in the foreign capitals of the world.<sup>87</sup>

Yardley, however, was concerned on the eve of the Washington Conference: "At New York, the Black Chamber trembles lest new codes be suddenly installed. It establishes swift courier service to and from Washington, and awaits the opening gong."<sup>88</sup> This fear

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<sup>84</sup> Army Security Agency, Washington, D.C., "Japanese Codes and Ciphers, 1919-1929" (U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17), 25.

<sup>85</sup> Ibid, 28.

<sup>86</sup> Yardley, *The American Black Chamber*, 193-197.

<sup>87</sup> Ibid, 202.

<sup>88</sup> Ibid, 199-203.

was not unfounded and perennially has been the fear of practitioners in every SIGINT service.

Secretary of State Charles Evans Hughes opened Washington Conference on November 11, 1921, at the Pan-American Building in Washington. From the start, Hughes called for parity between the United States and Great Britain in total naval capital ship tonnage and for Japan to be limited to 60% of the capacity of each, or a 5:5:3 ratio. On November 14, the Committee on Limitation of Armament convened for the first time in order to consider this issue. Representatives of the United States, Britain, Japan, France, and Italy attended, and Hughes chaired the meeting. The ensuing deliberations occurred in secret.

On November 16, the committee discussed the proposed 5:5:3 ratio. Japan countered with 10:10:7 ratio and, in a press release, Japan's Chief Commissioner Plenipotentiary, Marshall-Admiral Viscount Kato Tomosaburo, Japan's delegate to the committee, argued that a 10:10:7 ratio was vital to Japan's national defense. Kato also contended that the Japanese Navy was already dedicated to that ratio, while Hughes insisted that the U.S. proposal was based on the existing naval strength of each country concerned.

The Cipher Bureau provided intelligence reporting from Japanese diplomatic intercepts throughout the negotiations until, on November 28, it decrypted what according to Yardley was "the most important and far-reaching telegram that ever passed through its doors." In the cable, Tokyo informed its mission in Washington that Japan would accept the 5:5:3 ratio if it must, "provided the status quo of the Pacific defenses are maintained." The Japanese Foreign Ministry explained: ". . . we are of the opinion

that it is necessary to avoid any clash with Great Britain and America, particularly America, in regard to the armament limitation question.” Therefore, the Foreign Ministry instructed, “in case of inevitable necessity you will work to establish your second proposal of 10 to 6.5.” Tokyo, however, suggested that it would permit a 5:5:3 ratio.<sup>89</sup>

Finally, on December 28, in an URGENT and VERY CONFIDENTIAL cable, Tokyo authorized Kato to accept the 5:5:3 ratio. Realizing that Great Britain would not support Japan’s negotiating position, the Japanese Foreign Ministry lamented: “It is therefore left that there is practically no prospect of carrying through this contention” that a 10:10:7 ratio “was absolutely necessary to guarantee the safety of the national defense of Japan.”<sup>90</sup>

As Yardley’s biographer, cryptography historian David Kahn, observed of Japan’s acquiescence: “Good relations with the United States were more important than the battleship and a half that the greater ratio would have given it – and which it concluded it would not get anyway.”<sup>91</sup> The Cipher Bureau’s intelligence had enabled Secretary Hughes and his team to secure the best agreement possible. According to Yardley, for their good service, the Cipher Bureau’s clerks and cryptanalysts received Christmas bonuses as 1921 concluded, which was rare for federal employees. The Cipher Bureau’s cryptanalysts had performed admirably, decrypting, translating, and rushing to U.S.

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<sup>89</sup> Ibid, 208.

<sup>90</sup> Ibid.

<sup>91</sup> David Kahn, *The Reader of Gentlemen’s Mail: Herbert O. Yardley and the Birth of American Codebreaking* (New Haven: Yale University Press, 2004), 79-80.

diplomats in Washington more than 5,000 sensitive Japanese diplomatic intercepts, delivering meaningful and actionable intelligence products.<sup>92</sup>

Exhausted from weeks of hard work, in February 1922 Yardley convalesced for several weeks in Arizona. He returned to New York in June only to discover his “most valuable assistant in a frightful condition.” In Yardley’s absence, the individual had been working sixteen-hour days and “talked incoherently, with a strange light in his eyes.” Yardley advised him to take an extended break, but on returning the man ended his career in cryptography.

This chief assistant was probably Frederick Livesey, Yardley’s foremost cryptanalyst focusing on Japanese codes and ciphers, who left the Cipher Bureau shortly after the Washington Conference. During the 1930s, when the War Department produced an 83-page examination of the Cipher Bureau’s performance from its opening in 1919 through its termination in 1929, titled “Japanese Codes and Ciphers, 1919-1929,” the War Department’s researchers interviewed Livesey extensively.<sup>93</sup> They compared Livesey’s account of the Washington Conference to Yardley’s version in his memoir, especially regarding the solution of the sixteenth cipher, which Japan had introduced on the eve of the conference and which required 40 days to solve.

Livesey believed that Yardley did not afford him adequate recognition for his contribution to solving the cipher. Yardley credited the Cipher Bureau’s cryptanalysts

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<sup>92</sup> Ibid.

<sup>93</sup> Army Security Agency, Washington, D.C., “Japanese Codes and Ciphers, 1919-1929,” U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17.

broadly in his reports to officials in Washington but, in “Japanese Codes and Ciphers, 1919-1929,” Livesey claimed sole credit for the success. He argued in a footnote in the report: “The work was all mine, as I remember it, and [the solution] took a week from the first message.”<sup>94</sup>

Regardless of who was correct, the War Department honored Yardley and the Cipher Bureau’s cryptanalysts and clerks for their contribution concerning the Washington Conference. For his part, Yardley received the Distinguished Service Medal. Notably, the statement accompanying the award did not refer to the Cipher Bureau’s contribution to the Washington Conference, since the service’s profile had to remain low. Instead, it encompassed Yardley’s intelligence career beginning during the Great War.<sup>95</sup> In describing these events, Yardley highlighted how seriously his superiors in Washington took the Cipher Bureau’s CI profile.<sup>96</sup>

Yardley did not dedicate himself as strongly as he should have to remaining unknown, summarizing his exposure to foreign intelligence services in the following summary: “As Chief of MI-8 my name was known in every corner of the earth, for I had to sign all letters dealing with codes and ciphers,” he claimed. “Aside from this I was well known to English, French and Italian cryptographers during the war, as the Chief of MI-8.” Furthermore, he rationalized: “If a foreign government wished to find out

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<sup>94</sup> Army Security Agency, Washington, D.C., “Japanese Codes and Ciphers, 1919-1929” U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 1. Documents 1-17, 29.

<sup>95</sup> Kahn, *The Reader of Gentlemen’s Mail*, 81-82.

<sup>96</sup> Yardley, *The American Black Chamber*, 212-16.

whether the United States still maintained a Cipher Bureau, the first thing their secret agents would do would be to locate me, and of course my address was on file with the Adjutant-General of the Army.” Yardley claimed to have maintained low profile in New York City to reduce his and the Cipher Bureau’s CI profile: “My name was not permitted in the telephone book, mail addressed to me was through a cover-address, etc.” Yardley, however, disagreed with these measures, arguing: “It was really useless to attempt to hide my whereabouts, but as the attempt seemed to please Washington, I made no protests.”

In 1923, Congress reduced Department of State’s fiscal year 1924 budget by five percent and the War Department’s budget ten percent.<sup>97</sup> Ultimately, MID cut the Cipher Bureau’s budget from \$50,000 to \$35,000. A year and a half had passed since the Washington Conference and, even in his memoir, the normally self-promoting Yardley did not claim significant success during that interlude.<sup>98</sup>

The Cipher Bureau lost 10 of 16 of its staff due to the budget reduction. Livesey resigned during this period, in part because he believed he was underpaid. He accepted a job as an economist with the Department of State. Another cryptanalyst, Serena Laning, who knew Japanese, a language critical to the Cipher Bureau’s mission, was laid off. So was Claus Bogel, who accepted a position in the U.S. Navy’s Code and Signal Section before moving on to work in the Library of Congress Reference Room. Following these losses, only Yardley and three other cryptanalysts remained. Then, on October 24, 1923, Yardley moved the Cipher Bureau from its original 37th Street Brownstone into smaller, less expensive spaces in an office building at 52 Vanderbilt Avenue, near Grand Central

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<sup>97</sup> The fiscal year 1924 budget commenced on 1 July 1923.

<sup>98</sup> Kahn, *The Reader of Gentlemen’s Mail*, 82.

Station. Notably, Yardley received a \$600 raise and \$150 housing allowance so that he and his wife could rent an apartment in Queens.<sup>99</sup>

### *The End of the Reading Gentlemen's Mail*

Securing the cables that the Cipher Bureau was expected to solve presented a consistent challenge for Yardley. The British, German, and French governments passed laws enabling their SIGINT organizations to obtain cables entering and leaving their respective borders even during peacetime. The U.S. government passed no such law. Consequently, Yardley initially relied on telegram firms to provide cables voluntarily. For the telegram companies, however, potential legal consequences for assisting the Cipher Bureau outweighed possible benefit. By the mid-1920s, the patriotism inspired by the Great War having faded, Yardley claimed that he even paid cash bribes to clerks at the major telegraph companies, such as Postal Telegraph, Mackay Radio, All-America Cable, and Western Union, in order to secure cables.<sup>100</sup>

The Cipher Bureau continued to target Japanese secret communication in the second half of the 1920s, but the efforts yielded largely routine information. The Cipher Bureau produced just one more success against Japanese secret communications when, in 1924, Edna Hackenberg, a Cipher Bureau clerk, posited that Japanese diplomats were transmitting the content of *New York Times* articles to Tokyo in encrypted cables using a particular cipher. Identifying the articles in their encrypted form enabled Cipher Bureau

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<sup>99</sup> Yardley and his spouse previously had lived on the top floor of the original Cipher Bureau spaces.

<sup>100</sup> Kahn, *The Reader of Gentlemen's Mail*, 84.

cryptanalysts to solve the system. In the end, however, the telegrams did not contain useful information.<sup>101</sup> Finally, during the 1927 Anglo-Japanese-American conference in Geneva, Switzerland, via which U.S. diplomats intended to build on the 1922 Washington Treaty, the Cipher Bureau failed to solve anything. U.S. negotiators likewise failed in their objectives to limit the Japanese and British navies.<sup>102</sup>

The Cipher Bureau never again experienced the kind of success it had delivered in 1921-22, against Japanese codes and ciphers. The significant 1924 budget cuts were never reversed and the departure of skilled cryptographers, especially Livesey and Laning, crippled the service's cryptanalytic capacity. Furthermore, Japan received valuable cryptologic training from Captain Jan Kowalewski, a skilled Polish cryptographer, who eliminated some of the ways through with Yardley's cryptanalysts had solved Japanese encryption systems.<sup>103</sup>

In July 1928, Major Owen S. Albright assumed command of MID's communications division, to which the Cipher Bureau was subordinate. Consistent with his duties, Albright examined the Cipher Bureau's composition and performance. In the end, he concluded that the Cipher Bureau was not addressing the military's intelligence requirements; rather, it was providing SIGINT support predominantly to the Department of State. "The expert staff of three were getting older each day and there was no arrangement for replacement or addition by young blood," Albright observed.

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<sup>101</sup> Ostensibly, these cables would have included merely the content of *New York Times* articles, which was open-source, publicly available information.

<sup>102</sup> Ibid, 84-85.

<sup>103</sup> Ibid, 86-87.

Furthermore, the Cipher Bureau was not training cryptanalysts for wartime service which, he maintained, had been one of MID's chief reasons for establishing it.

In a memorandum dated April 4, 1929, Albright suggested that the War Department reorganize its broader SIGINT structure. He recommended that the Secretary of War create a broader SIGINT structure that would be implemented during war. The three main cryptographic elements that Albright proposed, which would reside within a single organization, were: Military Intelligence for solving foreign intercepts; a Signal Corps for solving codes and ciphers; and the Adjutant General for the printing, storage, and issuance of cryptosystems. On May 10, the Army released Changes No. 1 to Army Regulations 105-5, which charged the Chief Signal Officer with responsibility "in time of war" for "the solution of intercepted enemy code and cipher messages," fundamentally conflicting with Yardley's role as chief of MID's cryptanalysis.<sup>104</sup>

In 1929, incoming President Herbert Hoover appointed Henry L. Stimson Secretary of State. By then, the Cipher Bureau's significant 1921-1922 achievements had been forgotten. The service's reduced budget had deprived it of vital resources, particularly the cryptanalysts and clerks essential to its success, and Yardley was not as attentive to his Cipher Bureau duties. Furthermore, the world seemed to have changed. The Great War was a distant memory and U.S. leaders relied on an arms reduction agenda and other diplomatic objectives in order to prevent future conflicts. Ultimately, the Cipher Bureau had failed to justify its existence.

During Stimson's first three months in office, as he became acquainted with his position, State Department officials did not brief him on the Cipher Bureau's existence.

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<sup>104</sup> Ibid, 94-95.

Then, in June 1929, when the Cipher Bureau solved what Yardley deemed “a series of important code messages,” Yardley “suggested that this presented an opportune moment to acquaint the new Secretary with our skill.” Unfortunately for Yardley, Stimson was unimpressed with the material. Yardley learned that Stimson had asked how the telegrams had been acquired and, on being briefed about the Cipher Bureau, ordered that Department of State cease funding it. Yardley observed: “This of course spelled the end of the Black Chamber which was now supported almost totally by State Department funds.”<sup>105</sup>

Stimson based his decision on a principal that he endeavored to maintain in his new position: “The chief lesson I have learned in a long life is that the only way you can make a man trustworthy is to trust him; and the surest way to make him untrustworthy is to distrust him and show him your distrust.” Stimson added: “We will do better by being an honest simpleton in the world of nations than a designing Sherlock Holmes.”<sup>106</sup>

Stimson’s longtime friend and new Undersecretary of State, Joseph P. Cotton, agreed that the Cipher Bureau’s mission was “highly unethical.” Importantly, Stimson was not opposed to the Army or Navy collecting SIGINT. He argued: “If we have to do it, it would be far less a mistake to do it through our military and naval services than to do it through our State Department . . . .” He asserted that diplomats “are the only class of officers who are supposed to deal internationally on a gentlemen’s basis” and that “the Secretary of State doesn’t act as a spy on the people he is receiving as brothers.” Finally,

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<sup>105</sup> Yardley, *The American Black Chamber*, 247-49.

<sup>106</sup> Kahn, *The Reader of Gentlemen’s Mail*, 97-98.

Stimson famously proposed: “Gentlemen don’t read each other’s mail.” Accordingly, when its funding expired on October 31, 1929, the Cipher Bureau closed.<sup>107</sup>

William F. Friedman played an active role in removing Yardley as a rival in the U.S. cryptography community. He took the lead in crafting an offer through which Yardley might be retained, although Yardley would have been paid less than half of what he had received to direct the Cipher Bureau and substantially less than the War Department by then paid Friedman. Yardley refused, which Friedman and other War Department officials had expected. Then, in October 1929, as director of the Army’s new Signal Intelligence Service (hereinafter SIS), Friedman traveled to the Cipher Bureau’s offices in New York City, collected those documents that Yardley had left behind, and brought them to Washington for secure storage.<sup>108</sup> Thus, Friedman had arranged for Yardley’s departure and appropriated his documentary legacy.

The Cipher Bureau cost the U.S. Department of State a total of \$230,404 and the Department of War all of \$98,808.49, which added up to a half-cent for every American during the service’s existence over approximately a decade. It had received limited resources and had failed to provide warning or insight regarding major international events, such as the 1922 Rapallo Treaty between Germany and the Soviet Union, the 1923 Franco-Belgian invasion of Germany’s Ruhr Valley and the ensuing economic collapse of the German financial system, and the war scare between Britain and Russia in

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<sup>107</sup> Ibid, 98-99.

<sup>108</sup> According to the proposal, Yardley would be offered an annual salary of \$3,750. Friedman’s annual salary was \$5,600, substantially less than what Yardley had been paid during his tenure running the Cipher Bureau. Kahn, *The Reader of Gentlemen’s Mail*, 100.

1927. Notably, however, no one else among the U.S. intelligence or diplomatic communities warned policy makers of these approaching developments and U.S. leaders failed adequately to equip, empower, and use the intelligence community in order for it to do so. The Cipher Bureau had never been afforded the resources necessary in order to pursue a global SIGINT challenge effectively. Possibly, no one, including Yardley, even comprehended the global challenges to U.S. interests that had emerged by then.<sup>109</sup>

A memorandum from the Office of the (Army) Chief of Staff, Washington, dated July 17, 1929, prepared by Major O. S. Albright, General Staff and addressed to Major General George S. Gibbs, Army Chief Signal officer, detailed Yardley’s July 1929 modest staffing and payroll:

|                     |                   |
|---------------------|-------------------|
| Alice Dillon        | \$110             |
| Marguerite O’Connor | 150               |
| Edna Ramsaier       | 133.33            |
| Victor Weiskopf     | 305               |
| Ruth Wilson         | 312.50            |
| H. O. Yardley       | 625               |
| Rent                | 250               |
| Petty Cash          | 15 <sup>110</sup> |

In 1921-1922, the Cipher Bureau focused on one target in Japan and produced tremendous results. The Cipher Bureau did not succeed against the codes and ciphers of

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<sup>109</sup> Kahn, *The Reader of Gentlemen’s Mail*, 101.

<sup>110</sup> Memorandum from Major O. S. Albright, General Staff, to Major General George S. Gibbs, dated July 17, 1929 (U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 99. Documents 186-199. The memorandum indicated that the Cipher Bureau would be paid through the end of October 1929. Until November 1, General Gibbs and the Signal Intelligence Service (hereinafter SIS) would supervise the employees. Albright “had no doubt that Friedman will have definite ideas as to what final work they should be put at until November 1, such as the collection of data in tabulated form, etc.”

other states participating in the conference, gaining insight into Great Britain's activities, plans, and intentions related to the Washington Conference, for example, only through Japanese cables.

In 1931, having lost his Cipher Bureau income, as well as what he earned from real estate speculation due to the Great Depression's onset, Yardley published his memoir of his career in cryptography, *The American Black Chamber*. The memoir detailed his experiences with the Departments of State and War, including his time in the Department of State Code Room, his creation and direction of MI-8 during the Great War, and his exploits directing the Cipher Bureau. The book ended with an account of Stimson's 1929 termination of the Cipher Bureau. The most compelling section of Yardley's memoir concerned the Cipher Bureau's greatest success, during the Washington Conference. The book proved a sensation in the United States and in foreign capitals, especially Tokyo. It earned Yardley the resentment of William F. Friedman who, by the time of the book's publication, already had arranged with MID leaders to terminate the Cipher Bureau and ensure that the U.S. government no longer employed Yardley.<sup>111</sup>

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<sup>111</sup> Importantly, Major Owen S. Albright's determination that the Cipher Bureau was not adequately addressing the War Department's intelligence requirements and the Department of State's cession of funding to the service preceded Yardley's publication of *The American Black Chamber* by approximately two years. Although Friedman deeply resented Yardley's publication of highly classified information in the memoir, he had already arranged for the creation of the Signal Intelligence Service, which he directed, and for SIS to assume the Cipher Bureau's cryptanalytic responsibilities. Friedman had also already trained SIS's first cryptographers by the time that Yardley published his memoir. Ultimately, Friedman had already undertaken to remove Yardley as a competitor in the field of U.S. government cryptography before he could Yardley's publication of classified information could provide a justification for acting against Yardley's interests so severely. *The American Black Chamber*, however, may have provided Friedman with further reason to resent Yardley.

Friedman annotated a copy of *The American Black Chamber*, highlighting parts where, Friedman charged, Yardley had exaggerated his accomplishments or even outright fabricated information. Friedman appears to have elicited feedback concerning Yardley's memoir from individuals involved in the events that Yardley had recounted. Annotations scrawled across an early page in the book indicate the positions those who provided feedback held in U.S. intelligence community during Yardley's tenure as Cipher Bureau director. According to the annotations, Friedman himself was a "member of code solving section, G2 – A6, GHQ – AEF"; A. J. McGrail was "in charge of secret ink section, Captain, MID, Washington during World War [I]"; Charles J. Mendelsohn was "in charge of German diplomatic code solving section, MID, Washington"; Frank Moorman was "chief of Radio Intelligence Section, G2 – A6 GHQ – AEF"; and Frederick Livesey was "in charge of Japanese code solving section, MID, from 1919-1923."<sup>112</sup> Friedman interviewed these individuals and others, who worked for Yardley either in MI-8 or the Cipher Bureau, about Yardley and the two intelligence services that he had directed. The hand-written annotations in the book presumably were based on these interviews.

Friedman, Livesey, and perhaps other contributors to the annotations were highly critical of Yardley and, demonstrating his goal of undermining Yardley's credibility, Friedman included his intentions: 1. "To prove Yardley a liar in regard to the inadequacy of the AEF field codes (p. 42-46)"; 2. "To show how Yardley colored up each story to

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<sup>112</sup> Herbert O. Yardley, *The American Black Chamber*, with Friedman's annotations, 3.

suit himself (p. 57, message re secret inks)”; 3. “To show how Yardley compresses 3 months into 24 hours (p. 140 et seq.).”<sup>113</sup>

Based on information that A.J. McGrail provided him in 1942, Friedman also alleged that a ghostwriter wrote *The American Black Chamber*. According to Friedman, McGrail “had it on most excellent authority that this book was actually ‘ghostwritten’ by an AT&T Co engineer called Clem Koukul, who received \$1000 for his work,” Friedman recorded. “I don’t know Koukul but feel sure Y had much help in writing, from somebody. W.F.F. 1945.”<sup>114</sup>

Yardley’s memoir certainly was sensational. He probably exaggerated his achievements in *The American Black Chamber* while minimizing or even ignoring his failures. Clearly, however, Friedman was determined to diminish Yardley’s reputation and did not permit an absence of evidence to limit the endeavor. For his part, Yardley did not have an opportunity to defend himself against the charges and his publication of classified information diminished his credibility with the U.S. intelligence community. Finally, in spite of his hostility toward Yardley and significant contribution to the Cipher Bureau’s destruction, with Yardley’s departure, Friedman saw fit personally to assume control of the Cipher Bureau’s files.

Despite the Cipher Bureau’s termination and his publication of *The American Black Chamber*, Yardley was not quite finished in the SIGINT business. In the late 1930s, he directed Chiang Kai-Shek’s Nationalist Chinese regime’s SIGINT operations against Japan with some success. Chronicling this experience, Yardley wrote *The Chinese Black*

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<sup>113</sup> Ibid, 8.

<sup>114</sup> Ibid, 9.

*Chamber: An Adventure in Espionage*, which was not published until September 1983, well after his August 7, 1958, death. Yardley also wrote *Japanese Diplomatic Codes, 1921-1922*. Although the U.S. government seized the manuscript and prevented its publication, it was finally declassified in 1979. Friedman even sent SIS cryptographer Frank B. Rowlett, a major focus of Chapter Two, to interview Yardley on his return from China, so that SIS could learn from his experiences. Friedman had refused to meet with Yardley but, nevertheless, desired to learn what he could from him. Finally, between June and December 1941, Yardley stood up a cryptologic section for Canadian intelligence, called the Examination Unit. He directed the Examination Unit until the U.S. government demanded that Canada discharge him.

Herbert Yardley was self-serving and arguably promoted his personal interests too much during much of his tenure leading MI-8 and the Cipher Bureau. Yardley, however, proved to be a skilled cryptographer, creating and leading two unprecedented intelligence services that at times performed estimably. He earned SIGINT an important position in the U.S. intelligence community, improving the quality of the codes and ciphers protecting sensitive U.S. telegraphic communications and demonstrating to policy makers the tremendous advantage that SIGINT could provide as they negotiated with foreign governments and crafted policy. The Cipher Bureau's success in 1921-22 against Japan remains his premier accomplishment.

Friedman reserved considerable enmity for Yardley before the latter published his controversial memoir. Indeed, he was instrumental in effectively replacing the Cipher Bureau with SIS and Yardley with himself. Then, in the early 1930s, Friedman memorialized his antipathy for Yardley via the annotations in his personal copy of *The*

*American Black Chamber*. In the end, although Friedman's Army Signal Intelligence Service (hereinafter SIS) outperformed the Cipher Bureau, Yardley's contribution to U.S. intelligence during the 1920s remains significant and probably contributed to SIS's success.<sup>115</sup> While the Cipher Bureau was solving secret Japanese cables and delivering timely and impactful intelligence to U.S. negotiators during the Washington Conference, in spring 1922 Friedman's Army Signal Corps was attempting to breed pigeons with parrots at its Pigeon Breeding and Training Center at Fort Monmouth, New Jersey, and in April 1922 staged a pigeon race from Portland, Oregon, to San Francisco, California, in order to see whether a pigeon could convey a message faster than an airplane.<sup>116</sup> At least until the 1930s, the distinction between the two men's importance and achievements was stark.

When Yardley published the Cipher Bureau's most important secrets in *The American Black Chamber*, however, Yardley earned Friedman's contempt or, perhaps, finally provided justification for resentment that Friedman already reserved for his rival. Yardley argued that the U.S. government signaled that it did not value the Cipher Bureau's achievements when it terminated the SIGINT service. Clearly rationalizing, he claimed, furthermore, that in publishing the book he had intended to alert U.S. public that its government had abandoned the pursuit of intelligence vital to national security. He also argued that he needed the money that the book's sales would earn him. Nearly seven

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<sup>115</sup> The U.S. government's failure adequately to support the Cipher Bureau may have led to greater sustained War Department support for SIS.

<sup>116</sup> Rebecca Robbins Raines, *Getting the Message Through: A Branch History of the Army Signal Corps* (Washington, D.C.: Government Printing Office, 1996), 222.

years before the memoir's publication, however, in an October 22, 1924, letter to Major C. M. Milliken, Yardley had indicated that he understood that what he did seven years later was unjustifiable: "Ever since the war I have consistently fought against disclosing anything about codes and ciphers. My reason is obvious: it warns other government of our skill and makes our job more difficult."<sup>117</sup> Regardless of how poorly he had been treated, how inadequately the government had supported the Cipher Bureau during most of its tenure, and in spite of the absence of a law prohibiting the publication of state secrets, Yardley knew that by publishing his memoir he would release to the world extremely sensitive U.S. national security information. It is difficult not to conclude that was actually his premier objective.

In the end, however, regardless of Friedman's campaign to characterize Yardley as irresponsible, dishonest, and even disloyal, Yardley and his considerable accomplishments have endured in the lore of American cryptology. He earned a privileged place in the NSA Hall of Honor, and the books on cryptography that he collected and the documents that he and the Cipher Bureau received and produced reside in the U.S. National Archives in the "Herbert O. Yardley Collection," in College Park, Maryland.

Herbert O. Yardley advanced U.S. cryptography and provided a legacy on which his successors, beginning with Friedman, capitalized, particularly regarding the Japanese diplomatic section of SIS, as it pursued solutions to increasingly complex Japanese

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<sup>117</sup> September 22, 1924 letter from Herbert O. Yardley to Major C. M. Milliken. U.S. National Archives, College Park, Maryland. Record Group (RG) 457. Records of the National Security Agency/Central Security Service. Herbert Yardley Collection. Box 99. Documents 186-199.

diplomatic codes and ciphers during the 1930s and 1940s and produced unprecedented success.

## Chapter Two

### “Magic”: The Army Signal Intelligence Service’s Pursuit of Japan’s Diplomatic Codes and Ciphers, 1930-1941

Exceptional among the achievements of United States Intelligence between the First and Second World Wars was the U.S. Army Signal Intelligence Service’s (hereinafter SIS) solution of the most advanced diplomatic code and cipher systems of the Japanese Foreign Ministry during the 1930s and early 1940s, particularly the two successive Japanese diplomatic cipher systems that SIS dubbed RED and PURPLE. The Japanese Navy began encrypting its message traffic with RED in 1931 and, ultimately, the Japanese Foreign Ministry adopted the cipher system for its sensitive telegraphic communication. Then, the Japanese Foreign Ministry introduced the more sophisticated PURPLE cipher in 1939 in order to encrypt its more sensitive cables more securely.<sup>118</sup> In

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<sup>118</sup> For further information regarding the possibility that Japanese naval codes and ciphers were deciphered by U.S. Intelligence before the Pacific War, refer to Robert B. Stinnett, *Day of Deceit: The Truth about FDR and Pearl Harbor* (New York: The Free Press, 2000). In addition, the paperback edition of *Day of Deceit* (New York: Touchstone, 2001) of *Day of Deceit* includes an afterword in which Stinnett addresses this subject in even greater depth, based upon documents acquired after the book’s original publication. Ronald Clark, *The Man Who Broke Purple: The Life of Colonel William F. Friedman, Who Deciphered the Japanese Code in World War II* (Boston: Little, Brown and Company, 1977), also provides good insight into the subject, although the title is arguably misleading, for the “Purple” cipher system was broken in 1940, during World War II, but before the United States entered the conflict. Also, for a summary of U.S. signals intelligence’s impact on policy making, refer to David Alvarez, *Secret Messages: Codebreaking and American Diplomacy, 1930-1945* (Lawrence, KS: University Press of Kansas, 2000). A good broader source on MAGIC intelligence and its impact is provided in Ronald Lewin, *The American Magic: Codes, Ciphers, and the Defeat of Japan* (New York: Farrar Straus & Giroux, 1982). An informative primary source, written by Army Signal Intelligence Service cryptanalyst Frank Rowlett, who led SIS’s effort to solve Japan’s PURPLE cipher system, is Frank B. Rowlett, *The Story of Magic: Memoirs of an American Cryptologic Pioneer* (Laguna Niguel, CA: Aegean park Press, 1998).

order to extract intelligence information from Japan's secret diplomatic communication, U.S. Army Secret Intelligence Service (hereinafter SIS) cryptanalysts launched significant efforts to solve each of these systems, ultimately successfully.

This chapter will examine U.S. cryptography from 1930 through December 1941, principally through the professional experiences and accomplishments of SIS director William F. Friedman, SIS cryptographer Frank B. Rowlett, and other SIS cryptographers, who focused principally on solving Japan's diplomatic code and cipher systems during the period. Although it endeavored to intercept and solve the secret, encrypted telegraphic communication of a number of countries, including Germany and the Soviet Union, SIS targeted Japanese diplomatic telegraphic communication particularly aggressively beginning in 1930. Ultimately, gaining insight into Japan's sensitive, non-public diplomatic communications represented an important means of understanding Japanese activities, plans, and intentions vis-à-vis U.S. interests, as tension with Japan increased during the 1930s.<sup>119</sup>

During the Great War, William F. Friedman initially served at Riverbank Laboratories as a cryptanalyst, where his primary function through April 1918 was

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<sup>119</sup> Both codes and ciphers constitute forms of encryption. A "code" normally involves substituting a word with a different word, whereas a "cipher" involves substituting a particular letter with another letter. By the 1930s, foreign states, such as Japan, secured their secret telegraphic communications with increasingly complex codes and ciphers, in which a different substitute word (in a code system) or letter (in a cipher system), was used for each substitution. Ultimately, these systems became so advanced that in order to solve, for example, a Japanese diplomatic cipher system, cryptanalysts had to infer the design of the cipher machine from encrypted intercepts in order to solve the system. Ultimately, cipher systems were more difficult to solve than code systems, and therefore Japan more often employed cipher systems to protect its secret diplomatic communications.

training new cryptographers for MID. In this capacity, Friedman designed a training curriculum and prepared dozens of cryptographers for duty in the AEF in France. Once MI-8 assumed training responsibilities in April 1918, Friedman joined the U.S. Army, was commissioned a First Lieutenant, and was assigned to the AEF Military Intelligence's Radio Intelligence Section, G2-A6, in France. Eventually he was promoted to direct the cryptanalytic Code Solution section. Then, when the war ended, the U.S. Army demobilized Friedman in spring 1919, whereupon he returned to Riverbank Laboratories.<sup>120</sup>

As detailed in Chapter One, Friedman and his wife, Elizebeth, an accomplished cryptographer in her own right, ultimately refused an offer of employment from Herbert Yardley, the director of the newly created Cipher Bureau, a SIGINT service formally within MID, but funded by both the Departments of War and State. Then, in fall 1920, Major Joseph Mauborgue, who was in charge of the Army Signal Corps, convinced Friedman and Elizebeth each to accept a six-month civilian cryptanalytic position with the Army Signal Corps and the Friedman's moved to Washington in order to begin their assignments on January 1, 1921.<sup>121</sup> By the end of 1921, Friedman had been named the War Department's Chief Cryptanalyst, a position that he would hold for more than two decades. Effectively, the Army extended Friedman's six-month assignment indefinitely.

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<sup>120</sup> John F. Dooley, *Codes, Ciphers and Spies: Tales of Military Intelligence in World War* (New York: Copernicus Books, 2016), 28, 265.

<sup>121</sup> Ronald Clark, *The Man Who Broke Purple: The Life of Colonel William F. Friedman, Who Deciphered the Japanese Code in World War II* (Boston, MA: Little, Brown and Company, 1977), 79.

With Yardley and the Cipher Bureau in New York, Friedman became the resident cryptologic expert in Washington, where he wrote monographs that formed an intellectual and informational foundation for various aspects of cryptography, in addition to delivering lectures on different features of cryptography. His chief cryptographic responsibility was code compilation. When the Yardley's Cipher Bureau closed in May, however, Colonel Owen S. Albright ordered Friedman, now the director of SIS, also to manage MID cryptanalysis, the only cryptographic discipline of which he had not yet assumed control for the War Department.<sup>122</sup> That fall, Friedman traveled to New York, acquired the Cipher Bureau's files, and returned with them to Washington. There, he placed them in secure storage in the Munitions Building, where SIS headquarters resided.<sup>123</sup>

### *Frank Rowlett Joins the Signal Intelligence Service*

On April 1, 1930, Frank B. Rowlett reported to the main entrance of the Munitions Building in Washington, at the juncture of 21st and B Streets, for his first day of duty "as a Junior Cryptanalyst in the Signal Service at Large, Office of the Chief Signal Officer, War Department."<sup>124</sup>

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<sup>122</sup> Ibid, 115.

<sup>123</sup> Ibid.

<sup>124</sup> The best source concerning Frank B. Rowlett and his career during the 1930s in the Signal Intelligence Service is Rowlett's autobiographical account of his professional activities during the decade: Frank B. Rowlett, *The Story of Magic: Memoirs of an American Cryptologic Pioneer* (Laguna Niguel, CA: Aegean Park Press, 1998). Unfortunately, Rowlett did not complete his memoir, which ends prior to America's entry into World War II. But he provided a detailed account of William F. Friedman's development of SIS, beginning in 1930, appropriately with Rowlett's commencement as

Rowlett was the first “Junior Cryptanalyst” whom SIS director Friedman hired. He had been one of two applicants who has passed the civil service examination and whom Friedman had determined possessed a strong enough background in either science or mathematics, in addition to a foreign language. Rowlett had been a mathematics teacher in southern Virginia and was proficient in German. Later in April, Abraham Sinkov and Solomon Kullback joined Rowlett in Friedman’s Junior Cryptanalyst training program, followed in May by John Hurt, who was fluent in Japanese, as a Cryptanalyst Aide.<sup>125</sup> Early in their training Friedman arranged for Hurt to begin teaching Rowlett,

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a Junior Cryptanalyst, SIS’ efforts to solve Japan’s diplomatic code and cipher systems during the 1930s, to provide sensitive intelligence to high-ranking civilian and military officials, and to produce an advanced cipher machine capable of fortifying U.S. Army and Navy signals communications against foreign signals intelligence services. Why Rowlett failed to complete his memoir remains unexplained, but he permitted David Kahn to write an epilogue for the book that includes a summary of what Rowlett and SIS accomplished during World War II.

<sup>125</sup> Initially, Friedman did not deep Sinkov and Kullback to have strong enough backgrounds in a foreign language in order to hire them but, when additional qualified candidates did not materialize, he hired them, according to: “Additional Personnel for Signal Intelligence Service,” February 7, 1930, Report Summarizing Secret Intelligence Service Applicants’ Viability, Container #777, HCC, NSA/CSS, Record Group 477, U.S. National Archives, College Mark, Maryland; Rowlett, *The Story of Magic*, 11-12; Abraham Sinkov commenced working for SIS as a Junior Cryptanalyst on April 10, 1930, and Solomon Kullback began as a Junior Cryptanalyst on April 21, 1930. John B. Hurt officially began working in SIS as a Cryptanalyst Aide on May 13, 1930, although, according to Frank Rowlett’s account, Hurt had begun working in SIS in a limited capacity prior to that official start date. Rowlett also referred to Hurt as a Junior Cryptanalyst but, in fact, Friedman hired Hurt as a Cryptanalyst Aide, according to: War Department, Office of the Chief Signal officer, Washington, October 20, 1930, Civilian Personnel, Addressed to the: Signal Corps Civilian Personnel Board (THROUGH Executive Officer, Office of Chief Signal Officer), United States National Archives, College Mark, Maryland, Record Group 457, National Security Agency/Central Security Service; Entry # A1 9032: Historic Cryptographic Collection, Pre-World War I Through World War II; Container # 751; for further information on John B. Hurt, refer to “Pearl Harbor Review – Linguists,” accessed April 15, 2013, [http://www.nsa.gov/about/cryptologic\\_heritage/center\\_crypt\\_history/pearl\\_harbor\\_review/linguist.shtml](http://www.nsa.gov/about/cryptologic_heritage/center_crypt_history/pearl_harbor_review/linguist.shtml); Samuel S. Snyder, “A Translator Extraordinaire: A Tribute to One of

Sinkov, and Kullback Japanese. As Friedman explained to his four trainees: “Today, Japan is our highest intelligence priority.”<sup>126</sup> All four proved to be sound early hires, providing SIS a strong cryptographic and linguistic foundation.<sup>127</sup>

### *Friedman Introduces His Junior Cryptanalysts to the Black Chamber*

An important part of Friedman’s training program for his three Junior Cryptanalysts was their June 1930 introduction to the extensive material that Friedman had acquired from Herbert O. Yardley’s Cipher Bureau or “Black Chamber” and stored in the Munitions Building.

The Cipher Bureau’s products were stored in rows of filing cabinets in a windowless room, approximately 25 feet by 25 feet, secured behind two steel doors. Responsibility for the records resided with Army G-2, and in particular the Chief Signal Officer. Friedman scanned the hall as he invited his protégés into the vault. Then, once they were inside, he declared: “Welcome, gentlemen, to the secret archives of the American Black Chamber.”<sup>128</sup> Friedman provided a complete list of the files in the vault

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the Original Seven Involved in the Signal Intelligence Service” from the John Hurt (Collection), accessed April 15, 2013, [http://www.nsa.gov/public\\_info/\\_files/cryptologic\\_spectrum/translator.pdf](http://www.nsa.gov/public_info/_files/cryptologic_spectrum/translator.pdf); David Alvarez, *Secret Messages: Codebreaking and American Diplomacy, 1930-1945* (Lawrence, KS: University Press of Kansas, 2000), 22.

<sup>126</sup> Rowlett, *The Story of Magic*, 30.

<sup>127</sup> Ronald Clark, *The Man Who Broke PURPLE: The Life of William F. Friedman, Who Deciphered the Japanese Code in World War II* (Boston: Little, Brown and Company, 1977), 120.

<sup>128</sup> Rowlett, *The Story of Magic*, 34-35.

and instructed Rowlett, Sinkov, and Kullback to familiarize themselves with the voluminous collection over the next two hours. He specifically instructed them to locate all Japanese diplomatic codes and ciphers and all German army field ciphers in the collection. According to Rowlett, they became engrossed in examining the voluminous cryptographic collection. He recalled being “completely hypnotized” by the material, and observed:

Here were copies of the secret codes and ciphers of many of the great nations of the world, and, more relevant to Friedman’s recent observation, and American signals intelligence in the next fifteen years. Here were the worksheets used in breaking Japanese diplomatic codes. Here were the translations of Japanese messages relating to the negotiations of the Washington Naval Conference, to which were attached letters of appreciation signed by high officials of the United States government.<sup>129</sup>

Impressed by the experience, Rowlett maintained that “King Solomon’s mines could have offered no greater treasure for us.”<sup>130</sup> After lunch that day, Friedman related to his trainees a brief account of “Yardley’s Bureau,” including of the Cipher Bureau’s successes during the 1920s and its 1929 termination by Secretary of State Stimson.<sup>131</sup>

Friedman described the SIS mission as two-fold. Its premier objective was to ensure that U.S. code and cipher systems were the most secure in the world. During peacetime, the War Department also expected SIS to intercept and analyze “foreign code and cipher communications for the production of intelligence for use by the nation’s top

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<sup>129</sup> Ibid, 36-37.

<sup>130</sup> Ibid, 37.

<sup>131</sup> Because this did not include the Department of State funding that had been allocated to the Cipher Bureau in addition to funding provided by the War Department, the net result was a significant cut in funding to the U.S. government’s total signals intelligence budget.

level planners and policy makers.” Furthermore, in the event of war, SIS would “intercept and solve the enemy communications at all levels so that the commanders of our armed forces would be provided with the intelligence necessary for their successful prosecution of the war.”<sup>132</sup>

Friedman described the global network of intercept stations being established. The first, then under construction, was at Monmouth, New Jersey. He explained that considerable secrecy was vital to protecting the War Department’s developing SIGINT program. Were the State Department to learn of the program, Friedman warned, Secretary Stimson could intervene via the highest levels of the government to have the program terminated. Friedman stressed that the current U.S. codes and ciphers were “woefully inadequate, outdated, inefficient and – worst of all – insecure.”<sup>133</sup> He believed that SIS must immediately develop much better encryption systems in order to prepare for the next war. He argued that U.S. codes and ciphers must be mechanized to achieve the degree of security that modern warfare demanded, but also recognized that the War Department must rely on the existing encryption systems for the time being. Finally, Friedman explained that G-2 also had established general priorities for SIS concerning the interception and decryption of foreign codes and ciphers. Accordingly, Japan was SIS’s premier target, followed first by Germany and then Italy. Other countries were

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<sup>132</sup> Rowlett, *The Story of Magic*, 37-38. For a detailed summary of the Army Military Intelligence Division’s perspective concerning signal intelligence endeavors during peacetime and war, refer to General Mauborgne’s nine-page document on the subject, dated 17 April 1939, addressed to the Adjutant General, Container #751, HCC, National Security Agency/Central Security Service, Record Group 477, National Archives and Records Administration (NARA), College Park, Maryland.

<sup>133</sup> Rowlett, *The Story of Magic*, 37.

relegated to priority four.<sup>134</sup> The War Department had anticipated the adversaries that the United States would face a decade later in the Second World War.

Further parameters were established on November 30, 1931, when the Army issued a memorandum for the Chief Signal Officer proposing that the Army and Navy identify their SIGINT priorities and agree on a plan to divide the broader burden between themselves. The Navy proposed that its premier SIGINT service, OP-20-G, concentrate on the “naval codes [and ciphers] of all nations,” and the diplomatic codes and ciphers of “Japan, Italy, France, and England.” OP-20-G suggested that SIS should pursue the “military codes [and ciphers] of all nations, and the diplomatic codes and ciphers of “Russia, Mexico, South America, Germany, etc.” The War Department, however, refused to forego pursuing any diplomatic codes and ciphers.

An Army Signal Corps memorandum memorializing the outcome of the negotiation stated that although the Navy’s pursuit of all foreign naval encryption systems and the Army’s pursuit of all foreign army encryption systems were perfectly reasonable, no formal agreement or allocation concerning foreign diplomatic encryption systems existed. The memorandum asserted, however, that “no formal agreement is required,” and that each service would “continue the wholehearted spirit of cooperation to the limit of our abilities.”<sup>135</sup> Essentially, the memorandum observed that the War and

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<sup>134</sup> Rowlett, *The Story of Magic*, 38-39.

<sup>135</sup> Memorandum from Major D. M. Crawford, Army Signal Corps., to the Army Chief Signal Officer, on the Navy’s Proposed Allocation of Diplomatic Signals Intelligence Responsibilities, Container #752 HCC, National Security Agency/Central Security Service, Record Group 477, National Archives and Records Administration (NARA), College Park, Maryland.

Navy Departments each could continue pursuing solving foreign diplomatic codes and ciphers, neither having agreed to forego targeting any of it.

The War Department also expected SIS to develop advanced codes and ciphers to protect War Department telegraphic communication. An October 14, 1931, letter from Colonel G. E. Kempe, of the Chief Signal Officer's office, on "Codes, Ciphers, Secret Inks, Radio Interception and Goniometry," explained that the Chief Signal Officer had "established the nucleus of the Signal Intelligence Service in calendar year 1930 and obtained personnel to fill vacancies authorized under a program based upon the then available funds." Kempe observed that "this nucleus, which consists of six persons, has been undergoing highly-specialized training, in accordance with the ideas outlined under paragraph 7b of the letter referred to above." Kempe explained War Department expectations for SIS, including developing better encryption systems.<sup>136</sup>

Friedman concentrated on training his new personnel in cryptanalysis and, although SIS ultimately achieved its greatest success decrypting Japanese codes and ciphers, SIS was also responsible for creating encryption systems to secure War Department communications. Prior to 1930, the Chief Signal Officer and the Army Adjutant General both were responsible for War Department communication security. The Chief Signal Officer was empowered particularly to design and compile

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<sup>136</sup> October 14, 1931 Letter from Colonel G. E. Kempe, Signal Corps, Executive to U.S. Signal Corps., Adjutant General, Responding to Letter from Adjutant General Concerning "Codes, Ciphers, Secret Inks, Radio Interception, and Goniometry." Container #752 HCC, National Security Agency/Central Security Service, Record Group 477, National Archives and Records Administration (NARA), College Park, Maryland.

departmental cryptographic systems.<sup>137</sup> The Adjutant General was charged with printing and storing the cryptographic systems and for clearing all unclassified and classified messages prior to their transmission.<sup>138</sup> The War Department transmitted encrypted, classified cables and unclassified, unencrypted cables either over the War Department radio network or via commercial telegraphic companies, such as RCA and Western Union. The Army Signals Corps radio network managed messages between Washington and the nine U.S. Army Corps areas in the continental United States, as well as between Washington and the three overseas signals intelligence platforms located in Panama, Manila, and Hawaii.<sup>139</sup>

Following a short assignment working night shifts in the War Department's code room in late 1930, Rowlett described to Friedman the inadequacy of the War

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<sup>137</sup> According to the United States National Archives' "Records of the Office of the Chief Signal Officer, the Chief Signal Officer's position was created on July 28, 1866. Among its numerous responsibilities during its tenure, the Chief Signal officer was responsible for managing "the U.S. Army Signal Service (Signal Corps), with overall responsibility for research and development in communications; procurement, testing, and operation of signal equipment; maintenance of signal security; and collection of communications intelligence." The position was abolished on February 28, 1964. For further information concerning the Chief Signal Officer's position, refer to the United States National Archives, "Records of the Office of the Chief Signal Officer," accessed 18 April 2013., <http://www.archives.gov/research/guide-fed-records/groups/111.html>.

<sup>138</sup> The Adjutant General was and remains the United States Army's chief administrative officer, and is subordinate to the Army Chief of Staff. The Adjutant General heads the Adjutant General's Corps, and is responsible for the procedures affecting personnel procurement and for the administration and preservation of records of all army personnel. For further information concerning the Adjutant General's position, refer to "Adjutant General's Corps", accessed May 14, 2013, <http://usmilitary.about.com/library/milinfo/armybranches/blagc.htm>.

<sup>139</sup> Rowlett, *The Story of Magic*, 40.

Department's codes and ciphers. Friedman responded that he was aware of the problem and that he intended for SIS to resolve it, but lamented that SIS could not make vital improvements until the Army allocated to the Chief Signal Officer full responsibility, including over the budget, for War Department cryptography. Friedman praised Rowlett for voicing his concern, assured him that he and his colleagues would play a principal role in rectifying the shortcomings. Then, he implemented the study of advanced encryption machines into the SIS training program, including extensive, hands-on analysis of the ADFGVX cipher system, the AT&T Cipher machine, the Strip System, and the B-211 Cipher Machine.<sup>140</sup> For his part, Rowlett began to consider how to design cipher machines that would facilitate Japanese and Chinese characters.<sup>141</sup>

Once Rowlett and his colleagues became well-acquainted with the advanced cipher machine designs, Friedman informed G-2 that SIS would begin intercepting foreign diplomatic cable traffic transmitted via international radio circuits. The Director of Military Intelligence instructed SIS to focus particularly on Japanese diplomatic communications. The Chief Signal Officer agreed, provided that SIS continue analyzing advanced cipher machines in order eventually to develop superior encryption systems for the protection of War Department communications.

At the conclusion of their probationary period, Rowlett, Sinkov, and Kullback received favorable performance reviews providing a breakdown of what they had

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<sup>140</sup> Rowlett, *The Story of Magic*, 59-81. Rowlett's two chapters in *The Story of Magic*, titled "The Cipher Devices We Studied" and "Two Cryptanalytic Research Projects," provide detailed insight into initial SIS training for Rowlett and his colleagues regarding cryptographic machines.

<sup>141</sup> Rowlett, *The Story of Magic*, 40-47.

accomplished and praising the newly minted cryptographers for their superb performances.<sup>142</sup> According to his initial performance evaluation, Hurt's obligations as a Cryptanalyst Aide were similar to those of a Junior Cryptanalyst, although his review noted that his "knowledge of foreign languages is of excellent assistance in the section."<sup>143</sup>

Their probationary period and training complete, Friedman directed Rowlett, Sinkov, and Kullback to begin their effort against Japanese diplomatic codes and ciphers by examining the voluminous collection from Yardley's Cipher Bureau. Friedman explained that during its final two years the Cipher Bureau had solved Japanese Foreign Ministry encryption systems and surmised that some of these systems might still be in

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<sup>142</sup> Rowlett's evaluation was recorded in an "Initial Review of Frank B. Rowlett's Performance as an SIS Junior Cryptanalyst," Container #777 HCC, National Security Agency/Central Security Service, Record Group 477, National Archives and Records Administration (NARA), College Park, Maryland. Sinkov's evaluation was recorded in an "Initial Review of Abraham Sinkov's Performance as an SIS Junior Cryptanalyst," Container #777, HCC, National Security Agency/Central Security Service, Record Group 477, National Archives and Records Administration (NARA), College Park, Maryland. Kullback's evaluation was recorded in an "Initial Review of Solomon Kullback's Performance as an SIS Junior Cryptanalyst," Container #777, HCC, National Security Agency/Central Security Service, Record Group 477, National Archives and Records Administration (NARA), College Park, Maryland.

<sup>143</sup> Hurt's evaluation was recorded in an "Initial Review of John B. Hurt's Performance as an SIS Junior Cryptanalyst," Container #777, HCC, National Security Agency/Central Security Service, Record Group 477, National Archives and Records Administration (NARA), College Park, Maryland. Although the review referred to Hurt as a "Junior Cryptanalyst," he was actually a "Cryptanalyst Aide" and the content of his training accordingly was different from that of Rowlett, Sinkov, and Kullback.

use.<sup>144</sup> Although Rowlett, Kullback, and Sinkov discovered that the Japanese Foreign Ministry no longer used the systems, the records were a good starting point.<sup>145</sup>

By September 1932, Rowlett, Sinkov, and Kullback were analyzing Japanese diplomatic intercepts full-time in addition to studying Japanese several hours a week.<sup>146</sup> When they employed some of Cipher Bureau's tactics in seeking solutions for current Japanese intercepts, they learned that the Japanese Foreign Ministry had not changed its encryption systems conceptually. Rowlett, Sinkov, and Kullback discovered new systems probably introduced after the Cipher Bureau's dissolution and determined that Japan was employing surprisingly simple codes and ciphers. The work was tedious and time-consuming, however, and Rowlett lamented SIS's inadequate clerical support.<sup>147</sup>

#### *SIS and OP-20-G Collaborate*

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<sup>144</sup> Rowlett, *The Story of Magic*, 84. Although Rowlett too rarely provides dates or approximate dates for events that he describes in his memoir, in this particular case he indicated, regarding the review that he and his fellow new cryptanalysts conducted of the Black Chamber's files, that "the Japanese had, in some point in the last three years since the Black Chamber had been abolished, modified the code without completely replacing it," thereby indicating that the review was conducted in 1932, since the Black Chamber was closed in summer 1929. Other sources, however, indicate that Rowlett and his colleagues had reviewed the Cipher Bureau's holdings as early as summer 1930.

<sup>145</sup> Rowlett, *The Story of Magic*, 83.

<sup>146</sup> Theodore M. Hannah and Frank B. Rowlett, "Frank B. Rowlett: A Personal Profile" ([http://www.nsa.gov/public\\_info/\\_files/cryptologic\\_spectrum/frank\\_rowlett.pdf](http://www.nsa.gov/public_info/_files/cryptologic_spectrum/frank_rowlett.pdf)) accessed May 1, 2013; p. 12. Hurt tutored Rowlett, Sinkov, and Kullback in Japanese until he was diagnosed with advanced tuberculosis. Thereafter, until Hurt recovered enough to return to SIS, Rowlett, Kullback, and Sinkov studied Japanese on their own, having received a strong enough foundation in the language from Hurt to do so.

<sup>147</sup> Rowlett, *The Story of Magic*, 87-88.

By 1935, SIS and OP-20-G were exchanging all Japanese diplomatic intercepts, although the only direct contact between the two services occurred via periodic meetings between Friedman and the Director of OP-20-G, Lieutenant Joseph N. Wenger.<sup>148</sup> This limited degree of contact reigned even though, as early as October 1931, the Director of Naval Communications had urged the Chief of Naval Operations and ONI that Army and Navy SIGINT exercise more formal and structured cooperation. Furthermore, at a more tactical level, SIS and OP-20-G leaders recognized that they should coordinate their cryptanalytic activity in order to limit redundant labor and support one another wherever practicable. The two SIGINT services had access to nearly all diplomatic traffic transmitted by foreign states, via Army and Navy signals collection sites and commercial telegraph companies. They also had a strong mandate when, in October 1931, the Director of Naval Communications observed that “due to unsettled political conditions existing throughout the world, from the immediate point of view, obtaining this diplomatic information becomes of paramount importance.”<sup>149</sup>

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<sup>148</sup> Joseph N. Wenger became Director of OP-20-G in 1935, following his 1932-4 tour as the U.S. Asiatic Fleet’s radio intelligence officer. During that previous assignment, Wegner concluded that the United States must improve its communication security as well as expand offensive SIGINT collection, particularly against Japan. For additional information concerning Wenger’s tenure as chief of OP-20-G, see the National Security Agency’s article titled “Joseph N. Wegner,” approved by NSA for release June 12, 2009, FOIA Case # 52567, accessed April 23, 2013, [http://www.nsa.gov/public\\_info/\\_files/crypto\\_almanac\\_50th/Joseph\\_N.\\_Wenger.pdf](http://www.nsa.gov/public_info/_files/crypto_almanac_50th/Joseph_N._Wenger.pdf)) Doc ID# 3575736.

<sup>149</sup> October 29, 1931 Memorandum from the Director of Naval Communications to the Chief of Naval Operations Concerning the “Allocation of Radio Intelligence Activity between the Army and the Navy,” Container #752, HCC, National Security Agency/Central Security Service, Record Group 477, National Archives and Records Administration (NARA), College Park, Maryland.

In 1934, Friedman informed Wenger that a small team of SIS cryptanalysts had through the analysis of intercepts discovered that the Japanese Foreign Ministry was using a new cipher machine to encrypt its messages.<sup>150</sup> In turn, Wenger told Friedman that the Navy had acquired a Japanese naval cipher system that employed Japanese kana script rather than Roman letters. Wegner, however, withheld additional detail.<sup>151</sup>

Friedman pressed Wegner for further information during the next meeting about the new cipher system, which SIS and OP-20-G had dubbed “RED,” but Wegner declined to provide significant additional information. Rowlett and Kullback therefore continued seeking a solution through conventional cryptanalysis. Eventually, they devised a method for solving the cipher system without OP-20-G’s information.<sup>152</sup> Rowlett and Kullback ultimately determined the machine’s design, enabling the U.S. Navy Yard to replicate how the Japanese cipher machine functioned. They also recorded the hours that they invested in the project, so that Friedman could use the data to request funding for additional personnel.

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<sup>150</sup> Alvarez, *Secret Messages*, 40. According to Alvarez, SIS first noticed a new stream of Japanese diplomatic cable traffic encrypted via a new cipher system in March 1933. SIS called the new cipher system “RED,” and began to investigate the cipher in spring 1934.

<sup>151</sup> Rowlett, *The Story of Magic*, 112-113; according to cryptography historian David Khan, in 1934 the Japanese Navy purchased a commercially-available German cipher machine called ENIGMA. The Japanese Foreign Ministry based its RED cipher system on the principles of ENIGMA. David Khan, *The Codebreakers: The Story of Secret Writing* (<http://catdir.loc.gov/catdir/enhancements/fy0640/96031318-s.html>) accessed May 13, 2013.

<sup>152</sup> Rowlett, *The Story of Magic*, 117-122.

Once Friedman was convinced that SIS had indeed solved RED, enabling it to decipher and read Japanese messages encrypted with the system, he briefed a small number of Signal Corps and Army intelligence, or G-2, officers on the breakthrough. Additionally, the Japanese diplomatic intercepts contained information concerning German-Italian Axis negotiations. The intelligence yield justified additional funding for SIS; in turn, Friedman hired much-needed additional personnel.<sup>153</sup>

The Chief Signal Officer, the Officer-in-Charge, War Plans and Training Division, and various G-2 officers commended SIS for solving RED. But, the most important praise came from the Director of Military Intelligence, who promised additional personnel for the exploitation of Japanese diplomatic intercepts. War Department leaders were impressed with SIS. That Rowlett and his colleagues had determined the design and operation of a sophisticated Japanese cipher machine through cryptanalysis was an unprecedented accomplishment.<sup>154</sup> Rowlett had led the effort against RED and by 1937 was overseeing most of SIS's analysis of Japanese diplomatic intercepts as well as operating at an administrative level. By 1938, his Japanese diplomatic section was solving all Japanese diplomatic traffic encrypted via RED.

### *Japan Introduces PURPLE*

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<sup>153</sup> July 25, 1931, report Titled "Annual Report of the War Plans & Training Division Covering Fiscal Year 1931" prepared for the "Chief Signal Officer of the Army," prepared by Major D. M. Crawford of the Signal Corps., Container #752, HCC, National Security Agency/Central Security Service, Record Group 477, National Archives and Records Administration (NARA), College Park, Maryland.

<sup>154</sup> Rowlett, *The Story of Magic*, 126-127.

In late 1938 and early 1939, SIS intercepted several RED messages that Tokyo sent to the Japanese diplomatic missions in Washington, London, Ankara, Paris, Berlin, Moscow, and Warsaw. The cables concerned what the Japanese referred to as Angooki Taipu B, or Cipher Machine, Type B. Tokyo was informing these missions that Tokyo would send a cryptographer named Okamoto to install the new cipher machines in those diplomatic installations and train staff at each location to operate and maintain the new equipment. The messages, however, did not describe the design or function of the Type B machines. SIS lamented that the Japanese Foreign Ministry's replacement of the RED cipher system would probably end its ability to read Japanese diplomatic communication and deliver the resulting intelligence to its consumers. Therefore, SIS resolved that it must solve the new cipher system as soon as possible in order to prevent a major lapse in intelligence production. Rowlett and his colleagues hoped that the new system would only be an enhanced, conceptually similar version of RED, rather than a fundamentally different and more complex design.<sup>155</sup>

SIS learned via three March 20, 1939, Japanese diplomatic intercepts sent from the Japanese embassy in Warsaw, Poland, to Tokyo, that the Japanese Foreign Ministry had begun using the new cipher system. As it was being implemented, Japan referred to Angooki Taipu B, or "Cipher Machine, Type B," officially as 97-shiki O-bun In-ji-ki.<sup>156</sup> For its part, SIS dubbed the new cipher "PURPLE." The new system proved to be

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<sup>155</sup> Rowlett, *The Story of Magic*, 137; Rowlett and Theodore M. Hannah, "Frank Rowlett: A Personal Profile," accessed August 1, 2013, [http://www.nsa.gov/public\\_info/\\_files/cryptologic\\_spectrum/frank\\_rowlett.pdf](http://www.nsa.gov/public_info/_files/cryptologic_spectrum/frank_rowlett.pdf).

<sup>156</sup> Frank B. Rowlett, *The Story of Magic* (Laguna Niguel, CA: Aegean Park Press, 1989), 137, 163.

fundamentally more sophisticated than RED and, by late April, the Japanese Foreign Ministry enciphered with PURPLE virtually all Japanese diplomatic cable traffic that formerly had been encrypted with RED. Consequently, solving PURPLE became SIS and OP-20-G's premier priority. They shared information concerning their respective progress more liberally than before, while the Army and Navy instructed their listening stations abroad to monitor PURPLE cable traffic constantly. Furthermore, the War Department ensured that SIS received equipment necessary to solve the new cipher.<sup>157</sup>

Meanwhile, SIS continued progressing on another high priority project as it prepared in early 1939 to distribute the M-134 cipher machine to three overseas departments. Friedman and Rowlett developed the M-134 to secure sensitive, high-level War Department radio communication, and the department initially dispatched six M-134 machines: Two to the Panama Canal Department, two to the Hawaiian Department, and two to the Philippines Department. Friedman visited each site in order to train the personnel there in how to operate the M-134.<sup>158</sup>

### *SIS Deconstructs PURPLE*

During their initial analysis of PURPLE intercepts, Rowlett and SIS's Japanese diplomatic section, which he directed, approached the challenge based on their experience solving RED and experienced some success early in the process.<sup>159</sup>

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<sup>157</sup> Ibid, 139-141.

<sup>158</sup> Ibid, 142-3.

<sup>159</sup> Ibid, 145.

Thereafter, however, their labor yielded no success. SIS's burden increased when, shortly after Japan implemented PURPLE, OP-20-G re-assigned naval cryptanalysts assigned to solve PURPLE to concentrate instead on decrypting Japanese naval ciphers. Fortunately, , however, Navy listening sites continued to intercept Japanese PURPLE traffic, furnishing SIS with intercepts. SIS also received funding to hire additional cryptanalysts, who underwent a training program designed by Rowlett, Kullback, and Sinkov. In less than a decade, Friedman's original hires had become senior SIS cryptographers.<sup>160</sup>

As the more experienced cryptanalysts of SIS Japanese diplomatic section wrestled with PURPLE, they determined that the Japanese had not based the cipher on ENIGMA, as they had RED. PURPLE was fundamentally different.<sup>161</sup> Rowlett observed that "the more we worked with the intercepts, the more we became convinced that we were confronted with a type of machine encipherment that was significantly different from any that we had yet."<sup>162</sup>

SIS cryptanalysts had relied on the "pencil and paper" method to solve RED, but this process proved prohibitively time-consuming and ultimately impracticable for solving PURPLE, as did other ideas intended to accelerate the process. For example, one member of the Japanese diplomatic section's proposal to adapt IBM accounting machine

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<sup>160</sup> Ibid, 147.

<sup>161</sup> David Khan, *The Codebreakers: The Story of Secret Writing*, accessed May 13, 2013, <http://catdir.loc.gov/catdir/enhancements/fy0640/96031318-s.html>.

<sup>162</sup> Rowlett, *The Story of Magic*, 147.

equipment to the effort proved more expensive and time-consuming than existing techniques. Rowlett and his colleagues continued searching for a simpler method.

On Friedman's return from the Panama Canal Zone, Hawaii, and the Philippines, Rowlett briefed him on SIS's progress against PURPLE. When Rowlett described the machine's underlying concept, Friedman recommended that Rowlett consider involving reserve Army officer Leo Rosen in the project. Rosen had majored in electrical engineering at the Massachusetts Institute of Technology (MIT) and the Army recently had summoned him to active duty with SIS. Already impressed with Rosen from his performance in training, Rowlett, Kullback, and Sinkov immediately accepted Friedman's offer. Then, when Friedman explained the project to Rosen and asked whether he would like to contribute to learning enough about the PURPLE cipher in order to create a machine that could decrypt PURPLE intercepts, Rosen eagerly accepted.

A few days later, Rosen made his first contribution, when he highlighted to Rowlett a telephone equipment manufacturer's brochure describing a set of telephone stepping switches. The telephone system appeared suited to what Rowlett's section had already determined about the fundamental concepts of the PURPLE cipher machine. Therefore, when Rosen suggested that the design could be used to build a machine that would decipher PURPLE intercepts, his explanation left Rowlett feeling optimistic.

On being briefed about Rosen's insight, Friedman met with his immediate superior, Colonel Spencer Akin, and explained the need to acquire a set of the stepping switches described in the brochure. Akin not only supported the request, but told Friedman that he had a personal friend, who was an official with the manufacturing company. Then Akin called his friend, learned that the switches were available for

prompt shipment, requested that two sets be shipped by air directly to him and that additional sets be dispatched to the Signal Procurement Office. Akin's swift action greatly reduced the significant time it otherwise would have taken to acquire the parts via the official procurement process, which meant that SIS could continue progressing.

As they awaited the stepping switches, Rowlett and Rosen prepared other components of the machine that they, Kullback, and Sinkov were building. They cannibalized a damaged M-134 cipher machine, salvaging its solenoid-operated IBM typewriter. Because the M-134 keyboard was badly damaged, with Friedman's reluctant permission they extracted the M-134 pilot model's keyboard. Meanwhile, Rosen began assembling the machine as SIS awaited delivery of the stepping switches. Akin, who continued to show significant interest in the project, ordered parts through the Signal Corps Procurement Office that SIS could not obtain from its own store room. Once the new stepping switches arrived, Rosen incorporated them into the new device.

Once they had completed the machine, Rowlett and his colleagues dubbed it the "Six Buster," as Rowlett recalled, "for want of a better name."<sup>163</sup> The Six Buster enabled SIS cryptanalysts, who had been deciphering an aspect of PURPLE, dubbed "the sixes," manually, instead to dedicate their time toward solving other aspects of PURPLE. Furthermore, the Six Buster's products were typed neatly, rather than handwritten. It was so effective that Rosen built two more. Next, the Japanese diplomatic section turned to the machine's other major aspect, which the cryptanalysts called "the twenties."

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<sup>163</sup> Rowlett, 149-50.

Eventually, the Japanese diplomatic section devised what it considered a logical fundamental design for the Japanese cipher machine.<sup>164</sup>

Shortly before Labor Day 1939, nearly a year after Rosen had proposed employing the stepping switches to decipher the sixes, Genevieve Grotjan, one of the more experienced cryptanalysts in Japanese diplomatic section, made a significant discovery. Rowlett and two other section cryptanalysts, Bob Ferner and Albert Small, were in Rowlett's office discussing potential means through which to improve cryptanalytic techniques, when Grotjan entered and asked them to evaluate a major breakthrough that she potentially had made.<sup>165</sup>

When Grotjan highlighted consistencies in plaintext and ciphertext equivalents in a number of PURPLE transmissions, Rowlett, Ferner, and Small recognized immediately that she had indeed made a momentous discovery. Grotjan's discovery of the pattern would enable SIS cryptanalysts to match encrypted cables with their plain-text counterparts. Rowlett used Grotjan's worksheets to explain the discovery to Friedman who, recognizing the breakthrough's significance, announced to the Japanese diplomatic section: "The recovery of this machine will go down as a milestone in cryptanalytic history. Without a doubt we are now experiencing one of the greatest moments of the Signal Intelligence Service." Soon Rowlett and his colleagues produced some ciphertext, which Rowlett referred to as "the peak of the most difficult portion of our analysis of the machine, and from this point our task became easier and easier."<sup>166</sup>

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<sup>164</sup> Ibid, 150-51.

<sup>165</sup> Ibid, 151.

<sup>166</sup> Ibid, 152-3.

### *SIS Builds a PURPLE Machine*

The Japanese diplomatic sections great progress against PURPLE enabled Rosen to begin designing a cipher machine that would mimic the cryptographic functions of the Japanese Type B machine, despite the difficulty of acquiring parts for it.<sup>167</sup> Rosen built the analog device, ultimately relying chiefly on parts that SIS either had on hand or could cannibalize from other devices. Rowlett observed that Rosen's machine "was clumsy and awkward in use" and that operating it required considerable physical strength, but that "it appreciably speeded up the deciphering process and greatly facilitated the recovery of the unknown twenties." Ultimately, the machine cost the U.S. government only \$684.65. Meanwhile, the benefits were priceless.<sup>168</sup>

Rowlett and Rosen's remaining challenge in constructing an SIS version of the PURPLE cipher machine was arranging the unit's wiring. Rowlett eventually settled on an organizational scheme that he assumed the Japanese technician who designed the B Machine probably had employed. Then, he and Rosen typed three Japanese PURPLE ciphertext messages into the unit. It produced clear plaintext translations.<sup>169</sup>

The morning after Rowlett and Rosen finished assembling the new machine, they demonstrated it to the Japanese diplomatic section's staff. Friedman arrived shortly after the test and, on reviewing the plaintext that the machine produced, praised Rosen's significant contribution and approved Rowlett's advice that two additional machines be

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<sup>167</sup> Ibid, 154.

<sup>168</sup> Theodore M. Hannah, "Frank Rowlett: A Personal Profile," accessed August 1, 2013, [http://www.nsa.gov/public\\_info/\\_files/cryptologic\\_spectrum/frank\\_rowlett.pdf](http://www.nsa.gov/public_info/_files/cryptologic_spectrum/frank_rowlett.pdf).

<sup>169</sup> Rowlett, *The Story of "Magic,"* 155-9.

constructed. With only one machine, Rowlett had to determine intelligence priorities, since SIS only had the capacity to process some of the Japanese diplomatic intercepts that it received, let alone the considerable backlog that had accumulated. In order to ensure that SIS processed the most important messages first, SIS polled G-2 regarding its priority intelligence requirements.

SIS successfully demonstrated the cipher machine for Colonel Akin.<sup>170</sup> Akin in turn arranged a demonstration for the Army Chief of Signals Intelligence and Chief Signal Officer General Joseph Oswald Mauborgne. Mauborgne was thrilled, immediately recognizing the breakthrough's importance. But he keyed on a potential counterintelligence vulnerability implicit in the accomplishment, asking: "If we can do this to the Japanese intercepts, what can other nations do to our codes and ciphers?" The rhetorical question echoed the observation that Herbert Yardley had made to his superior during World War I: "For the sake of argument, I always assume that what is in the power of one man to do is also in the power of another."<sup>171</sup> The answer from the SIS cryptanalysts present was clear: "Until improved systems are prepared and issued, the foreign intelligence services of any nation with a comparable cryptanalytic competence can exploit our communications." They explained to Mauborgne, however, that in designing the Army-Navy cipher machine, the M-134, developers had carefully considered potential weaknesses, such as those exploited in solving PURPLE.

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<sup>170</sup> Ibid, 161.

<sup>171</sup> Herbert O. Yardley, *The American Black Chamber* (Mattituck, NY: Amereon House, 1931), 8.

As the meeting ended, Mauborgne telephoned the Director of Military Intelligence and then departed to inform him of SIS's success. After about an hour he returned, conveyed the Director's praise, and directed Friedman, Rowlett, and others present to continue the strict compartmentation practices that SIS had imposed. Mauborgne said that as Chief Signal Officer he would issue formal orders codifying these security practices. Deciphered, translated PURPLE cables would be available only to named recipients, whom G-2 had approved and designated. Mauborgne insisted that SIS immediately implement his orders, since the Japanese diplomatic section had already been preparing translations of deciphered PURPLE intercepts. Then, in selecting a name for the new intelligence compartment for PURPLE intercepts and intelligence products derived from them, Mauborgne memorialized the remarkable or "magical" feat that SIS had accomplished in solving the cipher and building the machine, dubbing it "MAGIC."<sup>172</sup>

In Rowlett's experience, this was the first time that the War Department had formally "restrictively controlled," or compartmented, intelligence. Previously, such controls had been implemented informally and not necessarily followed or enforced consistently. The MAGIC compartment's creation represented a major shift in how U.S. intelligence agencies and their consumers handled particularly sensitive intelligence.

In the eighteen months since the Japanese Foreign Ministry implemented PURPLE, the United States intercepted hundreds of Japanese diplomatic cables enciphered with PURPLE. SIS had to exploit the intercepts and, therefore, SIS

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<sup>172</sup> Rowlett, *The Story of Magic*, 160-63.

cryptanalysts had to determine the key that the Japanese Foreign Ministry assigned each day in order to encrypt its cable traffic. Once SIS determined the key for a particular day, SIS cryptanalysts set the cipher machine to the appropriate corresponding indicator. The machine then could decipher any given message from that 24-hour period.<sup>173</sup>

SIS and MID officials determined that they must inform their OP-20-G and ONI counterparts of the breakthrough. Rowlett argued that SIS and MID should share MAGIC intelligence products as well as how SIS solved the PURPLE cipher because, potentially, the insight could help OP-20-G solve Japanese naval codes and ciphers.<sup>174</sup>

Colonel Akin and General Mauborgne agreed, and Mauborgne granted permission for SIS to brief OP-20-G into the MAGIC compartment. Mauborgne insisted, however, that, prior to receiving its in-brief, OP-20-G must agree to adhere to the security measures that SIS had established for MAGIC. Next, Mauborgne informed the ONI director, Rear-Admiral Walter S. Anderson, of SIS's considerable achievement. Mauborgne pledged to share the information in its entirety on the condition that the ONI handled MAGIC according to SIS's security parameters.

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<sup>173</sup> Ibid, 163-4. In explaining the role and importance of the indicators, Rowlett explained in his memoir: "Just like the RED machine, the PURPLE machine used a daily sequence which, for any given date, was applied to all messages enciphered on that day between 12:01 and midnight, Tokyo time. Once this daily key had been recovered, and intercept using it could be immediately deciphered if the machine settings corresponding to the message indicator had been solved. The indicator identified the settings of the commutating units and the motion control switch. In our recovery of the PURPLE machine, we had determined the settings for only a small number of the indicators, and clearly one of our priority projects was to recover the full list of message keys."

<sup>174</sup> Rowlett, *The Story of Magic*, 164-5.

Anderson accepted the security requirements and agreed to dedicate OP-20-G resources to exploiting PURPLE intercepts jointly, ensuring additional support that SIS desperately needed. Then, Friedman scheduled a meeting with the OP-20-G director, Captain Laurence A. Safford, in order to brief him into the MAGIC compartment.<sup>175</sup> The following morning, Rowlett briefed Safford about SIS's solution of PURPLE cipher and construction of the cipher machine. Initially, Safford assumed that SIS must have purloined the machine from a Japanese code room. He was surprised to learn that SIS actually had inferred its design via cryptanalysis and was especially curious regarding the components with which SIS had constructed the cipher machine. Because Rowlett considered Safford the Navy's most accomplished cryptographer, especially regarding cipher machines, that the OP-20-G director was so impressed by SIS's accomplishment was especially rewarding. "Safford's whole attitude was one of frank admiration," Rowlett recalled and, at the briefing's conclusion, Safford declared to Rowlett that SIS had achieved the "greatest cryptanalytic accomplishment of all time." Finally, Safford

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<sup>175</sup> Rowlett, *The Story of Magic*, 165-6; Captain Laurence F. Safford (b. 1890 - d. 1973) has been recognized as a principal architect of the United States Navy's signals intelligence operations following World War I. Although the Navy, concerning the Pacific area of operations, directed its resources largely against Japan's naval codes and ciphers during the interwar period and the Pacific War, Safford promoted significant collaboration with the Army in targeting Japan's diplomatic codes and ciphers, a field that the Navy had strongly considered ceding entirely to the Army. Safford also collaborated closely with SIS cryptanalyst Frank Rowlett in creating the SIGABA cipher machine, in order to encipher and secure American secret transmissions against foreign signals intelligence services. Significantly, no evidence has emerged to suggest that SIGABA was broken by a foreign signals intelligence service during the Second World War. Lawrence Safford Wikipedia Page, accessed April 14, 2013, [http://en.wikipedia.org/wiki/Laurance\\_F.\\_Safford](http://en.wikipedia.org/wiki/Laurance_F._Safford).

readily acceded to SIS's security requirements and was eager for OP-20-G to assist with the exploitation of PURPLE intercepts.<sup>176</sup>

In spite of OP-20-G's support to deciphering and translating PURPLE intercepts and preparing MAGIC products for consumers, SIS continued to face a severe personnel shortage. Rowlett ultimately communicated the problem up the SIS and MID chains of command and, in turn, Mauborgne and Akin requested additional funding in order for SIS to hire and train additional personnel. The White House and Department of State, by then premier MAGIC consumers, supported the request.

Codifying the new arrangement between SIS and OP-20-G concerning MAGIC, and effectively recognizing SIS and OP-20-G as the premier U.S. SIGINT services, the White House arranged for an inter-departmental meeting between MID and ONI, chaired by General Sherman Miles, the assistant Army chief of staff for intelligence. MID Director Mauborgne; Director of Naval Communications, Admiral Leigh Noyes; ONI Director Anderson; and Federal Bureau of Investigation Associate Director Edward Tamm attended the meeting, during which Mauborgne, Noyes, and Anderson informed Tamm that OP-20-G and SIS operated signal interception sites and had been intercepting and analyzing Japanese communication. Tamm neither opposed the project nor the FBI's exclusion from it, nor that the FBI did not receive significant insight into MAGIC.<sup>177</sup>

Akin and Mauborgne ensured that the Japanese diplomatic section's accomplishment received due attention from War Department leadership. A week after observing Rowlett's demonstration of the PURPLE cipher machine, Akin instructed

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<sup>176</sup> Rowlett, *The Story of Magic*, 167-70.

<sup>177</sup> Alvarez, *Secret Messages*, 74.

Rowlett to prepare a 30-minute presentation about it for a mystery audience. The mystery audience turned out to be Army Chief of Staff George C. Marshall. Marshall, however, was too curious for SIS to limit his presentation to just 30 minutes. He asked Rowlett numerous questions during the briefing and, as the allotted 30 minutes drew to a close, Marshall indicated that he would prefer to hear the entire briefing, regardless of its duration. In the end, the presentation lasted an hour.

How SIS discovered the Japanese cipher machine's design, purely through the analysis of intercepts, in addition to the machine's demonstration, intrigued Marshall. At the conclusion, similar to Mauborgne, he keyed on an important counterintelligence implication of the achievement, asking whether foreign states could experience similar success against U.S. encryption systems. Akin answered that although he was unaware of any such success by a foreign intelligence service, it was certainly possible that foreign cryptanalysts were reading secret U.S. communications. Akin explained to Marshall that the Army and Navy were jointly designing an advanced cipher machine intended to reduce that potential substantially, whereupon Rowlett described the M-134 machine, citing PURPLE's vulnerabilities to highlight the M-134's superior security, as he had done when he addressed the issue with Mauborgne. Rowlett added that solving the codes and ciphers of foreign states remained the best way to defend against foreign SIGINT services breaching U.S. encryption systems.

Pleased with Rowlett's performance and especially with Marshall's reaction, Akin directed Rowlett to be prepared to deliver the presentation again. Two weeks later, he informed Rowlett that he would brief Secretary of War Henry L. Stimson and his principal lieutenants, Assistant Secretaries of War John J. McCloy and William P. Bundy.

This briefing proved another resounding success. At one point, as Stimson sifted through raw PURPLE intercepts, he read one aloud and commented that “our nation is indeed fortunate to have access to such important information, vital to the success of our diplomatic endeavors.” At this, Rowlett wondered whether the story about Stimson’s 1929 termination of Herbert Yardley’s Black Chamber with the famous declaration: “Gentlemen do not read each other’s mail,” could really be true.<sup>178</sup>

The presentations had provided opportunities for Friedman and Rowlett, as well as Akin and Mauborgue, to demonstrate SIS’s accomplishments against Japan, a premier U.S. foreign policy focus, to high-level U.S. officials empowered to reward SIS with the additional resources that it persistently required. U.S. civilian and military leaders were increasingly concerned about Japan’s imperial and military activities in the Asia-Pacific region and SIS’s Japanese diplomatic section was delivering detailed insight into the Japanese Foreign Ministry’s sensitive activities, plans, and intentions related to U.S. interests. That the Japanese Foreign Ministry was unwittingly providing the insight to U.S. leaders via its most sensitive cables added further credibility to the intelligence. Shortly after the briefings, a number of ROTC students were called to duty, some of the brightest of whom were allocated to SIS. SIS also received qualified candidates from the American Cryptogram Association and, ultimately, hired a number of them.<sup>179</sup>

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<sup>178</sup> As explained in Chapter One, in terminating the Cipher Bureau, Stimson did not object broadly to the interception and decryption of foreign communications. Rather, Stimson opposed the Department of State funding such activity executed against the State Department’s foreign counterparts. He did not oppose the Departments of War and Navy targeting the codes and ciphers of their foreign counterparts.

<sup>179</sup> Rowlett, *The Story of Magic*, 171-3.

### *The Supercipher*

SIS's honeymoon, however, did not last long. Soon after solving PURPLE, creating a regular system for processing and disseminating MAGIC products, and securing further resources for the endeavor, SIS solved a circular Japanese diplomatic cable informing particular Japanese foreign missions that the Foreign Ministry would introduce an additional layer of encryption, or "supercipher," to its cables already enciphered with PURPLE in order to augment further the security of the messages.<sup>180</sup>

SIS's Japanese diplomatic section was confident that it would also solve the new supercipher. Rowlett believed that "fresh from the successful recovery of what we considered to be a truly sophisticated cipher machine," SIS "could solve any code or cipher system that the Japanese cryptographers were capable of producing." He recalled that SIS's "reaction to the introduction of the new system was more one of curiosity about its nature rather than concern that we would not be able to solve it." SIS tracked the supercipher's implementation via PURPLE intercepts and within a few weeks had amassed enough intercepts to begin analyzing the supercipher. SIS soon discovered, however, that the system represented a new cryptographic concept.<sup>181</sup>

Rowlett and his team discussed the supercipher with their OP-20-G counterparts and learned that OP-20-G had also concluded that the supercipher represented a novel cryptographic approach and would be more difficult to solve than previous Japanese encryption. Each service determined that the first step must be to understand the

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<sup>180</sup> "Circular" cables were those sent simultaneously to multiple foreign missions.

<sup>181</sup> Rowlett, *The Story of Magic*, 174-5.

supercipher's fundamental concept. Over nearly a decade, Rowlett and his team had developed an excellent understanding of the Japanese Foreign Ministry's cryptographic tendencies and idiosyncrasies. Japan's Foreign Ministry had adhered to particular fundamental cryptographic conceptual principles, often enabling SIS to solve a new cipher based on understanding its predecessor. The supercipher ended this good fortune.

A decade earlier, as a training exercise, Friedman had directed Rowlett, Kullback, Sinkov, and Hurt to solve the German World War I-era ADFGVX cipher system. Consequently, Friedman's trainees became more proficient with that particular cipher than did those U.S. cryptanalysts who experienced it during the war. This experienced benefitted Rowlett, as well as Bob Ferner and Albert Small, two of Rowlett's most experienced cryptanalysts in the Japanese diplomatic section, as they endeavored to crack the supercipher. They anticipated that the Japanese Foreign Ministry eventually would transmit two messages in which plaintext would be repeated, which would provide clues regarding the supercipher's design. Such messages, however, failed to materialize during the next month. Incidentally, Rowlett, Ferner, and Small learned that their OP-20-G counterparts were pursuing a similar approach, also unsuccessfully.

Just over a month after the Japanese Foreign Ministry had introduced the supercipher, an OP-20-G counterpart called Rowlett and requested an immediate private meeting.<sup>182</sup> He said that he "had something special to discuss," arrived at Rowlett's office a few minutes later, and closed the door behind himself on entering. Then he placed a sealed manila envelope on the desk, and announced: "Before you open that

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<sup>182</sup> In *The Story of "Magic,"* Rowlett did not identify the OP-20-G individual who visited him on this occasion.

envelope you will have to promise me that you will give its contents the same security treatment you asked us to apply to PURPLE information.” Rowlett assessed that his counterpart had something important to discuss, but sparred nevertheless: “How can I make such a promise if I do not know what I am letting myself in for?” The visitor countered: “You are not letting yourself in for anything that you would not agree to if you knew what was in that envelope.” He pledged: “I assure you that you will not regret making such a promise when you look at its contents.” Then, anticipating the nature of the man’s call, Rowlett observed: “That envelope contains materials relating to the new system the Japanese have introduced, and which we are now trying to break, does it not?” When the visitor inquired about how Rowlett knew that, Rowlett added: “If that is what you have in the envelope, you have my promise. I assure you that I will do everything reasonable to meet your requirements for the security of its contents.” With that, the visitor told Rowlett: “And now open the envelope.”<sup>183</sup>

From the double-wrapped package Rowlett withdrew a series of 8x10 photographs depicting various aspects of a Japanese diplomatic cryptographic device, which turned out to be the supercipher machine. As Rowlett and his colleagues had anticipated, the cipher machine included a basic code for converting Japanese plain text into code text, in addition to a transposition system for super-enciphering the text. As he examined the photographs, Rowlett concluded that “somewhere a safe had been cracked, a code-room official had been bought, or a courier’s briefcase had been violated.”<sup>184</sup>

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<sup>183</sup> Rowlett, *The Story of Magic*, 177-78.

<sup>184</sup> *Ibid*, 178.

Rowlett's interlocutor observed that the photographs could jeopardize the acquisition details of the photographs, pointing out: "You will find that when you examine the photographs you may be able to identify the Japanese installation where they were taken." ONI was opposed to circulating or using the photographs in their raw form. In order to alleviate this concern, it planned to transcribe the information into a form that would appear to have been acquired cryptanalytically and would be as useful, but would obscure the nature and location of the material's acquisition. ONI would provide copies of the transcriptions to SIS. When Rowlett asked whether ONI had validated the information, the man affirmed that ONI had successfully tested it. Then, the two examined the photographs together and discovered that the new Japanese supercipher was fundamentally different from RED and PURPLE.

Rowlett pledged to share the photographs, a copy of which ONI entrusted to SIS, only with Friedman, Akin, and Mauborgne, and promised to request ONI's permission before divulging them to anyone else. They agreed that SIS and OP-20-G would continue adhering to the division of labor that they had established for processing MAGIC intercepts and intelligence products.

Finally, the Rowlett's visitor asked whether, having examined the photographs of the Japanese superencryption system, Rowlett believed that SIS ultimately could have solved the supercipher cryptanalytically. Rowlett answered that SIS could have, arguing: "It would take a lot of work, and we'd have to have some luck. But it would not be impossible." When the visitor disagreed, Rowlett reminded him of the success SIS had in devising a general solution for the World War I-era German ADFGVX system. Then Rowlett gave him a copy of that general solution, urged him to study it, and said: "You

will find that the cryptanalytic technique this paper describes will apply to the new Japanese system. The theoretical work has been done, and all we have to do is to adapt the principles to the new Japanese system.” When the man indicated that he had never seen the document, Rowlett assured him that “a complete set of our technical papers was provided to your organization.”<sup>185</sup>

As soon as his ONI visitor had departed, Rowlett informed Friedman of the photographs and the two reviewed the materials together. With the office door closed, Rowlett observed: “ONI made a surreptitious entry into a Japanese diplomatic code room and photographed the code book.” Rowlett informed Friedman of his pledge to handle the material according to the standards that SIS had established for the MAGIC compartment and Friedman agreed. Then, Friedman indicated that he must inform Akin and Mauborgne of the information right away and instructed Rowlett to test the information against Japanese diplomatic intercepts, so that he would be prepared to demonstrate the material for Akin and Mauborgne that afternoon.<sup>186</sup>

ONI had periodically conducting similar operations beginning more than a decade earlier. For example, in 1923, ONI operatives surreptitiously entered the Japanese consulate in New York and photographed the code and cipher material located in its code room. The information that ONI acquired during the operation provided OP-20-G with a cryptanalytic head start. Ultimately, ONI conducted at least six clandestine entries of

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<sup>185</sup> Ibid, 177-80.

<sup>186</sup> Ibid, 178-81.

Japanese diplomatic facilities between 1920 and 1935, some of which yielded sensitive cryptographic material. OP-20-G and to some extent SIS were the main beneficiaries.<sup>187</sup>

When Friedman and Rowlett presented the photographs to Mauborgne and Akin, Mauborgne asked Friedman whether he believed that the system could have been solved cryptanalytically. Friedman professed unequivocally that without important clues such a feat would have been “obviously impossible.” Rowlett disagreed, however, arguing that SIS could have solved the system via cryptanalysis and a little good fortune.

In their debate over whether SIS could have solved the system cryptanalytically, neither Friedman nor Rowlett considered an important CI implication concerning ONI’s photographs. Mauborgne, however, focused immediately on the potential ramifications of ONI illicitly entering the Japanese embassy in Washington to access its code room.<sup>188</sup> He observed that while SIS consistently had kept ONI up to speed regarding even the most sensitive aspects of its work against the RED and PURPLE ciphers, ONI did not inform MID or SIS of the surreptitious entry until after the fact. Mauborgne worried that were the Japanese to discover the operation, and especially that ONI had photographed the cipher machine, they would immediately cease using the compromised system. That would nullify SIS’s success against the PURPLE cipher.

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<sup>187</sup> Thomas R. Johnson, “The Sting - Enabling Codebreaking in the Twentieth Century,” U.S. National Security Agency, *Cryptologic Quarterly*, Spring/Summer 2004, Vol. 23, Nos. 1-2, accessed August 15, 2015, [https://www.nsa.gov/public\\_info/\\_files/cryptologic\\_quarterly/the\\_sting.pdf](https://www.nsa.gov/public_info/_files/cryptologic_quarterly/the_sting.pdf).

<sup>188</sup> Previous to this point in his account in *The Story of Magic*, Rowlett did not indicate that ONI had targeted the Embassy of Japan in Washington. Mauborgue may have learned from his ONI counterpart that ONI had entered the Japanese Embassy in Washington, or he may have been citing it hypothetically.

Mauborgne's argument persuaded Rowlett and Friedman that ONI's operation indeed had jeopardized years of SIS progress against Japan's most advanced diplomatic encryption systems, especially PURPLE. They concurred with Mauborgne's contention: "From this moment forward, I want to make it clear that no clandestine operation will be undertaken by anyone, including ONI, against a Japanese diplomatic installation until it has been officially cleared by me." Mauborgne asked that Friedman and Rowlett to relate this to their OP-20-G counterparts and to "make it clear that I will take this matter to the White House for a decision if the Navy shows any unwillingness to cooperate."<sup>189</sup>

The following morning, Rowlett met with his OP-20-G counterpart, the head of its Japanese diplomatic section, at ONI headquarters, in order to acquire the transcriptions of the photographs. When his counterpart asked what Friedman, Akin, and Mauborgue had thought of the photographs, Rowlett conveyed Mauborgne's concerns.

Rowlett observed that if Japan had learned of ONI's surreptitious entry, especially if ONI had targeted a Japanese diplomatic facility containing the RED or especially the PURPLE cipher system, or even incorrectly assumed so, the Japanese Foreign Ministry immediately would have ceased using RED and PURPLE. That would have negated the substantial progress that SIS had made against Japan's most advanced diplomatic ciphers. His counterpart confirmed that the particular diplomatic facility that ONI had surreptitiously entered had not housed either RED and PURPLE. This assessment failed to consider, however, that CI analysis is not an exact science. CI officials often are governed as much by suspicion and even some degree of paranoia as by objective facts and well-grounded extrapolation. Even if the particular site that ONI breached did not

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<sup>189</sup> Ibid, 182-83.

contain the RED or PURPLE systems, Japanese officials could have assumed that a more significant penetration or a yet-to-be-detected breach had occurred.

The Japanese Foreign Ministry could also replace RED, PURPLE, or both simply out of an abundance of caution. As their meeting ended, Rowlett requested that ONI not conduct another illicit entry operation until SIS had an opportunity to solve the next supercipher variation cryptanalytically, since the Japanese Foreign Ministry would eventually change the supercipher. The meeting ended cordially, and Rowlett had conveyed Mauborgue's warning and extracted a promise from the Navy not to execute another surreptitious entry operation, at least for the time being.<sup>190</sup>

Rowlett returned to the Munitions Building and briefed Friedman about the meeting, whereupon Friedman contacted Captain Safford and arranged to meet with him in order to discuss the issue. Then, Rowlett created a display with the transcribed materials from ONI and invited Ferner and Small to review them. Although Rowlett did not tell them how the materials had been acquired, Ferner and Small recognized immediately that they had not been acquired cryptanalytically. Rowlett explained the ground rules to them, including that the security requirements for MAGIC would be applied to the ONI information and that SIS and ONI would continue their division of labor regarding the exploitation of Japanese diplomatic intercepts.

Rowlett, Ferner, and Small anticipated that the Japanese Foreign Ministry would replace the supercipher approximately every three months. Therefore, they determined that SIS must build a corpus of statistical material in order to apply it toward solving the

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<sup>190</sup> Ibid, 185-86.

next variation. Finally, Rowlett invited the other section cryptanalysts to peruse the ONI materials. Ferner and Small briefed the ground rules to them.

As Rowlett, Ferner, and Small had predicted, The Japanese Foreign Ministry implemented a new supercipher variation about three months later. SIS solved it in a month, aided considerably by the Foreign Ministry's transmission of an inordinately large volume of message traffic in a single day. Rowlett promptly informed Friedman and urged him to tell Mauborgne of the breakthrough, considering the ongoing potential that ONI could execute another illicit entry operation.<sup>191</sup>

On being briefed about SIS's success against the latest supercipher variation, Mauborgne declared even more firmly that he did not want ONI conducting another surreptitious entry operation unless SIS concurred with it. Then, he observed: "All along I have had full confidence that the SIS could break any code or cipher system the Japanese cryptographers might produce."<sup>192</sup> Then, Akin proposed that Rowlett, Friedman, and Mauborgne meet with their respective Navy counterparts and convey SIS's stance.<sup>193</sup>

When Rowlett, Ferner, and Small briefed an OP-20-G counterpart about SIS's solution of the newest supercipher variant, their counterpart argued that solving the system cryptanalytically was too time- and resource-consuming. Although Rowlett, Ferner, and Small conceded that this was a valid point, they argued that SIS cryptanalysts

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<sup>191</sup> Ibid, 181-93.

<sup>192</sup> Ibid, 193.

<sup>193</sup> Ibid, 193-94.

and linguists gained valuable experience during the process, refined their testing approach. Furthermore, they predicted, their increasing skill and efficiency would enable success ever more swiftly going forward. Rowlett urged again that ONI not conduct another illicit entry operation of a Japanese diplomatic code room. Were the Japanese to discover such an operation, they could replace all of the encryption systems used at that facility, setting SIS and OP-20-G's cryptanalytic work back months or even years. His counterpart confided that while he and most of his OP-20-G colleagues agreed, ONI officials ultimately would decide whether to conduct further entry operations.<sup>194</sup>

Rowlett's message delivered to OP-20-G, Friedman scheduled a meeting with Safford for the following day. Friedman confessed to Rowlett, Ferner, and Small that although initially he had not believed that SIS would consistently solve future supercipher versions cryptanalytically, he was "pleased to learn that my initial estimate needs to be revised, and that there is a chance that you may be able to develop an approach which will allow almost every key period to be recovered."<sup>195</sup>

The following day, Friedman related to Rowlett what had transpired during his meeting that morning with Captain Safford. Safford had agreed that ONI should not conduct another clandestine entry operation and pledged that no such operation would occur without his consent. Although this could not guarantee that ONI would not conduct another entry operation, Friedman and Rowlett appreciated that key OP-20-G officials supported SIS's position.<sup>196</sup> Ultimately, ONI conducted no further entry

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<sup>194</sup> Ibid, 196-97.

<sup>195</sup> Ibid, 202.

<sup>196</sup> Ibid, 200-201

operations, permitting SIS to continue solving successive supercipher variations cryptanalytically.

Under Rowlett's direction, the Japanese diplomatic section had come into its own. By 1940, when SIS solved PURPLE and a series of superciphers, Rowlett had been with SIS approximately a decade. He may even have become more experienced in cryptography than Friedman had been when he hired Rowlett, Sinkov, and Kullback in 1930, thanks largely to Friedman himself. The credit for solving RED, PURPLE, and variations of the "supercipher," however, belonged to Rowlett, Ferner, Small, and the other members of the Japanese diplomatic section and, in the end, they gained the trust and support of a skeptical Friedman. Colonel Akin and General Mauborgne, for their part, provided crucial support to the SIS, ensuring that high-level War Department officials, including General Marshall and Secretary of War Stimson, realized the significant implications of SIS's successes for U.S. national security, securing vital additional funding and personnel for SIS in the process.

Friedman, ultimately, had built SIS and established the foundation and scaffolding enabling its tremendous success. Despite limited funding initially, he hired and trained the right personnel to establish the personnel basis of an effective SIGINT service. When he promoted SIS's accomplishments to his War Department superiors, his purpose was predominantly to demonstrate the service's important accomplishments and protect SIS from the sort of debilitating budgetary reductions that had doomed the Cipher Bureau. While Yardley often had focused on self-aggrandizement, Friedman's promotion of SIS was geared toward enabling SIS to continue developing and improving. Perhaps he realized that he would receive credit for his accomplishments regardless and that

promoting and enabling his subordinates to perform and succeed would enhance rather than detract from his own achievements. In the end, after a decade, SIS's accomplishments against Japan had eclipsed those of its predecessor. Furthermore, with tension with Japan rising in the Asia-Pacific region, the stakes were much higher for Friedman, Rowlett, and SIS than they had ever been for Yardley and the Black Chamber.

Lamentably, however, despite the intelligence that SIS produced, U.S. leaders failed in the end to capitalize on the insight that MAGIC intelligence provided into Japanese activities, plans, and intentions vis-à-vis the United States, demonstrating that good intelligence did not guarantee effective leadership or policy.<sup>197</sup> PURPLE intercepts and the MAGIC intelligence that they yielded permitted U.S. leaders to track Japanese intelligence efforts in the United States, throughout Latin America, and more broadly around the world, and observe Japanese preparations for war even as Japan pursued diplomacy in Washington. Regardless, through its remarkable cryptanalytic achievements and strong interagency collaboration, SIS promoted the fundamental concepts underlying of a more cohesive and effective U.S. intelligence community and, as the next chapter will demonstrate, enabled a number of important U.S. intelligence and law enforcement successes against Japan.

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<sup>197</sup> Roberta Wohlstetter, in *Pearl Harbor: Warning and Decision*, stated that “an American cryptanalyst, Col. William F. Friedman, had broken the top-priority Japanese diplomatic code, which enabled us to listen to a large proportion of the privileged communications between Tokyo and the major Japanese embassies throughout the world.” Roberta Wohlstetter, *Pearl Harbor: Warning and Decision* (Stanford, California: Stanford University Press, 1961) 382. Although Friedman was an outstanding cryptographer, however, he was not involved in the day-to-day work concerning PURPLE, and periodically learned of progress and setbacks through briefings from Rowlett and his Japanese diplomatic section colleagues.

## Chapter Three

### “MAGIC” Intelligence and Japanese Espionage, Propaganda, and Preparation for War, 1940-1941

Whereas Chapter Two of this dissertation focused on SIS’s solution of Japan’s PURPLE cipher in 1940, this chapter will examine advantages that MAGIC intelligence provided U.S. intelligence and law enforcement agencies during 1941.<sup>198</sup> MAGIC intelligence enlightened U.S. leaders about the Japanese government’s most sensitive activities, plans, and intentions vis-à-vis the United States in real time, while enabling intelligence collection and counterintelligence successes against Japanese intelligence operatives and networks that aggressively targeted the United States in 1941, in addition to enabling a much better understanding of Japan’s foreign objectives and the lengths to which it would go in order to achieve them.<sup>199</sup> Unfortunately, however, in the end, U.S.

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<sup>198</sup> PURPLE was the codeword that SIS allocated to the Japanese cipher that the Japanese Foreign Ministry introduced in 1939, and which SIS solved in 1940. MAGIC was the broader name of the intelligence compartment that MID created for both RED and PURPLE intelligence information and finished intelligence products, including analysis, based on RED and/or PURPLE intercepts. The “B Machine,” which SIS constructed based on its cryptanalytic analysis of PURPLE intercepts, was used to decipher PURPLE intercepts and ultimately resided within the security strictures of the MAGIC compartment. Its design was directly connected to SIS’s solution of PURPLE and production of MAGIC products, including raw intercepts and finished intelligence.

<sup>199</sup> As Chapter Two described, in 1940, SIS broke the Japanese Foreign Ministry’s newest and most sophisticated cipher system, which SIS dubbed “PURPLE.” Intelligence predicated on PURPLE intercepts, in addition to that which was extracted from Japanese cables encrypted with Japan’s “RED” cipher, PURPLE’s predecessor, was dubbed MAGIC. The War Department’s Chief Signal Officer, General Joseph O. Mauborgue, selected MAGIC to be the overarching compartment name based on the remarkable or “magical” feat that PURPLE’s solution, accomplished by SIS Japanese diplomatic section cryptanalysts entirely through cryptanalytic means, constituted. Mauborgue received recognition in the field of decryption early in his career, in 1914, when he published the first known solution of the Playfair cipher.

leaders did not exploit MAGIC effectively enough to prevent Japan from inflicting significant defeats against U.S. interests at Pearl Harbor and other locations in the Asia-Pacific region beginning in December 1941.

By the end of 1940, SIS and OP-20-G, delivered MAGIC products to a limited number of specified, or named, intelligence consumers in Washington six days per week. Some of the first intelligence, predicated on PURPLE intercepts and delivered by MID and ONI to U.S. leaders, informed those intelligence consumers that Japan had launched a two-part plan in December 1940. It would negotiate with the United States to resolve diplomatic and commercial disagreements concerning the Asia-Pacific region, particularly regarding China and Manchuria but, concurrently, would also prepare to deliver a knock-out blow against the United States militarily, so that Japan could continue pursuing its imperial and military ambitions in the Asia-Pacific region unopposed.

MID and ONI were able to gauge MAGIC's impact early on with their premier intelligence consumer. ONI provided President Franklin D. Roosevelt his first MAGIC intelligence report, predicated on PURPLE intercepts, in January 1941. Thereafter, FDR and other high-ranking U.S. officials, who were privy to MAGIC intelligence and how it was acquired, received monthly intelligence summaries of PURPLE intercepts, as well as MAGIC analytic intelligence reports and memoranda derived from the intercepts. On January 23, in yet another example of the increasingly effective intelligence coordination between MID and ONI described in Chapter Two of this dissertation, the Army and Navy agreed that the MID would deliver MAGIC intelligence to the White House during odd months, while ONI would deliver it during even months.

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Demonstrating Roosevelt's interest in MAGIC intelligence products, several months after he began receiving them, the Army stopped delivering MAGIC to the White House, having decided that it was more appropriate for the Department of State to deliver intelligence products derived from diplomatic intercepts, although the Navy continued delivering MAGIC when it was responsible for doing so. The trigger for the Army's decision was the mishandling of a MAGIC intelligence summary by one of its officers. Brigadier General Edwin M. Watson, Roosevelt's military aid, had disposed of a MAGIC intelligence summary in his office wastebasket in either May or June 1941, rather than destroying it. This mistake could have resulted in grave CI consequences, although it did not. When FDR noticed the absence of MAGIC intelligence in September 1941, an Army month, he directed that MAGIC intelligence deliveries resume and end even requested raw intercepts.

In early November, when the Army again failed to deliver MAGIC, Roosevelt complained to Captain John R. Beardall, his naval aide. When Beardall informed Roosevelt that November was an Army month, Roosevelt told him that although Secretary of State Cordell Hull was providing him MAGIC summaries, he also wanted raw PURPLE intercepts. Finally, on Monday, November 10, the Army agreed to deliver finished MAGIC intelligence and raw Purple intercepts to the State Department, while the Navy would continue delivering them to the White House. On November 12, the Navy made the first delivery of raw PURPLE intercepts to the White House.<sup>200</sup>

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<sup>200</sup> David Kahn, *How I Discovered World War II's Greatest Spy and Other Stories of Intelligence and Code* (Boca Raton, FL: CRC Press, 2014), 81.

### *Japan Pursues Peace While Preparing for War*

In late 1940, Japanese Foreign Ministry outlined a two-part plan to address its increasingly strained relationship with the United States, explaining the plan in PURPLE cables to its embassies and consulates abroad and instructing them in how to execute the scheme. PURPLE intercepts described the plan and then its implementation in considerable detail and, as the following account demonstrates, SIS and OP-20-G, via MID and ONI, ensured that U.S. leaders cleared to receive MAGIC intelligence detailing the Japanese Foreign Ministry's activities virtually in real time.

At the end of 1940, the Japanese government appointed Admiral Kichisaburo Nomura Japanese Ambassador to the United States. Tokyo dispatched Nomura, who had longstanding good relationships with a number of U.S. civilian and Navy officials, in an effort to negotiate a diplomatic settlement with the United States, especially concerning Japan's invasion of China. But a secret PURPLE cable, transmitted on December 10, 1940, from Tokyo to the Japanese Embassy in Washington, indicated that Japan was not placing all of its eggs in the Nomura basket. The cable informed Japanese missions: "With the appointment of Ambassador Nomura we wish to formulate a definite plan for our propaganda and information gathering work by seeking cooperation of Japanese bank and business officials in the United States."<sup>201</sup>

Japan planned to intensify its intelligence operations and re-focus its propaganda dissemination in order to prepare for war with the United States. It would pursue these activities via Japanese embassies and consulates throughout the world, but especially in

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<sup>201</sup> U.S. Department of Defense, *The "Magic" Background of Pearl Harbor*, Vol. I (Washington, D.C.: Government Printing Office, 1977), A-73.

the United States, Canada, Mexico, and other locations in Latin America. Japan previously had focused its intelligence and propaganda activities concerning the United States primarily on disseminating cultural and political propaganda; intelligence collection, however, thenceforth would be Japan's premier priority. Further MAGIC messages expounded on the plan and provided detailed instructions regarding initial steps that Tokyo expected Japanese embassies and consulates to take.

On December 17, 1940, the Japanese consulate in New York, responding to Tokyo's directive, reported Japanese businesses in its area of responsibility that would and collect intelligence and disseminate propaganda for Japan. The cable explained: "As propaganda and enlightenment organs here, we have the Japan Institute, the Tourist Bureau, and the silk office of the Ministry of Commerce and Communication."

Regarding entities willing to collect intelligence for Japan, the message stated:

Other groups whose importance we cannot ignore for collecting information are the financial advisor, the Army and Navy Inspection Offices, Representatives of Domei, ASAHI, NITINITI, AND YOMIURI, the Bank of Japan, the Specie Bank, Mitsui, Mitsubishi, N.Y.K., O.S.K., the Manchurian R.R. and OKURA Co.

The message also recommended that "an information committee centering around the press attaché" be established in order to exploit these aforementioned entities.<sup>202</sup>

Tokyo acted swiftly on this information. A February 5, 1941, message, from Foreign Minister Yosuke Matsuoka to the Japanese Embassy in Washington, observed that, regarding New York's December 17 message, Japanese government officials had contacted Tokyo representatives of the companies, "including Sumitomo's

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<sup>202</sup> Ibid, Vol. I, A-73.

representatives,” as well as newspaper representatives. Matsuoka explained that one of his representatives discussed having “the various representatives of business firms engage in collecting intelligence material” and “to have all such representatives abroad (in the United States) cable their opinions and manipulations in so far as they are needed in politics, through diplomatic channels so as to maintain secrecy.” The Foreign Minister added that he had been “able to obtain their agreement to cooperate with us in this respect, so please proceed with this program.” Additionally, he had “the perfect understanding and agreement of the army and navy in this connection,” because “they promise to give us whatever aid they can.”<sup>203</sup> In turn, Japanese embassies and consulates cabled Tokyo throughout 1941 to report that these companies had followed through, providing Tokyo the intelligence that it requested concerning the United States.

On January 30, 1941, Matsuoka sent Washington two PURPLE messages containing specific instructions about Japan’s priorities and objectives for its fortified intelligence network. The first cable, No. 43, read in part:

. . . we have decided to de-emphasize propaganda for the time being, and instead, to strengthen our intelligence work.

. . . we have mapped out a fundamental program, the outline of which is contained in my supplementary cable No. 44.

Please, therefore, reorganize your intelligence set-up and put this new program into effect as soon as possible.<sup>204</sup>

Cable No. 44 further directed the Japanese Embassy in Washington:

(1) Establish an intelligence organ in the Embassy which will maintain liaison with private and semi-official intelligence organs (see my message to Washington #591 and #732 from New York to Tokyo, both of last year's series).

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<sup>203</sup> Ibid, Vol. I, A-73–A-74.

<sup>204</sup> Ibid, Vol. I, A-76.

With regard to this, we are holding discussions with the various circles involved at the present time.

(2) The focal point of our investigations shall be the determination of the total strength of the U.S. Our investigations shall be divided into three general classifications: political, economic, and military, and definite course of action shall be mapped out.

(3) Make a survey of all persons or organizations which either openly or secretly oppose participation in the war.

(4) Make investigations of all anti-Semitism, communism, movements of Negroes, and labor movements.

(5) Utilization of U.S. citizens of foreign extraction (other than Japanese), aliens (other than Japanese), communists, Negroes, labor union members, and anti-Semites, in carrying out the investigations described in the preceding paragraph would undoubtedly bear the best results.<sup>205</sup>

Japanese naval officers, in the United States ostensibly as diplomatic officials, and Japanese government agents serving abroad as teachers, students, Buddhist and Shinto priests, and in various other capacities, would oversee the collection, synthesis, and transmission of intelligence to Tokyo, while ethnic Japanese residents were expected to provide much of the intelligence ultimately acquired. Notably, Matsuoka's instructions indicated that the Japanese government was willing to place first-generation Japanese immigrants, or *Issei*, and second-generation Japanese-Americans, or *Nisei*, in the United States at risk for undertaking these activities on Japan's behalf. The Japanese Foreign Ministry also believed that *Issei* and *Nisei* would indeed commit espionage against the United States and for Japan.

Demonstrating the significant impact that MAGIC intelligence had on U.S. policy, the U.S. government devised a plan to address security vulnerabilities concerning

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<sup>205</sup> Ibid, Vol. I, A-76-A-77.

ethnic Japanese in the Hawaiian Islands in the event of a war with Japan. In a December 4, 1941, memorandum to FBI Director Hoover, R. L. Shivers, Special Agent in Charge, in Honolulu, Territory of Hawaii, stated: “The War Department will control the enemy alien population in the Hawaiian Islands,” in the event of a war with Japan. He observed that out of a total population of 430,000 in Hawaii, the ethnic Japanese population totaled 156,000, of which 41,000 were or *Issei*, and 115,000 were *Nisei*.

Regarding the *Issei* population, Shivers explained: “It is obvious that the War Department would not and could not seize approximately a tenth of the population of the Hawaiian Islands and place that number in concentration camps.” Accordingly, Shivers concluded on the FBI and War Department’s behalf: “Therefore, the seizure of Japanese aliens in Hawaii is a matter of selectivity.” Shivers explained that after careful and thorough consideration by Military Intelligence officials in Hawaii, they had concluded “that if the leadership of the Japanese alien population is seized, that, of itself, will break the backbone of any Japanese alien resistance or attempt at interference.”<sup>206</sup>

Shivers noted that in the event of war the War Department would target for detention “the alien leadership in Hawaii in every branch of alien activity,” specifically “businessmen, consular agents, Japanese language school teachers and principals, Buddhist and Shinto priests.” The War Department would also target “others of no particular affiliation but who by reason of their extreme nationalistic sentiments would be

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<sup>206</sup> Memorandum from Territory of Hawaii Special Agent-in-Charge R. L. Shivers to FBI Director J. Edgar Hoover on Department of War plan to address the enemy alien population in Hawaii in the event of war against Japan, Germany, and Italy, accessed May 21, 2015, [http://www.internmentarchives.com/showdoc.php?docid=00254&search\\_id=127621&pagenum=003](http://www.internmentarchives.com/showdoc.php?docid=00254&search_id=127621&pagenum=003).

a danger to our security as well as others who have seen Japanese military service.” Shivers added that the FBI office in Hawaii was “in entire agreement with the plans that the Army has formulated for the handling of the enemy alien in Hawaii and has collaborated with the Army here in perfecting these plans.” Furthermore, the FBI, War Department, and ONI had composed a list of individuals whom the United States would detain as enemy aliens in the event of war with Japan as part of a collaborative effort that the three agencies inaugurated in early 1940.<sup>207</sup>

The content of PURPLE messages detailing the inauguration, development, and products of Japan’s intensified intelligence network detailed not only Japan’s plans and intentions, but also many of the network’s accomplishments. On February 5, 1941, a PURPLE transmission from Tokyo to Washington described Japan’s intention to “investigate the general national strength of the United States” and particularly about the U.S. relationship with Latin America, and stated that “Japanese residents, including newspaper men and business firms,” would be organized “for the purpose of gathering information.” The cable warned that “care should be taken not to give cause for suspicion of espionage activities.” Demonstrating the extent of the broader Japanese intelligence system, Japan’s Washington mission relayed the message to Japan’s embassies in Chile, Peru, Panama, Argentina, Venezuela, and Brazil. Japan’s Brazilia, Brazil, embassy re-transmitted the cable to Santos and Ribeiro Preto, Brazil.<sup>208</sup>

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<sup>207</sup> Ibid.

<sup>208</sup> *The “Magic” Background of Pearl Harbor*, Vol. I, A-81.

On February 12, 1941, ONI produced a “Memorandum for the Chief of Naval Operations” that concerned “Japanese Espionage Organization in the United States.” ONI recommended that the memo’s content be “brought to the attention of the President and the Secretary of the Navy” and noted that the information had “been compiled from highly confidential and reliable sources by the Domestic Intelligence Branch of the Office of Navy [Sic] Intelligence from documentary evidence in its possession.” In other words, the report included information from PURPLE intercepts. The memo reported that Japan had “decided to strengthen its intelligence network in the United States upon the arrival of . . . the new Japanese Ambassador [Nomura].” Furthermore, the cable stated that “Japanese Diplomatic and Consular representatives have been instructed to reorganize and strengthen their intelligence nets in [the United States].” A “fairly accurate portrayal” followed, detailing how “Nisei Japanese and Japanese resident nationals are to be employed” and stating that the “espionage centers would be Los Angeles, San Francisco, Seattle, New Orleans, Chicago, New York and Washington, all instructions emanating from Washington.” The memo also indicated that Mexicali, Sonora, and Vancouver would be espionage centers on the U.S. border. ONI disseminated the memorandum to MID and FBI.<sup>209</sup>

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<sup>209</sup> U.S. Navy Department, Office of the Chief of Naval Operations, Office of Naval Intelligence, Washington, D.C., Memorandum for the Chief of Naval Operations, “Japanese Espionage Organization in the United States,” February 12, 1941, accessed September 12, 2019, <http://www.mansell.com/eo9066/Intell.html>.

More detailed instructions for the broader ethnic Japanese, or *Nikkei*, population in North America were transmitted on February 15, 1941, from Tokyo to Washington.<sup>210</sup>

The cable informed the mission:

The information we particularly desire with regard to intelligence involving U.S. and Canada, are the following:

1. Strengthening or supplementing of military preparations on the Pacific Coast and the Hawaii area; amount and type of stores and supplies; alterations to air ports (also carefully note the clipper traffic).

2. Ship and plane movements (particularly of the large bombers and sea planes).

3. Whether or not merchant vessels are being requisitioned by the government (also note any deviations from regular schedules), and whether any remodelling [Sic] is being done to them.

4. Calling up of army and navy personnel, their training, (outlook on maneuvers) and movements.

5. Words and acts of minor army and navy personnel.

6. Outlook of drafting men from the view-point of race. Particularly, whether Negroes are being drafted, and if so, under what conditions.

7. Personnel being graduated and enrolled in the army, navy and aviation service schools.

8. Whether or not any troops are being dispatched to the South Pacific by transports; if there are such instances, give description.

9. Outlook of the developments in the expansion of arms and the production set-up; the capacity of airplane production; increase in the ranks of labor.

10. General outlooks on Alaska and the Aleutian Islands, with particular stress on items involving plane movements and shipment of military supplies to those localities.

11. Outlook of U.S. defense set-ups.

12. Contacts (including plane connections) with Central and South America and the South Pacific area. Also outlook on shipment of military supplies to those areas.

Please forward copies of this message as a "Minister's Instruction" to New York, San Francisco, Los Angeles, Seattle, Portland, (Chicago or

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<sup>210</sup> *Nikkei* includes all persons of Japanese descent in a foreign land. The term includes, broadly, and throughout this dissertation, *Issei*, or first-generation Japanese residents abroad, *Nisei*, or second-generation ethnic Japanese born abroad, and *Sansei*, or third-generation ethnic Japanese born abroad.

New Orleans?) Vancouver, Ottawa, and Honolulu. Also to Mexico City and Panama as reference material.<sup>211</sup>

Then, on April 19, 1941, Tokyo took a significant step toward organizing *Issei* and *Nisei* to gather intelligence, cabling the following instructions to its U.S. missions:

Please wire immediately of [Sic] the information you have based on the figures in your office taken at the time of the census in October of last year on the following points:

1. Number of first generation [Sic] and second generation [Sic] Japanese (listing male and female separately).
2. List second generation [Sic] Japanese maintaining only one nationality, and those having dual citizenship.
3. List also those who are dependent and those who are independent.

Forward by mail in code form to Los Angeles, Portland, and Seattle. Relay information from New York to Chicago and New Orleans.<sup>212</sup>

Within days, the intelligence requested was acquired and communicated to Tokyo, such as the following figures, transmitted on April 22, by the Japanese Consulate in Portland, Oregon:

1. First generation [Sic] males 2558. Females 1792. Second generation [Sic] males 1825. Females 1542.
2. Second generation [Sic] Japanese maintaining only one citizenship 1853; those maintaining dual citizenship 1514.
3. 2106 are independent (of these 280 are second generation Japanese). 5611 are dependent upon others (of these 3908 are second generation Japanese).<sup>213</sup>

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<sup>211</sup> *The "Magic" Background of Pearl Harbor*, Vol. I, A-82. "First generations" refers to *Issei*, ethnic Japanese who were born in Japan and emigrated from the Japan. "Second generations" refers to *Nisei*, ethnic Japanese born abroad to *Issei* parents. For the purpose of this dissertation, *Nisei* were born to *Issei* parents in the United States.

<sup>212</sup> *Ibid*, A-95.

<sup>213</sup> *Ibid*, A-96.

Intelligence collection began within several months of Japan's launch of its re-invigorated intelligence campaign. On May 9, Japan's Los Angeles consulate informed Tokyo that *Nikkei* were already acquiring intelligence for Japan:

. . . We have already established contacts with absolutely reliable Japanese in the San Pedro and San Diego area, who will keep a close watch on all shipments of airplanes and other war materials, and report the amounts and destinations of such shipments. The same steps have been taken with regard to traffic across the U.S.-Mexico border.

We shall maintain connection with our second generations who are at present in the (U.S.) Army, to keep us informed of various developments in the Army. We also have connections with our second generations working in airplane plants for intelligence purposes.

With regard to the Navy, we are cooperating with our naval Attaché's office, and are submitting reports as accurately and as speedily as possible.<sup>214</sup>

ONI, MID, and FBI focused particularly on this information, each agency reproducing it nearly verbatim for its customers.<sup>215</sup>

For example, a March 12, 1941 memorandum, prepared for FBI Director Hoover and 21 other FBI officials, according to the memorandum based largely on ONI intelligence information from a "highly confidential and reliable source," in other words MAGIC, which concerned "Japanese Espionage Organization in the United States," reported: "According to naval authorities, Japanese Diplomatic and Consular representatives have been instructed to reorganize and strengthen their intelligence network in this country." The memorandum further observed that, "according to available information, Hidenari Terasaki, Secretary of the Japanese Embassy, in

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<sup>214</sup> Ibid, A-99.

<sup>215</sup> Although it was unaware of the its origin, the FBI received the objective content of PURPLE intercepts.

Washington, D.C., will be the guiding influence in intelligence work and will establish an intelligence unit which will maintain liaison with private and semi-official organizations.” The memo then described the emerging intelligence network, noting that “second generation Japanese and Japanese resident nationals are also to be employed.”<sup>216</sup>

A May 22, 1941, “Memorandum for the Attorney General,” signed by FBI Director Hoover, provides yet another example of the FBI receiving sanitized MAGIC intelligence for CI purposes. According to the memorandum, for “intelligence activities in Southern California, the Japanese would be utilizing Japanese associations, Japanese chambers of commerce and Japanese newspapers.” The document warned, furthermore, that “a number of second generation [sic] Japanese have been placed in airplane plants for intelligence purposes” and that “Japanese authorities maintain contact with the second generation [Sic] Japanese who are now in the United States Army.” Most of this information was derived from PURPLE intercepts, although the FBI was not privy to its origin. The memorandum, which was nearly a reproduction of a May 9, 1941, PURPLE intercept, also described espionage activities among *Issei* and *Nisei* in the San Pedro, San Diego, and U.S.-Mexico border areas.<sup>217</sup>

Japanese intelligence collectors in Manila, Honolulu, Seattle, San Francisco, Los Angeles, San Diego, and Havana, among other places, cabled Tokyo detailed intelligence

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<sup>216</sup> Federal Bureau of Investigation, “Japanese Espionage Organization in the United States,” March 12, 1941, accessed September 12, 2019, <http://www.mansell.com/eo9066/Intell.html>.

<sup>217</sup> Federal Bureau of Investigation Director John Edgar Hoover, “Memorandum for the Attorney General,” 22 May 1941, accessed August 11, 2015, [http://home.comcast.net/~eo9066/Intell.html#JAPANESE\\_ESPIONAGE](http://home.comcast.net/~eo9066/Intell.html#JAPANESE_ESPIONAGE).

reports on the activities and routines of the U.S. Navy in the Pacific and Indian Oceans. Japanese intelligence officers also sent Tokyo detailed information concerning the U.S. aircraft industry. For example, a multi-scoped PURPLE intercept sent from the Seattle consulate to Tokyo on May 11, 1941, regarding “Economic Contacts,” indicated:

We are using foreign company employees, as well as employees in our own companies here, for the collection of intelligences having to do with economics along the lines of construction of ships, the number of planes produced for their various types, the production of copper, zinc and aluminum, the yield of tin for cans, and lumber.

SIS and ONI linguists failed to decipher a portion of the message referring to “second generation Japanese,” unfortunately. It was “garbled.” But, the next part of the intercept, which concerned “Military Contacts,” stated:

We are securing intelligences concerning the concentration of warships within the Bremerton Naval Yard, information with regard to mercantile shipping and airplane manufacturer, movements of military forces, as well as that which concerns troop maneuvers.

With this as a basis, men are being sent out into the field who will contact Lt. Comdr. OKADA, and such intelligences will be wired to you in accordance with past practice.<sup>218</sup> KANEKO is in charge of this. Recently we have on two occasions made investigations on the spot of various military establishments and concentration points in various areas. For the future we have made arrangements to collect intelligences from second generation Japanese draftees on matters dealing with the troops, as well as troop speech and behavior.

The final part of this intercept, which concerned American labor unions, noted: “We have had a first generation Japanese, who is a member of the labor movement and a committee chairman, contact the organizer, and we have received a report . . . .” The message clarified that the contact was a member of the Congress of Industrial

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<sup>218</sup> Lieutenant Commander Sadatomo Okada of the Imperial Japanese Navy is discussed below in this chapter in the section titled: *Lieutenant Commander Itaru Tachibana*.

Organizations (CIO). It specified that “for the collection of intelligences with regard to anti-participation organizations and the anti-Jewish movement, we are making use of a second generation Japanese lawyer.”<sup>219</sup>

The following two PURPLE cables, transmitted from Japanese consulates in the United States to Japan, containing intelligence information concerning U.S. naval vessels and installations, were indicative of the types of reports prepared by Japanese intelligence officers several times a week, and sometimes even daily:

FROM: Hollywood (Los Angeles) June 2, 1941  
TO: Washington # 7.

(Circular)

Message to Tokyo #83.

On the 20th, the Saratoga, and on the 24th, the Chester (?), Louisville, the 12th Destroyer Squadron and Destroyers #364, 405, 411, 412, and 413 entered San Diego, and all of them left on the 31st.

Trans. 6-20-41<sup>220</sup>

FROM: Seattle (Sato) June 23, 1941  
TO: Tokyo (Gaimudaijin) #056

(1) Ships at anchor on the 22nd/23rd (?):  
(Observations having been made from a distance, ship types could not be determined in most cases.)

1. Port of Bremerton:

1 battleship (Maryland type)

2. aircraft tenders (one ship completed and has letter “E” on its funnel).

2. Port of -----:

1 destroyer

11 coast guard cutters

(ships under repair)

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<sup>219</sup> *The “Magic” Background of Pearl Harbor*, Vol. I, A-100.

<sup>220</sup> *Ibid*, Vol. II, Appendix, A-127.

- 1 destroyer
- 11 (appear to be) minesweepers
- 3. Sand Point:
  - 2 newly constructed hangars
- 4. Boeing:
  - New construction work on newly built factory building #2.
  - Expansion work on all factory buildings.

Trans. 7-14-41<sup>221</sup>

Early in 1941, the Department of Justice (hereinafter DOJ) indicted a large number of *Issei* and *Nisei* residing in San Pedro, California, and Honolulu, Hawaii, on conspiracy charges. Then, on March 1, the Japanese consulate in Honolulu sent a PURPLE cable to Tokyo explaining what had transpired:

On the 28th [of February], the local Federal Grand Jury indicted 71 persons who owned fishing boats, (the majority of whom were Japanese), under Article 88 on charges of conspiracy. The Presidents of three fishing companies operated by Japanese were also indicted.

The U.S. law reads that captains of all fishing boats over 5 tons must be U.S. citizens. It is specifically charged that first generation [Sic] Japanese have forged bills of sale and made second generation [Sic] Japanese nominal owners of these vessels. It is charged that in this transaction conspiracy was involved.

This is a similar incident to that which recently arose in Los Angeles, and developments are being watched with considerable anxiety.

Tokyo relayed the message to the Japanese Embassy in Washington and to the Japanese consulates in San Francisco and Seattle.<sup>222</sup> Then, on April 5, the Japanese consulate in Honolulu informed Tokyo that 26 of the defendants had pled guilty, that the remainder had either entered a defense or a plea of not guilty, and that the indictments against those who had not pled guilty had been dismissed.<sup>223</sup> The San Pedro cases followed a similar

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<sup>221</sup> Ibid, A-126 – A-127.

<sup>222</sup> Ibid, A-108.

<sup>223</sup> Ibid, A-109.

course. DOJ's decision not to pursue those who had not pled guilty was probably based on the requirement that MAGIC intelligence used to disrupt the networks not be exposed during legal proceedings in order to reduce the risk of compromising the source.

On September 6, 1941, the Japanese consulate in Hollywood cabled Tokyo about another setback, relating:

The local immigration office has gradually undertaken the arrest of Japanese who are in possession of illegal passports. In Los Angeles approximately 50 and in the entire state of California, roughly 100 persons are understood to have been taken into custody. All of them have borrowed money to cover bond.

When boats become available approximately half of them will be given the opportunity to return home should they so desire. It seems that this sort of roundup will be carried on in the future as well.

This message, which the Japanese Foreign Ministry relayed to Washington and San Francisco, represented another CI success for the FBI and provided further justification for the resources invested in SIS.<sup>224</sup>

One area into which U.S. intelligence and law enforcement appears not to have insight was Japan's communication and potential transmission of goods via diplomatic courier. To this end, a March 11, 1941, PURPLE intercept indicated: "Vice consul "Mori will be appointed the first courier in the U.S." The message added that "he should make direct trips between Washington and San Francisco without stopping anywhere en route, except when the nature of the items he is conveying necessitate his doing so."<sup>225</sup> Then, a June 2 cable from Japanese Foreign Minister Yosuke Matsuoka in Tokyo to Rome, Washington, Berlin, Moscow, Berne, and Rio de Janeiro observed that "the science of

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<sup>224</sup> Ibid, Vol. V, A-216.

<sup>225</sup> U.S. Department of Defense, *The "Magic" Background of Pearl Harbor*, Vol. 1, A-92.

cryptography and cryptanalysis is being practiced more and more” and, thus, “no absolute confidence can be placed in the secrecy of a code.” Matsuoka argued, furthermore, that “courier mail is a more secure method of transmitting information than by reliance upon codes,” and requested: “. . . so when there is a secret matter which might arouse a given nation, please send the message by courier mail or some other method equally safe.”<sup>226</sup>

The scope and depth of insight that SIS’s solution of Japan’s PURPLE cipher ultimately provided U.S. leaders was unparalleled until British cryptanalysts solved Germany’s Enigma encryption system early in World War II. Seldom has a government had such extensive access to a foreign adversary's intelligence activities, plans, and intentions against it, especially as a conflict of the Pacific War’s magnitude approached and as the adversary telegraphed that it was preparing in earnest to initiate that conflict.

*Lieutenant Commander Itaru Tachibana*

In June 1941, ONI and FBI achieved a significant counterintelligence success against a Japanese naval intelligence network operating in the western United States with the arrest of Lieutenant Commander Itaru Tachibana. Tachibana, a Japanese naval officer assigned to the United States nominally as a language officer, was based in the Los Angeles area. There, he coordinated intelligence collection on the West Coast.

The episode began when, on March 25, 1941, when, during an apparent chance encounter, former U.S. Navy member Al D. Blake spoke with an old Japanese acquaintance, Toraichi Kono. Kono lamented that Blake no longer was on active duty, but said that he knew a Japanese naval officer who would pay Blake well for sensitive

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<sup>226</sup> Ibid, Vol. II – Appendix, A-187.

information concerning the U.S. Pacific Fleet. Blake told Kono that he had a close friend assigned to the U.S.S. *Pennsylvania*, then based at Pearl Harbor, Hawaii, who could provide sensitive information. Kono said that the Japanese naval officer would contact Blake soon.

Blake reported the encounter to the FBI field office in Los Angeles the same day, but the FBI was not interested in the information. The FBI and MID had already been investigating Tachibana's activities for a month, based on ONI's assessment that he appeared to be an intelligence operative targeting U.S. military members. Ultimately, the FBI deferred Tachibana to ONI, and ONI's District Intelligence Officer (hereinafter DIO) in Los Angeles closely surveilled the Japanese naval officer. When the FBI rebuffed him, Blake approached ONI's 11th district intelligence office in Los Angeles. Immediately recognizing the opportunity that Blake presented, ONI asked him to continue seeing Kono and to secure a meeting with his Japanese naval contact.<sup>227</sup>

When Kono introduced Blake to his contact, whom he called "Yamato," Yamato encouraged Blake to acquire sensitive information from his friend on the *Pennsylvania*. ONI physically surveilled the meeting and determined that Yamato's automobile's license plate number was identifiable with that of Tachibana. Yamato was Tachibana.

Then, ONI provided a letter on April 18, presumably from Blake's friend aboard the *Pennsylvania*, for Blake to pass to Kono. Three days later, Tachibana met with Blake in Los Angeles. He gave Blake \$600 and directed him to travel to Hawaii and acquire sensitive information on the U.S. Pacific Fleet from his friend.

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<sup>227</sup> At the time, the 11th Naval District included Southern California, Arizona, and Clark County, Nevada.

Blake reached Oahu on April 30 and remained in constant contact with ONI officers. He met with his notional friend from the *Pennsylvania*, actually an ONI officer, and received firing practice reports from the U. S. S. *Phoenix* intended for passage in turn to Tachibana. Then, on May 12, Blake returned to Los Angeles.

In the meantime, ONI officials in Los Angeles discovered that Tachibana was scheduled to travel to Japan on May 15. They requested permission from DOJ for the FBI arrest him as soon as he provided the gunnery reports to Japanese government officials, which the U.S. Attorney promptly granted. The FBI would also arrest Kono who, as a Japanese citizen not formally connected to the Japanese government, was a viable candidate for arrest and deportation. In order to reduce publicity, the U.S. Attorney also agreed not to require arrest warrants.

On May 13, however, Assistant Secretary of State Adolf A. Berle informed the FBI that the Department of State opposed arresting Tachibana and Kono. Berle added that he could not discuss the reason behind the State Department's position over the telephone. He approved a discreet search of Tachibana's luggage as he departed for Japan, but did not want the FBI to scrutinize Tachibana himself. Consequently, the FBI abandoned pursuit of Tachibana and deferred the case entirely to ONI. Whether Berle intervened based on information received via MAGIC and in order to protect MAGIC is unclear, since he did not discuss why the State Department opposed Tachibana and Kono.

Meanwhile, on May 13, Tachibana examined the gunnery reports at Kono's home and, disappointed, told Blake that the Japanese government would pay \$6,000 for better information. Tachibana added that he must secure permission from his superiors in

Washington, but urged Blake in the meantime to visit his friend in Hawaii again and to establish a small business front on Oahu as a cover for his trips there.

Tachibana canceled his travel to Japan and, with another Japanese naval intelligence officer, Engineer Lieutenant Wataru Yamada, instead visited Japanese naval attaché Ichiro Yokoyama in Washington. They reviewed the gunnery reports and agreed that they were insufficient. Yokoyama authorized Tachibana to dispatch Blake on another intelligence mission to Hawaii. Accordingly, Tachibana returned to Los Angeles and, through Kono, provided Blake with another \$600 for another trip to Oahu and \$3,000 to divide with his friend aboard the *Pennsylvania*. Kono informed Blake that Tachibana would pay him at least \$5,000 more for desirable non-public information.

ONI anticipated that Tachibana probably would still travel to Japan, but that he would stop in Hawaii in route in order to review any material that Blake acquired. Still hoping to apprehend Tachibana before he left the United States, the new Director of Naval Intelligence, Captain Alan G. Kirk, appealed to the Navy Secretary and the U.S. President's Naval Aide for permission. On May 24, Secretary of State Cordell Hull approved Tachibana's arrest, provided that the Justice and Navy Departments were certain of their information; that Tachibana would be convicted; and that arresting him was imperative. The State Department also told the FBI that it could arrest Kono, since he was not formally linked to the Japanese government.

Blake left for Oahu on May 26 and arrived there on May 29. Meanwhile, Lieutenant Commander Edwin Layton, Intelligence Officer of the Pacific Fleet, prepared a new set of documents for Blake to pass to Tachibana. Then, however, Blake complicated matters. Through a bug placed in Blake's room, ostensibly to monitor any

potential meetings with Japanese intelligence officials, ONI monitored Blake as he hosted women in his hotel room in Honolulu for several drinking parties. Blake had an affair with one of the women and bragged to her about his intelligence mission. Concerned that Blake had blown his cover, ONI chastised him, threatened to inform the woman's husband about the affair, and ordered him to return to San Francisco immediately. ONI also warned the woman with whom Blake had the affair that ONI would inform her husband of her indiscretion if she divulged to anyone what she had learned from Blake.

In California, ONI provided Blake with intelligence documents that included "Confidential" U.S. Navy reports, including fleet training schedules for 1942. According to Kono, Tachibana was ill, so Blake provided the documents the following day at his home. Once Blake had departed, the FBI arrested Kono and then arrested Tachibana at the Olympic Hotel in San Francisco.

The FBI charged Tachibana with violating U.S. espionage statutes. A judge set his bail at \$50,000, which Tachibana's automobile insurance company posted on his behalf. The Japanese assistant naval attaché, Lieutenant Commander Yoshinori Terai, immediately traveled from Washington to Los Angeles. He funded Tachibana's bail and illicitly posted Kono's bail.

Tachibana did not admit to his espionage activities, but instead stuck to his cover story: He was in the United States as a Japanese language officer. He claimed that he had dropped out of USC because the lectures had been too difficult to understand and that he had been learning English and about American culture and customs through magazines and newspapers at a public library. In searching his home, however, the FBI discovered the significant extent of Tachibana's intelligence activities. Three of the U.S. Navy's

best Japanese linguists translated a voluminous collection of Tachibana's documents, while a list compiled of his possessions totaled 107 pages. It included \$4,327 in cash; two file cabinets of documents; two loaded handguns with ammunition; cameras; and materials for developing film. Since Tachibana earned just \$200 a month, the amount of cash was suspicious. He claimed that his predecessor had left it for him, but FBI and ONI discovered a notebook in which Tachibana had written: "Matters of Secret Service Fund," which included the initials of six individuals. Tachibana's possessions also included a receipt for \$4,600 paid to Blake, which Blake had signed.

Tachibana's most compelling possessions were among his voluminous collection of documents, which included details on the movement of U.S. warships; figures concerning the U.S. production of war-related products; information about shipyards and ship-repair facilities; details regarding defense preparations on the West Coast, locations of U.S. military bases and forces; data regarding the mobilization by the U.S. government of military reserve forces; and maps of major West Coast cities.<sup>228</sup>

The content of these documents was consistent with the intelligence requirements that the Japanese Foreign Ministry had tasked its intelligence collectors to acquire in late 1940 and early 1941. Moreover, the information indicated that Tokyo had instructed Tachibana particularly to acquire intelligence concerning naval air power and aerial combat targeting naval vessels, which was consistent with Japanese intelligence requirements for the eventual attack against Pearl Harbor.

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<sup>228</sup> Pedro Loureiro, "The Imperial Japanese Navy and Espionage: The Itaru Tachibana Case," *Intelligence and Counterintelligence*, Volume 3, Number 1, 107-111.

Among Tachibana's possessions, the FBI also discovered a suitcase of documents that belonged to Lieutenant Commander Sadatomo Okada, another Japanese naval officer in the United States presumably as a language student. Okada resided in Seattle, Washington, and ONI had monitored him since his arrival in San Francisco in June 1940. He had traveled extensively along the West Coast and frequently visited the Bremerton Naval Yard in the state of Washington, as well as the Sand Point Naval Air Station. ONI assessed that he had visited these sites in order to observe U.S. Navy activities. In February 1941, for example, Okada had made one of these trips with another Japanese language officer, Lieutenant Commander Sadayashi Nakayomi. The two Japanese naval officers drove together from Seattle to San Diego and during the trip Okada stayed at the Olympic Hotel in Los Angeles. FBI and ONI concluded that Okada probably provided information collected during the journey to Tachibana at the Olympic Hotel.

A PURPLE intercept, transmitted on May 11, 1941, proved that Okada was a Japanese naval intelligence officer committing espionage in the United States. In it, the Japanese Foreign Ministry demonstrated that he had undertaken to address the intelligence requirements that Tokyo had sent its foreign missions in late 1940 and early 1941. The cable, also quoted earlier in this chapter, stated:

We are securing intelligence concerning the concentration of warships within the Bremerton Naval Yard, information with regard to mercantile shipping and airplane manufacture, movements of military forces, as well as that which concerns troop maneuvers. With this as a basis, men are sent out into the field who will contact Lt. Cdr. Okada and such intelligence will be wired to you in accordance with past practice.<sup>229</sup>

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<sup>229</sup> *The "Magic" Background of Pearl Harbor*, Vol. I, A-99 – A-100.

On June 4, 1941, Okada was pulled over for speeding and taken into custody by local police in Bakersfield, California. A search of his vehicle yielded a number of newspaper articles concerning U.S. naval and military topics. This was publicly available information and the police eventually released Okada. The police chief, however, was an ONI reserve officer. He highlighted Okada to the ONI office in San Pedro. ONI then arranged for Okada to be pulled over in Glendale, California. This time, authorities discovered that his suitcase contained meticulously crafted reports on U.S. Navy and Army forces stationed in the Pacific Northwest. The search also yielded detailed sketches of U.S. Navy vessels and photographs of U.S. Navy installations, in addition to reports on the movements of U.S. Navy and merchant vessels operating around Seattle, San Francisco, San Pedro, and San Diego.

Okada was a skilled intelligence officer. During the period in which he came under scrutiny, Tokyo was considering transferring him to San Diego, California, which remained an important port even after President Roosevelt ordered the U.S. Pacific Fleet relocated from San Diego to Pearl Harbor in June 1941. ONI's concern about Okada was considerable enough for the Naval Intelligence Director himself to inform FBI Director Hoover that Okada undoubtedly was connected to Tachibana, by then under arrest. Indisputably, in stark contrast with Okada, Tachibana exercised appalling tradecraft, considering the materials in his possession when the FBI apprehended him at the Olympic Hotel and, furthermore, the documents that connected him to Okada.

Tachibana was running a number of intelligence sources when the FBI and ONI disrupted him. At least several of them produced information that was dispatched to Tokyo via PURPLE transmissions, including from two sources identified as "Fukuti" and

“Maki” in San Francisco, and one referred to as “Kurokawa” in Honolulu, Hawaii. ONI and FBI also discovered that Tachibana had been running a British military officer, Frederick J. Rutland who, when questioned by British authorities, admitted to being a paid agent of Japan and to collecting intelligence particularly on the U.S. West Coast.<sup>230</sup>

A December 4, 1941, report from ONI’s Counter Subversion Section on “Japanese Intelligence and Propaganda in the United States During 1941,” prepared “from information received from various sources,” addressed Tachibana, Okada, their associates, and their broader intelligence network. It included a summary of ONI and FBI’s CI success against Tachibana. In a section titled “The Tachibana Case,” the report stated that Tachibana, an officer in the Imperial Japanese Navy, had led Japan’s West Coast espionage network until his arrest in 1941 “for violation of the espionage statutes.” The report also addressed Tachibana’s associates, including Okada, observing:

Other Japanese Naval Officers involved in this subversive group were Lieutenant Commander Sadatomo Okada, Commander Iwao Arisaka, Lieutenant Commander Sadayoshi Nakayama and Engineer Lieutenant Wataru Yamada. Okada and Yamada, like Tachibana, were requested to leave the U.S. because their activities were considered to be inimical to the safety of this country, and Commander Arisaka and Lieutenant Commander Nakayama sailed suddenly from New York for Brazil in July, 1941.<sup>231</sup>

The report observed also that Tachibana provided intelligence that he had acquired concerning the U.S. Navy to the *Nippon Kaigun Kyokai*, or Japanese Navy

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<sup>230</sup> Loureiro, “The Imperial Japanese Navy and Espionage,” 107-11.

<sup>231</sup> U.S. Office of Naval Intelligence, Counter Subversion Section, “Japanese Intelligence and Propaganda in the United States During 1941,” December 4, 1941, accessed August 2, 2015, [https://internmentarchives.com/showdoc.php?docid=00021&search\\_id=176299](https://internmentarchives.com/showdoc.php?docid=00021&search_id=176299).

Association, whose chief objective was “the dissemination of information about navies of other countries and the development of Japanese Naval strength,” and which had “established investigating agencies to study domestic and foreign navies, maritime transportation and other maritime matters.” Furthermore, the *Nippon Kaigun Kyokai* “had been working in collaboration with rank officers of the Imperial Japanese Navy stationed in Los Angeles” and, “Tachibana, who was collecting intelligence for the benefit of the Japanese Navy, was assisted by the investigating branch of that association.”<sup>232</sup>

Among Tachibana’s voluminous collection of documents, investigators also discovered “considerable correspondence from Dr. Takishi Furusawa, director of the Los Angeles *Suiko Sha*, which is an organization composed of officers and reserve officers of the Imperial Japanese Navy.” The December 4 ONI report stated that Dr. Furusawa and his wife, Sachiko Furusawa, appeared to direct the organization and were “exceedingly prominent in Japanese affairs.”<sup>233</sup>

ONI connected the dots concerning Tachibana’s intelligence network largely from information discovered among his documents and ultimately identified individuals and organizations with whom Tachibana had collaborated. ONI assessed that these individuals and organizations were involved in Japanese intelligence operations targeting the United States based on the nature of their relationships with Tachibana. The report specifically identified an intelligence-oriented nexus between Tachibana and “Dr. Kijima

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<sup>232</sup> Ibid.

<sup>233</sup> Ibid.

Amano, secretary of the Sakura Kai; Shunten Kumamoto, president of the Los Angeles Japanese Association”; as well as with “Gengoro Nakamura, president of the Central Japanese Association of California.” The report added that it was “interesting to note that all of them, including the Furusawas, are on the research committee of the Sakura Kai.”<sup>234</sup>

In the end, DOJ did not prosecute Tachibana, Okada, or the other Japanese naval intelligence officers that the FBI and ONI had identified and investigated, despite concluding that they had committed espionage and ensuring that they were charged criminally for it. The Japanese naval attaché to the United States and Japanese Ambassador Nomura personally requested of U.S. officials that Tachibana and Okada be permitted willingly to depart the United States and avoid criminal prosecution. The Department of State obliged and Tachibana, for his part, left the United States in late June 1941. Notably, one particular PURPLE intercept argued that, in dealing with him, the United States should consider Okada’s “social status” as well as potentially “similar unpleasant results for American officers in” Japan.<sup>235</sup>

The reason why the U.S. government ultimately did not prosecute them, however, was likely to avoid potential threat to MAGIC’s secrecy. MAGIC intelligence was too valuable to jeopardize by prosecuting Tachibana, Okada, or virtually anyone else, once their intelligence network had been disrupted. Tachibana and Okada, after all, had been neutralized as intelligence threats and Japan had sustained a humiliating setback. ONI

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<sup>234</sup> Ibid.

<sup>235</sup> *The “Magic” Background of Pearl Harbor*, Vol. II, A-152.

counterintelligence officials had identified, penetrated, and then terminally disrupted the Japanese naval intelligence network.

Insight into Japanese intelligence activities acquired from Tachibana and his co-conspirators fueled FBI counterespionage investigations and increased ONI's knowledge of Japanese naval intelligence activities targeting the U.S. Navy. Information acquired from Tachibana also revealed involvement by Japanese-language newspapers in intelligence activity. ONI and FBI learned this from Tachibana's correspondence with representatives of several Japanese language newspapers, including *Rafu Shimpo*, or the Los Angeles News, *Kashu Mainichi*, or the California Daily, and the *Nanka Sangyo Nippo*, or the Southern California Industrial Daily News.<sup>236</sup>

#### *Takeo Yoshikawa and Tadashi Morimura*

From February through December 6, 1941, Japanese naval ensign Takeo Yoshikawa, who was assigned to the Japanese Consulate in Honolulu under the pseudonym Tadashi Morimura, telegraphed PURPLE messages to Tokyo containing detailed intelligence on the U.S. Pacific Fleet at Pearl Harbor. ONI and FBI monitored Yoshikawa's activities beginning when he arrived in Hawaii, physically surveilling him and tapping the telephone line at his residence. Furthermore, SIS and OP-20-G intercepted and deciphered Yoshikawa's cables, encrypted via PURPLE, and disseminated intelligence products derived from them.

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<sup>236</sup> U.S. Office of Naval Intelligence, Counter Subversion Section, "Japanese Intelligence and Propaganda in the United States During 1941," December 4, 1941, accessed August 2, 2015, [https://internmentarchives.com/showdoc.php?docid=00021&search\\_id=176299](https://internmentarchives.com/showdoc.php?docid=00021&search_id=176299).

Richard M. Kotoshirodo, an American of Japanese ancestry, whom the Japanese Consulate in Honolulu employed, assisted Yoshikawa in intelligence-gathering excursions and in designing materials, such as bomb-plots, based on the intelligence that they acquired. Yoshikawa's final reports on U.S. ships in Pearl Harbor were signaled in code to Japanese submarines via lights and bonfires during the evening of December 6, 1941. SIS and OP-20-G intercepted and deciphered transmissions describing in detail the shore-to-ship signaling scheme.<sup>237</sup>

Shortly after the Japanese attack against Pearl Harbor and other U.S. installations in Hawaii, U.S. authorities arrested Kotoshirodo. In his defense, Kotoshirodo stated that although he "understood that I was gathering naval information for the Japanese government when I made these trips," he "gave no thought as to what my superiors in the consulate were going to do with it." Although the FBI possessed considerable evidence concerning Kotoshirodo's espionage activities, rather than prosecute him, the U.S. Department of Justice sent him to the Topaz Relocation Center in Utah following Pearl Harbor.<sup>238</sup> Having monitored and eventually disrupted Japanese intelligence activities in Hawaii, the Justice Department prosecuted neither Yoshikawa nor Kotoshirodo, perhaps because doing so could have required divulging MAGIC intelligence information.

In a March 12, 1942, "Memorandum for the Director," the FBI summarized the case against Kotoshirodo. The memorandum indicated that Kotoshirodo was a dual

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<sup>237</sup> John Toland, *Infamy: Pearl Harbor and Its Aftermath* (Garden City, NY: Doubleday & Company, Inc., 1982), 3-4.

<sup>238</sup> Robert B. Stinnett, *Day of Deceit: The Truth About FDR and Pearl Harbor* (New York: The Free Press, 2000), 90-91, 94, 98-100.

citizen of the United States and Japan and that he was loyal to Japan rather than the United States, but that he was no longer involved in subversive activity against the United States. Born in the United States in 1916, Kotoshirodo moved to Japan in 1923, where he remained through 1930. He “received seven and a half years of schooling in Japan and one year of student military training,” according to the memorandum. Before returning to the United States in 1930, Kotoshirodo applied to defer his Japanese military service until 1940. He began working for the Japanese Consulate in Honolulu in 1935 and admitted regarding one particular collection assignment from Japanese consular officials that he knew “that they were collecting information for the Japanese Government,” and that “he was told that that was the customary thing, and he admits freely that he aided Morimura [Yoshikawa] and Okuda in every way possible.”<sup>239</sup>

In the wake of Pearl Harbor, the FBI and other law enforcement agencies conducted a number of raids against *Issei* and *Nisei*, as well as against ethnic Germans and Italians, suspected of involvement in pro-Axis subversive activities. Raids continued even after the U.S. government compelled evacuation of *Issei* and *Nisei* from the West Coast after March 27, 1942. The results of these raids were recorded in Top Secret reports produced by ONI and MID, and in FBI memoranda. Some information pertaining to these raids was even released to the media.

On February 9, 1942, Hoover dispatched a “Memorandum for the Attorney General, Re: Enemy Alien Program in the Western Defense Command.” The

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<sup>239</sup> U.S. Department of Justice, Federal Bureau of Investigation, “Memorandum for the Director,” March 12, 1942, accessed September 12, 2019, <http://www.mansell.com/eo9066/Intell.html>.

memorandum reported “the results of a series of searches and apprehensions made by the Portland, Seattle, and Los Angeles Field Divisions on the afternoon and evening of February 7, 1942.” In Portland, in the vicinity of Bonneville Dam, which was “considered to be the most vital area in the Portland Field Division,” the FBI made four arrests in connection with the seizure of “twenty-one sticks of dynamite, sixty-two dynamite caps, and one hundred forty feet of fuse.” Near a U.S. Naval radio station in the vicinity of Seattle, two *Issei* and one German alien were arrested for possession of “prohibited articles,” including a half box of dynamite, approximately 100 dynamite caps, about twenty feet of fuse, a revolver, a short-wave radio set, and two cameras.

In the vicinity of the Palos Verdes Hills, just above San Pedro, California, the FBI apprehended 17 enemy aliens in connection with the confiscation of seven short-wave radio sets, a large amount of short-wave radio equipment, two cameras, twenty three flashlights, four large search lights, three telegraphers keys, firearms and ammunition, four blasting caps, three pounds of black powder, three feet of fuse, and two reels of eight millimeter film containing photographs of battleships and fortifications.<sup>240</sup>

### *Was It Enough?*

Through 1941, as Japan prepared to attack Pearl Harbor and other U.S. positions in the Pacific Basin, MAGIC consumers, comprised of high-level U.S. civilian and military leaders, received detailed, accurate, and timely insight into the subversive

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<sup>240</sup> U.S. Federal Bureau of Investigation, Memorandum for the Attorney General, “Enemy Alien Problem in the Western Defense Command,” February 9, 1942, accessed August 11, 2015, [http://home.comcast.net/~eo9066/Intell.html#ALIEN\\_PROBLEM](http://home.comcast.net/~eo9066/Intell.html#ALIEN_PROBLEM).

activities and intelligence information that enabled and informed Japanese war planning. MAGIC consumers learned about Japan's two-part plan to prepare for war as it engaged in diplomacy with the United States as Japanese missions abroad did. Yet, U.S. civilian and military leaders failed nevertheless to anticipate the Japanese attacks in December 1941 adequately and to take appropriate measures. Arguably, short of a declaration of war against the United States by Japan before the latter launched its series of military campaigns against the United States, Great Britain, and the Netherlands, the intelligence concerning the impending start of the Pacific War could not have been better. U.S. civilian and military leadership, however, should have used the intelligence to much greater effect. Although hindsight is nearly always clearer, foresight was in short supply among U.S. leaders late in 1941.

The intelligence that leaders received via MAGIC should have been enough for them to track and anticipate Japan's progress toward war and its decision ultimately to go to war in December 1941. The intimate insight that MAGIC provided U.S. leaders into Japan's activities, plans, and intentions, as well as the underlying political, military, and imperial ambitions and objectives, across a great breadth of issues beginning toward the close of 1940 remains unparalleled in the history of U.S. intelligence during peacetime.

MAGIC's importance endured the beginning of the Pacific War. During World War II, MAGIC was one of several major intelligence resources that delivered remarkable advantages to U.S. leaders and war planners, shedding light on important issues not only in Asia, but also in the European Theater of World War II.<sup>241</sup> Indeed,

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<sup>241</sup> According to Carl Boyd, in *Hitler's Japanese Confidant: General Oshima Hiroshi and Magic Intelligence, 1941 – 1945*, when the Japanese Ambassador to Berlin, General Oshima Hiroshi, toured the German defenses and fortifications of the Normandy

despite the failure of U.S. leaders adequately to anticipate, prepare for, and defend against Japan's attacks in December 1941, MAGIC continued to yield valuable intelligence.

Overt Japanese activities, however, as reported in Japanese and international media, also provided considerable insight into intensifying Japanese ambitions beyond its borders and the military expansion that enabled Japan to pursue them. Japan tended increasing to rely on military means in pursuit of its imperial and economic interests and, in so doing, became increasingly at odds with the preponderance of the international community. Considering the addition of crippling U.S. economic sanctions that restricted Japan's expansionist capacity and the enduring threat that the United States posed to Japan's imperial ambitions, U.S. leaders not only should have realized that conflict was likely, but should have acted accordingly, in order to prepare the country for that eventuality.

Intelligence continues to inform the decisions that U.S. civilian and military leaders make, but even the best intelligence guarantees neither good leadership or sound policy. Nor can compelling intelligence provide leaders with a public that supports a particular policy or, in the case of President Roosevelt in 1940, becoming involved in a foreign war. Regardless of whether FDR desired to support France and Great Britain against Germany, more than 80% of the American public opposed U.S. entry into the

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Coast during World War II, he cabled the Japanese Foreign Ministry detailed accounts of what he had observed. The information in the resulting PURPLE intercepts informed U.S. military planners of the invasion of Normandy, France, of the Normandy coast's defenses. Carl Boyd, *Hitler's Japanese Confidant: General Oshima Hiroshi and Magic Intelligence, 1941 – 1945* (Lawrence: University Press of Kansas, 1993), 117-139.

European conflict. Americans also indicated little support for engaging Japan more aggressively in the Asia-Pacific region.

The current high interest of U.S. policy makers and military leaders in intelligence products, and the immensity of the U.S. intelligence community, whose steady expansion U.S. leaders have sanctioned in the decades since World War II, time and again has presented this challenge to U.S. leaders. The fundamental lesson in the following observation from Roberta Wohlstetter, recorded in her exhaustive volume analyzing the intelligence and policy background of Pearl Harbor, titled: *Pearl Harbor: Warning and Decision*, is more broadly applicable than the focus of her study: Pearl Harbor:

If our intelligence system and all our other channels of information failed to produce an accurate image of Japanese intentions and capabilities, it was not for want of the relevant materials. Never before have we had so complete an intelligence picture of the enemy. And perhaps never again will we have such a magnificent collection of sources at our disposal.<sup>242</sup>

In the end, intelligence professionals and the services that employed them did not fail to seek, acquire, or make available to their consumers, including high-level civilian and military leaders, information describing the mounting threat that Japan posed as the interwar period progressed. Intelligence professionals warned that Japan posed an increasing threat to U.S. interests. They focused on conveying to important Japanese civilian and military counterparts that the United States did not pose a threat to Japan; they acquired intelligence concerning Japan's capabilities, activities, plans, and intentions; and they defended U.S. interests against increasingly aggressive Japanese intelligence activities throughout the 1920s and 1930s. They endeavored to have the

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<sup>242</sup> Roberta Wohlstetter, *Pearl Harbor: Warning and Decision* (Stanford, California: Stanford University Press, 1961), 382.

greatest impact that they could within a bureaucratic structure that often seemed systematically to inhibit their efforts, that chronically received inadequate support from the very executive and legislative branches and military bureaucracies that had created it.

U.S. civilian and military leaders ultimately failed to take intelligence as a profession seriously enough. They failed to empower and exploit U.S. intelligence adequately and they did not comprehend the increasing challenge that the United States faced from Japan. They also failed to comprehend how Japanese leaders interpreted U.S. actions vis-à-vis Japan. Eventually, the failures culminated in the tremendous disasters that the United States experienced in Hawaii, the Philippine Islands, Wake and Guam Islands, and throughout the Asia-Pacific region in December 1941, followed by the terrible devastation wrought during the Pacific War.

## Chapter Four

### Sidney Mashbir, Ellis Zacharias, and U.S. Human Intelligence Targeting Japan During the Interwar Period

Although the MAGIC intelligence products that the Army and Navy delivered to high-level U.S. consumers throughout 1941 provided extensive insight into Japanese activities, plans, and intentions, MAGIC could not alone provide a complete picture. Human intelligence (hereinafter HUMINT) was required in order to form a more complete non-public picture of what Japanese leaders believed, expected, desired, feared and, ultimately, what they would do.

While the U.S. government neither understood nor invested in intelligence adequately during the interwar period, dedicated intelligence professionals recognized the growing danger of conflict from increasing tension with Japan. Consequently, they endeavored during the interwar period to acquire strategic intelligence, and provide leaders in Washington with insight into the perspectives of key Japanese military officials, who probably would play important roles in Japan's next major military conflict. In the end, however, U.S. leaders had to exploit the information at their disposal and make prudent decisions, which they largely failed to do.

The consistent investment in personnel, material, and policy support required to enable good HUMINT collection is fundamentally the same now as it was during the interwar period, regardless of the target country.<sup>243</sup> An intelligence collector endeavors to convince a potential spy to provide sensitive, non-public information from his or her

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<sup>243</sup> Non-state actors increasingly have become targets for HUMINT collection in recent decades.

government in exchange for compensation and, inevitably, that target must have access to the information desired and must ultimately be amenable to the relationship and suitable for it. Compensation may embody one or more of a variety of forms, but financial remuneration usually is the premier motivator. The intelligence officer may have to convince the target that the information he or she provides will be used appropriately while, more often, the intelligence professional must demonstrate that he or she will ensure the asset's security. If discovered by his or her own government, a spy usually endures significant suffering or even death. Family members or even friends may suffer similarly. During the 1920s and 1930s, Japanese leaders decreasingly tolerated political opposition; they did not tolerate espionage. For example, in October 1941, Japanese authorities arrested Soviet Union spy Richard Sorge and his alleged accomplice, Japanese journalist Hotzumi Ozaki. During interrogation and torture, Ozaki confessed to spying against Japan. Japan hanged both men in November 1944.

This chapter will examine U.S. HUMINT collection between the end of World War I and the beginning of the Pacific War via the experiences and perspectives of two U.S. intelligence officers in particular, U.S. Army intelligence officer Sidney Forrester Mashbir and U.S. Naval intelligence officer Ellis M. Zacharias, in addition to several of their intelligence colleagues. Mashbir and Zacharias concurrently served assignments in Japan for their respective intelligence services in the early 1920s. Each learned the Japanese language, carefully studied Japanese society, and became well acquainted with a number of rising Japanese military and intelligence counterparts, who eventually played important roles in the Japanese military during the Pacific War. Furthermore, following World War II, Mashbir and Zacharias each wrote a memoir about his experiences as an

intelligence professional focused predominantly on Japan.<sup>244</sup> Zacharias and Mashbir's respective assignments in Japan during the early 1920s determined their career trajectories. Each believed that the United States and Japan would probably fight a war against one another. Each endeavored to warn their superiors about that coming war, prepare the United States for it, and ultimately to prevent it.

Mashbir and Zacharias believed that strong, working relationships, and even friendships, with their Japanese counterparts enabled them to increase mutual understanding and reduce tension among U.S. and Japanese military officials and thereby between the two countries. Periodically during the interwar period, they collaborated toward this end. Through their common perspective, focus, objectives, and experiences, Zacharias and Mashbir became good friends and professional allies.

#### *Sidney F. Mashbir*

On August 7, 1920, Captain Sidney F. Mashbir departed the United States for Tokyo, Japan, along with fellow Army intelligence officer Major Edward F. Witsell. They were to report for duty to the U.S. Military (Army) Attaché in Tokyo, and there begin "a four-year course of study in the Japanese language," in addition to performing other unspecified duties.<sup>245</sup>

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<sup>244</sup> Mashbir's memoir concerning his career as an Army intelligence officer through World War II is Sidney Forrester Mashbir, *I Was an American Spy* (New York: Vantage Press Inc., 1953); Zacharias's memoir concerning his career as a U.S. Naval Intelligence officer is Ellis M. Zacharias, *Secret Missions* (Annapolis, MD: Naval Institute Press, 2003).

<sup>245</sup> As Army intelligence officers, Mashbir and Witsell's premier intelligence consumers resided among the U.S. Army's leadership; but, their products ultimately served a broader military and civilian consumer base.

Mashbir and Witsell were “briefed and indoctrinated” for the assignment over the course of a month in Washington. According to Mashbir, they were most impressed when the Army Chief of Staff told them: “You two gentlemen have been selected from among several hundred applicants from the Army at large for this very important detail, and there can be no question that you will have grandstand seats for the next war.” Neither had served overseas during the Great War and each assumed that he must prepare for the next war in order to advance his military career, although neither Congress nor the American public were supportive of MID or intelligence more generally by the early 1920s.<sup>246</sup> Mashbir and Witsell also received instructions to “make every effort to devise some means of getting information out of Japan in time of war.” Mashbir took that directive seriously. It significantly impacted his career during the next twenty years.<sup>247</sup>

Mashbir and Witsell traveled by ship from San Francisco, California, to Honolulu, capital of the U.S. Territory of Hawaii, where they paid a courtesy call to Japanese Consul General Saburo Kurusu, and where Mashbir learned how to surf.<sup>248</sup> During their next stop, at Manila in the Philippine Islands, Mashbir and Witsell met fellow Army intelligence officer Lieutenant Colonel Alvin C. Gillem, Jr. Gillem had returned recently

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<sup>246</sup> Bruce W. Bidwell, *History of the Military Intelligence Division, Department of the Army General Staff, 1775 – 1941* (Frederick, MD: University Publications of America, 1986), 255.

<sup>247</sup> Mashbir, *I Was an American Spy*, 60. Mashbir’s efforts to undertake to address this directive will be addressed in Chapter Five.

<sup>248</sup> *Ibid*, 62. In 1941, the Japanese government sent Kurusu to the United States as a special envoy to assist Ambassador Kichisaburo Nomura in negotiations with the United States.

from an assignment with the American Expeditionary Force (hereinafter AEF) Siberia, during which he had been Chief of Staff to Colonel C. H. Morrow. Participating states, with Japan's exception, had withdrawn their military forces from the Siberian Expedition by the middle of 1920. Gillem recounted an event that occurred in Siberia. During the farewell banquet for the AEF, "one victory-flushed Japanese officer had gotten so drunk that he jumped up on the table and walked its length until he was near enough to shake his fist in Colonel Morrow's Face." Gillem observed that the Japanese officer yelled at Morrow: "You, you damned Americans! Your turn will come next!"<sup>249</sup> Mashbir recounted this in his memoir ostensibly because he believed that it was indicative of the Japanese military view of the United States and prevailing tension between the countries.

The relationship between the United States and Japan was indeed tense in 1920, when Mashbir and Witsell arrived in Japan. In illustrating the strain between the two countries, Mashbir also recounted that shortly before he arrived there, Japanese Lieutenant K. Oyama, grandson of a famous Japanese Field Marshall, Oyama Iwao, who had distinguished himself in the 1894-1895 Sino-Japanese War and again during the 1904-1905 Russo-Japanese War, attempted to sell supposedly "secret" maps to the U.S. military attaché, Lieutenant Colonel Charles Burnett. Burnett was away when Oyama arrived with the maps and Burnett's assistant permitted the Japanese officer to leave the maps in Burnett's office. Soon after, Japanese police arrived and charged that Burnett's assistant had stolen the maps. Mashbir wrote of the incident: "I doubt if anyone in [the United States] realized how close we were to a diplomatic break that could lead to a war

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<sup>249</sup> Ibid, 63. Colonel Morrow served under the American Expeditionary Force Siberia commander, Major General William S. Graves.

at that exact moment.” Mashbir probably exaggerated the event’s implications. Rather, the Japanese scheme probably was a defensive Japanese effort to intimidate the U.S. Army attaché and his assistant attachés and reduce their effectiveness. It also demonstrated the lengths to which the Japanese would go in order to provoke a confrontation and embarrass a U.S. official. Mashbir assessed that Japan might use the tension resulting from the incident to stoke public support for the government against an alleged external threat and even justify a Japanese response.<sup>250</sup>

Mashbir related another experience to demonstrate how the tension between Japan and the United States was evident even among Japan’s general population. Early in his tour, while visiting a Tokyo tea-house, a waitress asked Mashbir whether he was an American, or *Bei-koku*, or an Englishman, or *Ei-koku*. Because of his elementary grasp of Japanese at the time, Mashbir answered that he was *Ei-koku*, whereupon, the waitress said: “Ah, you English will help us defeat America when the war comes!”<sup>251</sup> Mashbir believed that the experience represented anti-American sentiment that the Japanese government had cultivated among the Japanese populace. He also maintained that “by claiming to be an Englishman I was told things I never would have heard had I identified myself as an American,” although he provided no further examples.

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<sup>250</sup> Ibid, 65-66. Notably, since Mashbir published his memoir in 1953, he may have included his broader career experience in his recollection of the account. On arriving at post in Japan, however, he probably received briefings about Japan and the environment in which he would be working as an assistant military attaché, which may have influenced his early observations and assessments of Japan and the Japanese.

<sup>251</sup> Ibid, 68.

Until the 1922 Washington Naval Treaty rendered it obsolete, the Japanese government believed that it could depend on the Anglo-Japanese Treaty in order to protect its interests, especially against the United States. Japan listed among reasons for which it could not trust the United States or virtually any other Western power China's humiliation by Western countries during the nineteenth century; Japan's own forced opening by U.S. Commodore Matthew Perry in 1853; the Triple Intervention's denial of Japan's imperial acquisitions from China following the 1895-95 Sino-Japanese War; and U.S. President Theodore Roosevelt's denial to Japan of perceived territorial rewards from the 1904-05 Russo-Japanese War, when Roosevelt intervened to mediate an end to the conflict via the Treaty of Portsmouth.

The accounts depicting Japanese mistrust and animosity toward the United States that Mashbir included in his memoir comprised the foundation of Mashbir's early understanding of Japanese leaders and the broader Japanese population to the extent of his experience with each. Although Mashbir's analysis of the Japanese remained ongoing at least through the end of the Pacific War, he appears to have drawn early suspicious and negative conclusions, which could have been shaped to some degree initially by insight and briefings he would have received from Colonel Burnett and Mashbir's colleagues on arriving in Japan. Since he wrote his memoir years after the Pacific War's end, however, his perspective may also have been shaped by the totality of his experiences in Japan and with the Japanese, over approximately 25 years.

In an effort to learn more about the Japanese people's "psychology," Mashbir secured Colonel Burnett's permission to supervise construction of two Baptist churches, a school building, and several homes on behalf of an American architect, Antonin

Raymond. Mashbir recalled that the project enabled him to interact with the artisan class of Japan and observe firsthand ordinary skilled and unskilled Japanese workers. He claimed that he was the first U.S. intelligence officer to do so.

Mashbir concluded that the Japanese largely opposed military conscription and that Japan's education system did not adequately prepare students. He determined that Japanese schools were producing more engineers, laboratory assistants, and technicians than Japan's industrial sector could employ and that many Japanese therefore ended up becoming mercantile clerks, farmers, or even rickshaw men. Mashbir concluded that Japanese militarists would seek a foreign war in order to alleviate the domestic socio-economic consequences of their education system's shortcomings.<sup>252</sup>

In the meantime, however, Mashbir assessed that the Japanese government periodically employed brutal measures in order to alleviate societal challenges. According to Mashbir, in the wake of the 1923 Great Kanto Plain earthquake that devastated Tokyo, Japanese military officials herded a group of "so-called advanced thinkers" into a Tokyo bullpen, bayoneted them, and declared that they had been "lost in the earthquake." Mashbir also asserted that the Japanese military placed "dissatisfied elements" in shock divisions during the war in China in the late 1930s, where they would suffer relatively higher casualty rates.<sup>253</sup> He argued that the Japanese government undertook such actions to alleviate rising public dissatisfaction and increase its control over the population. Mashbir argued again that Japanese militarists would pursue war

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<sup>252</sup> Mashbir's italics.

<sup>253</sup> Shock divisions or shock troops normally are used to lead attacks in battles, consequently sustaining heavier losses than forces subsequently entering the campaign.

with the United States based on the same motivations, although Mashbir published this “prediction” after that war.

U.S. Army intelligence reports produced during the interwar period and focused on the ongoing tension in Japan between rightist military groups and politically active, labor-affiliated leftist elements, demonstrate that U.S. military intelligence collectors followed Japan’s ongoing political and social tension as it rose and ebbed intermittently and conveyed intelligence reporting about it to their consumers in Washington.

An October 29, 1923, U.S. Army intelligence report, produced just after the 1923 earthquake and fires, titled “Comments on the Earthquake and Fire in Tokyo, No. 59” matched Mashbir’s anecdotes and analysis. The report stated that the earthquake and fire intensified the struggle between “capital” and “labor” and that “the extreme ‘Right’ and ‘Left’” each included adherents willing to resort to violence to secure their objectives. The report cited the assassination of socialist leader Osugi Sakae, his wife, and their 12-year-old nephew, and the elimination of leftist leaders by police and military forces, were radicalizing “labor,” motivating it to use assassination and arson in turn against the “capitalist class.” The report also described a conservative backlash against the left that began before the earthquake and fire, characterized by the November 4, 1921, assassination of Prime Minister Hara Takashi. Hara had been the first commoner to become Prime Minister. In 1914 he had inaugurated the Taisho democracy, moving Japan toward functional constitutional democracy.<sup>254</sup>

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<sup>254</sup> U.S. National Archives, College Park, MD. “Comments on the Earthquake and Fire in Tokyo, No. 59,” October 29, 1923, 7-8, M-1216, MID 2063-2063, Roll #1, from “Correspondence of the Military Intelligence Division Relating to General, Political, Economic Japan, 1918-1941.”

A separate U.S. Army intelligence report, titled “Comments on Current Military Events, Month of May, 1928,” dated June 25, 1928, written by Major Edward Witsell and approved by Lieutenant Colonel Burnett, detailed the Japanese rightist military leadership faction’s targeting of alleged communists in the Japanese Army. The report noted that eight Japanese Army reservists would be court martialed for “communist leanings,” while no regular Army soldiers supposedly exhibited communist tendencies. Japan either had screened communists out of the Army or suppressed evidence of their membership.<sup>255</sup>

Another HUMINT report, dated January 2, 1924, prepared by the “Headquarters Hawaiian Department, Office of the Department Commander, Honolulu, H.T. [Hawaiian Territory],” addressed to the Acting Chief of Staff, G-2, War Department, in Washington, and classified “Confidential,” indicated that the conservative military faction believed that the Japanese labor movement constituted the premier threat to Japan and that the 1923 earthquake and fire prevented a violent communist uprising. The report was from “a reliable contact of this office” and attributed the information ultimately to officials from a firm called Suguki, in addition to other Japanese businessmen.

Addressing the Japanese Navy and Army, the report argued that while the Army was “as powerful as ever and as efficient” to defend Japan and attack China and Russia which, according to the report, the source claimed were “practically defenseless as far as Naval defense is concerned,” the Navy was “second rate and may even be less than

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<sup>255</sup> Major Edward F. Witsell and Lieutenant Colonel, Cavalry, C. Burnett, U.S. Army Military Intelligence Division, G-2 Report on Japan (Military), on the Subject: “Comments on Current Military Events, Month of May, 1928,” received by G-2, Washington D.C., June 25, 1928, 1, under heading “Communism in the Army.”

that.”<sup>256</sup> The authoritativeness of this information appears tenuous, but it may have reflected the closest the attaché’s office could get to either Japanese armed service. Notably, although these intelligence reports provided insight that would have educated U.S. intelligence consumers regarding the conflict between the Japanese political factions, they also demonstrated the overall weakness of U.S. HUMINT collection concerning the Japanese military.

Mashbir was concerned that Japanese military leaders would stoke tension with the United States in order to secure larger military budgets and restore popular support for the armed services. He believed that Japanese leaders should promote “vertical expansion” through economic and industrial development rather than “horizontal territorial expansion” through conquest and colonial policies. Mashbir also realized, however, that pursuit of the latter promoted the interests of Japanese military leaders, not to mention that Japanese leaders felt entitled to pursue an imperial course that they deemed similar to the nineteenth and twentieth century policies of the Western countries active in the Asia Pacific region.

*Ellis M. Zacharias*

Between the world wars, ONI, arguably was the preeminent U.S. intelligence service, predicted that a significant conflict eventually would occur between the United

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<sup>256</sup> U.S. National Archives II, College Park, MD. Headquarters Hawaiian Department, Office of the Department Commander, Honolulu, H.T., “Conditions in the Far East,” prepared for the Acting Chief of Staff, G-2, War Department, Washington, D.C., January 2, 1924, M-1216, MID 2063-2063, Roll #1, from “Correspondence of the Military Intelligence Division Relating to General, Political, Economic Japan, 1918-1941.” The identity of the Japanese company Suguki was undeterminable.

States and Japan. Consequently, the U.S. Navy dedicated substantial resources toward collecting intelligence concerning the Japanese Navy. ONI also prioritized counterintelligence, in order to thwart Japanese intelligence activities targeting the U.S. Navy and broader U.S. interests.<sup>257</sup> During the interwar period, however, ONI leadership often was indecisive and usually was temporary, while U.S. civilian leaders focused largely on domestic policy. Furthermore, many civilian and military leaders did not understand how intelligence could inform foreign policy formulation; they did not realize that they should drive, focus, and adequately fund intelligence collection.

Lieutenant Commander Ellis Zacharias was an innovative, resourceful, and successful ONI officer during the interwar period and, ultimately, through the end of the Pacific War. Focusing primarily on Japan throughout the 1920s and 1930s, he engaged regularly with his Japanese counterparts who, like him, were young, rising naval intelligence officers. He developed collegial, working relationships with these Japanese naval officials throughout the two decades between the world wars, each side seeking not only to acquire intelligence from the other, but also to gain a better understanding of the other country's perspective and objectives. Zacharias particularly endeavored to convince his Japanese counterparts that the United States did not desire war with Japan. Furthermore, similar to Mashbir, he endeavored to learn as much as he could about Japan and the Japanese.

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<sup>257</sup> For further information on the history of ONI, see Jeffrey Dorwart, *The Office of Naval Intelligence: The Birth of America's First Intelligence Agency, 1865-1918* (Annapolis, Maryland: Naval Institute Press, 1979); Jeffrey Dorwart, *Conflict of Duty: The U.S. Navy's Intelligence Dilemma, 1919-1945* (Annapolis, Maryland: Naval Institute Press, 1983); and Captain Wyman H. Packard, USN (retired), *A Century of U.S. Naval Intelligence* (Washington, D.C.: Government Printing Office, 1996).

In 1920, Zacharias began a three-year assignment in Japan as a U.S. Navy language and intelligence officer. He learned the language and developed a good understanding of Japan and its people. He came to believe that Japan posed a threat to U.S. interests based on its conduct in the Asia-Pacific region and the influence of conservative Japanese military leaders on the country's domestic and foreign policies.

Similar to Mashbir, Zacharias experienced Japan's challenging CI environment and the negative attitude of many ordinary Japanese toward the United States, which the Japanese government cultivated through propaganda and control of the press. He surveyed Japanese and Western scholarship focused on the country and its people, writing at length about it in his memoir.<sup>258</sup> Zacharias relied on a small network of similarly Japan-focused U.S. intelligence officers from the Navy, Army, and the Marine Corps, including Mashbir. He developed a strong personal and professional bond particularly with Mashbir during their concurrent tours in Japan in the early 1920s, and they collaborated and depended on one another as they pursued their Japan-focused intelligence endeavors throughout the remainder of the interwar period.<sup>259</sup>

During the 1920s and 1930s, Zacharias found himself at the center of the complicated relationship between the U.S. and Japanese navies, although Zacharias

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<sup>258</sup> Five years after his assignment in Japan ended, Zacharias returned to Tokyo on an extended temporary duty assignment (hereinafter TDY), during which he noticed a remarkable shift in Japanese politics and society. Japan had moved perceptibly to the right, as hardline militarists had become ascendant in Tokyo.

<sup>259</sup> That the United States was plotting to attack Japan was often the premier concern of Zacharias's Japanese Navy interlocutors. Zacharias endeavored to calm their concern that the United States intended to undermine Japanese interests or even attack Japan. The Japanese Navy

usually positioned himself so. Furthermore, Zacharias endeavored to influence the relationship between the two countries, which tended toward varying degrees of tension. Zacharias operated as an intelligence officer should, but his performance distinguished him from the vast majority of his peers, who were not necessarily so personally invested, so well-connected to influential Japanese counterparts or, in the end, so effective.

On October 4, 1920, the Director of ONI, Captain Andrew T. Long, presented Lieutenant Commander Ellis M. Zacharias new orders recently signed by Secretary of the Navy Josephus Daniels. The orders read:

When directed by the Director of Naval Intelligence you will regard yourself detached from present duty and will proceed to Tokyo, Japan, for the purpose of acquiring a knowledge of the Japanese language and the Japanese people. This employment on shore duty beyond the seas is required by the public interest.<sup>260</sup>

“With one stroke of his pen Mr. Daniels had opened a new world before me, so different from the monotony of routine and regulations which marks the career of a naval officer,” Mashbir recalled in his 1946 memoir, *Secret Missions*. He characterized the assignment as a “passport to adventure.” Unlike Mashbir, who had intelligence experience predating his Japan assignment, Zacharias, who served at sea during World War I, was new to the profession. Similar to Mashbir, however, Zacharias was ambitious to learn and advance.

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<sup>260</sup> Zacharias, *Secret Missions*, 3. *Secret Missions*, which Zacharias published just after World War II, is a detailed autobiographical account of his career as a U.S. Naval Intelligence officer from the early 1920s, when he began his career as a U.S. Navy language and intelligence officer in Japan, through the end of World War II. In the book, Zacharias detailed many of his experiences as an intelligence officer, and included detailed insight into the other U.S. intelligence officers with whom he collaborated closely and regularly, and the Japanese naval officers whom he befriended, against whom he squared off, and sometimes a measure of each. For the purpose of this dissertation, the memoir of Zacharias provides good, detailed insight into the experiences of an active and successful Naval Intelligence officer during between World War I and World War II.

Zacharias reflected in *Secret Missions* that even in August 1920, as he served in a temporary duty assignment with ONI, he still “shared the indifference and even suspicion with which some of my fellow officers of the line habitually regarded intelligence work.” Eventually he concluded that “ignorance and mistrust” drove that attitude. He reflected decades later that he approached this first intelligence assignment emphasizing “the temporary character of my intelligence duties rather than the duties themselves.” But Zacharias also recognized his opportunity, recalling: “Standing in Captain Long’s office, I suddenly realized the implications of the word [intelligence].” Surprisingly, however, Long, warned: “Although you are attached to Intelligence, you are going to Japan as a language student and not as an intelligence officer.” He advised Zacharias to “keep away from intelligence work as far as possible.” Furthermore, Long explained: “We expect you to bring back the most valuable information we now need: knowledge of the Japanese language and the Japanese people.” Long concluded: “We don’t expect you to tie your hands with other activities. These are your orders.”<sup>261</sup>

In 1920, as Zacharias began his assignment in Japan, the United States was preparing to host the Washington Naval Disarmament Conference. U.S. diplomats intended via the conference to limit Japanese naval expansion in Asia and the Pacific. As Zacharias observed in his memoir, following the Great War, the recent combatant powers sought to avoid further military conflict through diplomacy and multi-lateral arms limitation agreements. As military budgets around the world shrank, including in the United States, Zacharias concluded that intelligence could support these efforts.

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<sup>261</sup> Ibid, 3-4.

Zacharias observed, furthermore, that the United States could learn a great deal from intelligence. He argued that partly due to its geographic isolation, the United States “knew but little about the lives and ways of other peoples, real friends or potential foes,” and “whatever knowledge we had was haphazard and colored by sympathies or antipathies, and by the sterile intellectual pacifism which followed in the wake of the last war.” Zacharias asserted, furthermore, that the Army and Navy preferred to secure national interests through diplomacy and intelligence to the extent practicable. “Although not generally recognized, it is nevertheless a truism that professional soldiers and sailors hate war,” he explained, since they know “better than anyone else what it costs in life and blood.” Zacharias believed that the premier purpose of intelligence was to acquire information that would enable policy makers to secure national interests, if possible, short of war.<sup>262</sup>

Long’s rationale confounded Zacharias. He wondered: “How can the knowledge of a foreign language and strange people be divorced from intelligence?” For Zacharias, the question was rhetorical. He decided that he must study the Japanese, their society and culture, in addition to their “language and folkways.” He lamented that ONI “lacked much of this essential knowledge and had no way of filling the gaps.” He determined that he would reject Long’s directive and pursue intelligence work in Japan.<sup>263</sup>

While awaiting his travel orders, Zacharias lodged at the Benedict, a bachelor apartment building in the vicinity of the Army-Navy Club in Washington.

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<sup>262</sup> Ibid, 21-22.

<sup>263</sup> Ibid, 3-4.

Coincidentally, Zacharias's apartment was directly above that of the Japanese naval attaché to the United States, Captain Uyeda. ONI considered Uyeda a rising star in Japanese naval intelligence and therefore an attractive target, and Uyeda frequently hosted female guests. Zacharias recounted:

Night after night I could hear shrill Japanese laughter interspersed with feminine giggles. Patches of conversation floated through the open windows; and it did not take much effort to find out that these girls were secretaries in the Navy Department.

Zacharias reported this to the Navy Department, which ensured that those Navy personnel were transferred. Then, in order to allay Uyeda's suspicion concerning the transfers, ONI made "carefully briefed replacements" available to Uyeda socially. This was the first experience Zacharias had with CI, or "negative intelligence," as he termed it. The Navy's first priority had been to prevent Uyeda from acquiring intelligence from his U.S. Navy guests. The CI threat eliminated, ONI prepared to collect "positive intelligence" from Uyeda. Zacharias had enabled the operation against Uyeda.<sup>264</sup>

On arriving in Tokyo, Zacharias reported for duty to the U.S. Naval Attaché, Captain Edward Howe Watson. Zacharias found Watson "a most gracious chief and an understanding guide to the scenes 'backstage' of Japanese naval politics, or what Admiral [Tetsutaro] Sato himself called 'Japanese Navalism'."<sup>265</sup> Zacharias judged him "one of

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<sup>264</sup> Zacharias defined "basic intelligence" as information acquired largely via open sources, "by studying reference books, consulting libraries, reading the newspapers of foreign countries, listening to their radios, interviewing bona fide travelers." Zacharias argued that "the collection of information by surreptitious means no longer was intelligence. Rather, it was espionage." Zacharias acknowledged that "both are closely related," but stressed that there were "crucial distinctions." Zacharias, *Secret Missions*, 4-6.

<sup>265</sup> Admiral Tetsutaro Sato was an influential Japanese naval officer and strategist, who had performed with distinction during the 1894-5 Sino-Japanese War and in the

the most likable and dynamic, intelligent and alert naval attachés we have had in any country.” This was high praised from Zacharias, who normally criticized the Navy’s leadership, and particularly that of ONI.

Zacharias observed that the Japanese naval officers “were mystified by [Watson’s] technique of telling them too much so that they could learn too little.” During one meeting with a Japanese Navy official, Watson spoke for an hour. As the meeting ended, the Japanese official said: “Eddie, I don’t think I have a right to complain. You certainly were not a bit taciturn. But, frankly, I haven’t the slightest idea what you are talking about.” Zacharias’s point was that Watson’s “loquaciousness was one of the many tricks he had up the sleeve of his uniform coat.”<sup>266</sup>

Zacharias expected to find the militarists comfortably in control of Japan, sustained by strong public support; but, this was not the case. Japan had failed through the Siberian expedition to create a buffer zone between itself and Soviet Russia, let alone to acquire the Russian Far East. Japan’s considerable participation had eroded public support for the military and those conservative civilian and military leaders associated with the armed services. Japanese subjects protested and petitioned the government increasingly and leftist political groups and trade unions demanded that Japan withdraw its 70,000 troops from Siberia.

Zacharias found his first Japanese Army and Navy contacts subdued and observed that members of the Japanese public increasingly expressed dissatisfaction with the

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1904-5 Russo-Japanese War. Sato opposed Japan’s participation in the 1921-22 Washington Naval Disarmament Conference.

<sup>266</sup> Zacharias, *Secret Missions*, 7-8.

military to the extent that military officers less frequently displayed their affiliation or rank. Meanwhile, high-level military leaders resigned and military budgets shrank.<sup>267</sup> Zacharias and other U.S. intelligence officers observed these trends and events; but, their intelligence consumers in Washington were unaware of them. Thus, Zacharias and other intelligence professionals in Japan endeavored to communicate what they observed to Washington via intelligence reporting.<sup>268</sup> The Army intelligence reports described earlier in this chapter represent this general variety of intelligence reporting.

Watson took the newly-arrived Zacharias on courtesy calls to important Japanese Navy officials. First they called on the Japanese Minister of the Navy, followed by the Chief of the Japanese Navy General Staff. Then Watson and Zacharias paid a considerably longer call to the chief of the *Joho Kyoku*, or Japanese Naval Intelligence. Upon arriving at the Japanese Navy Ministry building, staff conducted Watson and Zacharias to the Chief of Naval Intelligence's second-floor office. At the door, a "tall Japanese officer wearing the uniform of a Navy captain" met them. In good English and with a smile, the officer said: "I am glad to see you, Eddie." Then Watson introduced Zacharias to the naval officer, who was Captain Kichisaburo Nomura.

During the ensuing meeting, Zacharias assessed that Nomura possessed considerable ability. He noted the "friendly atmosphere" that Nomura afforded during this first meeting and that it "persisted throughout my stay in Japan and even long after." Zacharias judged Nomura "a Japanese to whom Westernism was no empty mode of

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<sup>267</sup> Ibid, 6-7.

<sup>268</sup> Ibid, 6-8.

manners.” He also judged Nomura “a man with a broad outlook and critical mind,” who could “perceive the pros and cons in every argument and weigh against realities the chimerical plans which were then being woven in that same building.”<sup>269</sup> Two decades later, Nomura led important negotiations with the United States concerning the Sino-Japanese conflict and other Asia-Pacific issues, even as Admiral Isoroku Yamamoto concurrently developed the war plan that included the attack against Pearl Harbor.

#### *Mashbir’s Mission to Vladivostok*

1 “In January 1922, I got one of my finest breaks in the way of an Intelligence mission,” which “resulted in establishing one of the firmest friendships of my life,” Mashbir recorded in his memoir, *I Was an American Spy*, published in 1953.<sup>270</sup>

In January 1922, the multi-lateral Siberia Expedition, which began in 1918 and to which Japan, Great Britain, France, Canada, Italy, China, and the United States contributed military forces, still remained to be resolved. The expedition’s stated goals, outlined by Britain and France, had been to prevent either Germany or the Bolsheviks from capturing military supplies; to rescue a “Czechoslovak Legion” numbering approximately 50,000 men; and to assist White Russian forces against Bolshevik “Red Army” troops on the eastern front of the Russian Civil War. Notably, the United States, which opposed intervening in the Russian Civil War, participated reluctantly and did not support that final objective. U.S. Secretary of State Charles Evans Hughes broached the

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<sup>269</sup> Ibid, 8-9.

<sup>270</sup> Mashbir, *I Was an American Spy*, 71.

topic in January 1922, as the Washington Conference closed, because of Japan's remaining massive military presence of 70,000 troops in Siberia, whereas U.S. General William S. Graves had withdrawn his American contingent by October 1920. The Japanese delegation responded that Japan would not evacuate its forces from Siberia.<sup>271</sup>

In late 1921, the U.S. Embassy in Tokyo received a message from Spiridon Dionisevich Merkulov, President of the "Provisional Government of the Amur" of the Far Eastern Republic, variously called the Chita Republic, "Black Buffer," or "Merkulovshchina."<sup>272</sup> Merkulov conveyed that he possessed documents proving that the Japanese occupation of Siberia was "a typical pilot model of aggression" and that the Japanese Army had staged the massacre of Japanese soldiers at its Nokolaevsk garrison in order to justify dispatching an exceptionally large troop contingent to Siberia. According to Merkulov, Japanese militarists had bribed Chinese bandits, *Hung-Tze*, to massacre the garrison's forces.<sup>273</sup> Merkulov requested that a U.S. envoy be dispatched to

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<sup>271</sup> Ibid, 71. Japan's premier goal had been to secure a portion of resource-rich Siberia and to create a buffer between the Soviet Union and Japan. It had sent a force of approximately 70,000 in pursuit of these ends. Since the total international force was supposed to number 25,000, the 70,000 troop-strong Japanese contribution was, obviously, conspicuous. When France first requested that Japan participate in the expedition, Japan pledged to provide 7,000. Shortly thereafter, the Japanese government approved sending 12,000. Ultimately, Canada had sent just over 4,000 troops, China approximately 2,000, and Britain just 1,500. The United States sent two forces, totaling about 15,000 troops.

<sup>272</sup> Igor V. Naumov, *The History of Siberia* (New York: Routledge, 2006) 183. The Far Eastern Republic existed from April 1920 through November 1922 in the Russian Far East. It was a nominally independent buffer state between the Russian Soviet Federative Socialist Republic and Russian Far Eastern territory that Japan occupied during the Russian Civil War. Merkulov was its president until July 1922.

<sup>273</sup> Mashbir, *I Was an American Spy*, 71. Notably, a decade later, Japan orchestrated the 1931 Manchurian incident as a *cassus belli* to justify seizing and annexing Manchuria and creating the puppet state of Manchukuo.

Siberia to receive the information. The U.S. Army and Navy attachés in Tokyo selected Mashbir to undertake the mission.<sup>274</sup> U.S. Ambassador to Japan Charles Beecher Warren asked Mashbir to return with the documents, if possible.

Mashbir posed as a courier and traveled by train from Tokyo to Tsuruga Harbor. From there, he went by Japanese passenger ship to Vladivostok. He was subject to Japanese surveillance and control throughout the entire trip, neither sleeping nor eating for more than 24 hours.<sup>275</sup> On arriving in Vladivostok, Mashbir met Commander Louis C. Richardson, captain of the *U.S.S. Albany*, as well as Marine Corps Captain James F. Moriarty. Moriarty would become one of his “closest friends and associates throughout the ensuing years.”<sup>276</sup> Mashbir lodged on the *Albany* during his stay in Vladivostok. Coincidentally, Mashbir had met Richardson when he was captain of the U.S.S. *Madawaska*, on which Mashbir had voyaged to Japan in 1920. During that voyage, Mashbir met Richardson’s First Lieutenant, Warren H. Langdon, who a Japanese sentry murdered in Vladivostok on January 8, 1921.<sup>277</sup> The Japanese government eventually acknowledged that the murder was unprovoked, convicted him of murder, and sentenced

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<sup>274</sup> Mashbir, *I Was an American Spy*, 72.

<sup>275</sup> *Ibid*, 72-76.

<sup>276</sup> During World War II, Moriarty earned the Silver Star for gallantry and five oak-leaf clusters.

<sup>277</sup> New York Times, “LANGDON KILLING FOUND UNPROVOKED; Washington learns Japanese Sentry at Vladivostok Revises His Story. ADMITS HE FIRED FIRST. American Seamen Searching for Victim’s Pistol Are Held Up – His Wife a Suicide,” January 18, 1921, accessed June 26, 2016, <http://query.nytimes.com/gst/abstract.html?res=9B06E4DB153CE533A2575BC1A9679C946095D6CF&legacy=true>).

him to a long prison term although, Mashbir claimed, they quietly released the sentry soon after his conviction. Finally, Mashbir bolted down a quick meal and met U.S. Consul General, Vladivostok, David B. McGowan, to whom he delivered the diplomatic pouch.<sup>278</sup> Mashbir's first impact in Vladivostok was to assist McGowan in freeing Chinese diplomats, whose extraterritoriality treaty had been violated by Russian security forces, according to Mashbir ultimately on Japanese orders.<sup>279</sup>

When Mashbir met Merkulov, he judged him a "typical Russian," finding him "highly excitable, and obviously completely terrified" since, although he was a Japanese puppet, he was attempting to orchestrate Japan's withdrawal from Siberia.<sup>280</sup> Merkulov translated a series of documents for Mashbir that appeared composed mostly of statements from Chinese *Hung-Tze*. Although the origin of the documents was unclear and Mashbir assessed that the testimony had been obtained through bribery or torture, the documents indicated that the Japanese had paid the *Hung-Tze* to attack Japan's Nikolaevsk garrison and murder its 250 soldiers.

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<sup>278</sup> In *I Was an American Spy*, Mashbir provided only McGowan's title and surname. But, American Consul General David B. McGowan was mentioned in a U.S. Department of Commerce report from March 1922. *Commerce Reports*, Volume 25, Part 2, Issues 14-16, April – May – June 1922 (Washington, D.C.: Government Printing Office, 1922), accessed October, 11 2014, [http://books.google.com/books?id=iwk4AQAAMAAJ&pg=PA568&lpg=PA568&dq=american+consul+general+mcgowan+siberia&source=bl&ots=yhNNioQt3Q&sig=5CzNJDNMphnv-UuZSvXWHUfoFoQ&hl=en&sa=X&ei=3rY5VPqYBYu1sQS\\_jYLoCA&ved=0CDsQ6AEwBQ#v=onepage&q=american%20consul%20general%20mcgowan%20siberia&f=false](http://books.google.com/books?id=iwk4AQAAMAAJ&pg=PA568&lpg=PA568&dq=american+consul+general+mcgowan+siberia&source=bl&ots=yhNNioQt3Q&sig=5CzNJDNMphnv-UuZSvXWHUfoFoQ&hl=en&sa=X&ei=3rY5VPqYBYu1sQS_jYLoCA&ved=0CDsQ6AEwBQ#v=onepage&q=american%20consul%20general%20mcgowan%20siberia&f=false).

<sup>279</sup> Mashbir, *I Was an American Spy*, 79-82.

<sup>280</sup> *Ibid*, 82.

“This was my first involvement in an intrigue of this scope and I acted amateurishly and injudiciously,” Mashbir recalled in his memoir. He betrayed to his interlocutor that the documents had impressed him and requested them. Merkulov refused. Mashbir then requested at least one of the documents in order to authenticate Merkulov’s description of the documents. Merkulov again refused, this time “abruptly and loudly.” Mashbir reflected: “This, although I did not know it then, is the Russian way of bargaining. They yell loudest just before capitulation!”

Having failed to acquire even one document, Mashbir invited Merkulov to dine aboard the *Albany*. Merkulov declined, claiming that the Japanese would disapprove. He suggested that they dine instead in the private dining train car of American railway expert Colonel John Frank Stevens. Stevens had built the Great Northern Railroad at the close of the nineteenth century and, from 1905 through 1907, had been chief engineer of the Panama Canal project. He had accompanied the American Expeditionary Force to Siberia. Importantly, visitors could approach the dining car unobserved.

That evening, Mashbir, Richardson, and the former chief engineer of the Trans-Siberian Railway greeted Merkulov, who arrived for dinner on time and with the documents. Toward the end of the dinner, Merkulov became increasingly agitated and several times tried to discuss the documents. Each time, however, either Richardson or Mashbir interrupted and changed the subject. Finally, Merkulov announced: “Now we will discuss the documents.” Mashbir demurred: “Your Excellency, I beg you not to discuss the documents.” Merkulov was surprised that Mashbir was no longer interested, especially since he had traveled all the way to Vladivostok to acquire them. Mashbir said that he had changed his mind and even suspected that the documents were not genuine.

Merkulov strenuously objected to this suggestion. In the end, Mashbir permitted Merkulov to persuade him to accept several key documents.<sup>281</sup>

Mashbir was scheduled to dine the following day with Major General Isamura, Chief of Staff of the Japanese Expeditionary force in Siberia.<sup>282</sup> Concerned about Mashbir's security, Richardson, Mashbir, and Moriarty arranged for Moriarty to accompany Mashbir.<sup>283</sup>

Major Isobe, Isamura's aide, met them at the *Albany* and took them to the Japanese military headquarters in Vladivostok. There, he left them for 45 minutes in a room with a table of rolled maps bearing the classification marking *Goku Himitsu*, which approximately translated to "Top Secret." Mashbir judged it a provocation and warned Moriarty to look out the window and say nothing until Isobe returned.<sup>284</sup> At last, Isobe

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<sup>281</sup> Ibid, 83-85.

<sup>282</sup> Major General Isamura probably is identifiable with General Isamura, who was stationed in Burma during its occupation by Japan during the Pacific War, according to Sanderson Beck, "Burma, Malaya and the British: 1800-1950," accessed October 15, 2014, <http://www.san.beck.org/20-8-BurmaMalaya1800-1950.html#a8>. Additionally, Major General Isamura is described as "military head of the Burmese-Japanese Relations Department" in Richard Butwell, *U Nu of Burma* (Stanford, CA: Stanford University Press, 1963) 40. Additional information concerning the identity of Major Isobe was unavailable.

<sup>283</sup> Mashbir was the first regular U.S. Army officer to visit Siberia since the American Expeditionary Force had withdrawn in 1920 which, Mashbir concluded, made the Japanese suspicious of U.S. plans and intentions concerning Siberia. According to Mashbir, an article even appeared in the *China Free Press*, concerning "American intervention in the Far East," linking Mashbir's visit to recent Chinese protests and questioning why he had traveled to Siberia.

<sup>284</sup> As Mashbir and Moriarty departed, Isobe left them an additional 30 minutes with the table of maps in the same antechamber.

returned and led Mashbir and Moriarty into Isamura's office.<sup>285</sup> According to Mashbir, during the ensuing meeting, Isamura attempted to convince Mashbir and Moriarty to accept a map detailing classified Japanese troop positions. Mashbir arranged for Isamura, Isobe, Moriarty, and himself to sign the map, thereby neutralizing the scheme.<sup>286</sup>

Mashbir departed Vladivostok two days later, delaying one day when the Japanese canceled all reservations, save that of Mashbir, on the ship to Tsuruga Harbor. As his ship prepared to leave, Merkulov arrived in a droshky, dashed up the gangplank, and demanded that Mashbir return the documents, claiming that the Japanese would kill him for providing them to Mashbir. Mashbir responded that because the documents were locked in the diplomatic pouch, he could not. It was a lie; the documents were actually on his person, under his shirt. But the lie worked. Merkulov left the ship empty handed. Then, as the ship prepared to depart, Moriarty arrived with a basket of roast duck and several bottles of Tan San. Thanks to his friend, Mashbir would not have to fast during the return trip. In his memoir, he reflected of their farewell: "The shrill whistle blast made what we said inaudible, but we shook hands, and the firmness of that handclasp and our man-to-man understanding sealed a lifelong friendship."<sup>287</sup>

*Zacharias and "The Great Diplomatic Adventure"*

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<sup>285</sup> Mashbir, *I Was an American Spy*, 85-89.

<sup>286</sup> Ibid, 89-90.

<sup>287</sup> Ibid, 95-98.

Zacharias arrived in Japan on the eve of the 1921-22 Washington Naval Limitation Conference. He referred to the conference as “the great diplomatic adventure,” citing its characterization by Yamato Ishihashi, secretary to the Japanese delegation to the conference.<sup>288</sup> Captain Watson intended for his assistant naval attachés to acquire intelligence that would assist U.S. diplomats negotiating with the Japanese.

Watson provided his officers a thorough account of the “long and serious discussions” among the “diplomatic triangle,” comprised of the United States, Great Britain, and Japan, as the three countries planned the conference.<sup>289</sup> Japan had not increased Navy appropriations since 1912 but, in 1920, the Japanese Navy received enough new funding for its ambitious “Eight-Eight Program,” a naval construction plan intended to yield eight battleships and eight battle cruisers.<sup>290</sup>

As Japan began implementing the Eight-Eight Program, Lord George Daniel Curzon, British Secretary of State for Foreign Affairs, suggested that world powers convene a naval limitation conference.<sup>291</sup> Japanese naval officials worried that their

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<sup>288</sup> Zacharias, *Secret Missions*, 9. For further information regarding the Washington Naval Limitation Conference, see Erik Goldstein and John Maurer, editors, *The Washington Conference, 1921-22: Naval Rivalry, East Asian Stability and the Road to Pearl Harbor* (New York: Routledge, 1994);

<sup>289</sup> Whether Watson was privy to Cipher Bureau SIGINT or included insight from it in his briefing to his subordinates is unclear, although open-source information would have sufficed to motivate and focus intelligence connection efforts.

<sup>290</sup> Zacharias, *Secret Missions*, 10.

<sup>291</sup> The Lord George Daniel Curzon was a conservative member of the House of Lords, who served as Viceroy of India from 1899 through 1905, in Parliament, first in the House of Commons and later in the House of Lords, and as Secretary of State for Foreign Affairs from 1919 through 1924. In 1923 he failed to secure the office of Prime Minister. Stanley Baldwin instead was appointed to the position.

civilian leaders would sacrifice the Eight-Eight Program in such a conference; but, as Watson told Zacharias: “Japan knows well that the choice is between armament limitation and an armament race. They know that we prefer a limitation agreement, but would not shrink from the race either.”<sup>292</sup> Watson argued that Japan would be at a significant disadvantage in a naval arms race. Regardless of how many ships Japan built, its navy would remain at a considerable disadvantage vis-à-vis Great Britain and the United States. Furthermore, Japan stood to lose its alliance with Great Britain, since Britain would abandon it rather than antagonize the United States.<sup>293</sup>

Watson’s prescient predictions were predicated partly on what he learned during regular meetings with important Japanese naval officials. As the Washington Conference approached, Zacharias and Lieutenant Commander John Walter McClaran accompanied Watson during his meetings with Nomura. Captain Nagano and Commander Yonai accompanied Nomura and Zacharias judged therefore that they were rising stars on the Japanese Naval General Staff. Reinforcing this assessment, Yonai recently had returned from an assignment in Moscow as a language student.<sup>294</sup>

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<sup>292</sup> Zacharias, *Secret Missions*, 10-11.

<sup>293</sup> Ibid. A reliable summary of Great Britain’s strategic consideration of how to contend with the political, economic, and military rise of the United States in the late nineteenth and early twentieth centuries is available in Graham Allison, *Destined for War: Can America and China Escape Thucydides’s Trap?* (Boston: Houghton Mifflin Harcourt, 2017).

<sup>294</sup> Zacharias, *Secret Missions*, 11-12. Zacharias illustrated this point by observing that Captain Nomura became Ambassador to the United States in early 1941, as the war clouds gathered between Japan and the United States; that Captain Nagano was head of the Japanese Naval General Staff when the Pacific War commenced and during its first years; and that Commander Yonai was elevated to the position of Navy Minister, which he held until just before Japan signed the Tripartite Pact in late September 1940.

Nomura and his colleagues met regularly in a Shimbashi teahouse, a small geisha house where the Japanese naval officers discussed business and enjoyed themselves. As the conference approached, Nomura and his junior officers began hosting meetings with Watson and his junior attachés in the teahouse. During these meetings, each side hoped to elicit intelligence information from the other.

When Watson decided that the meetings in Shimbashi had become inappropriate, in light of the conference, for someone of his higher position to participate, he tasked Zacharias and McClaran to continue attending and to acquire information:

Zack, there is certain information I would like to send to Washington. It is vital information. We must know in as great detail as possible the extent to which the Japanese are willing to go in accepting a compromise solution in a projected naval limitation agreement. I have a lot of data myself, but I have to check and countercheck my information before I can vouch for its validity in a report to the Navy Department. I want you and McClaran to do the checking for me.<sup>295</sup>

Nomura conducted the meetings on a *quid pro quo* basis, Watson explained, but he simply could not provide what Nomura expected. Instead, Watson would seek information that he required via official visits to high-ranking Japanese naval officers, while Zacharias and McClaran would “go ahead freely, in your give and take,” during the Shimbashi sessions. When Zacharias asked whether Watson desired something in particular, Watson replied: “No, just go to Shimbashi with the Nomura crowd and try to find out from them what their plans are for the Washington Conference. Pick up whatever information you can, and keep me posted on whatever goes on behind the scenes.”<sup>296</sup> He instructed Zacharias and McClaran to rely on their intuition.

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<sup>295</sup> Zacharias, *Secret Missions*, 11-12.

<sup>296</sup> *Ibid.*

Nomura scheduled the next Shimbashi meeting for September 21, 1920, and he did not mind that Watson would not attend. Zacharias assessed that Nomura believed that he would learn more from Zacharias and McCarran than from Watson, recalling:

But we had been carefully briefed. The information we were permitted to dole out carefully apportioned and weighed, leading questions rehearsed in advance, even the tone of our conversation, feigned surprises, the pauses between sentences practiced ahead of time so as to play our role as perfectly as possible when the performance came.

Via Watson's leading questions, Zacharias and McClarran steered "Nomura and Nagano into conceding that there was a conciliatory attitude taking shape in Japanese councils and that a compromise would be possible, even on America's terms." Importantly, as illustrated in Chapter One, Herbert Yardley's Cipher Bureau kept U.S. negotiators apprised of how far they could push their Japanese counterparts in Washington.

Zacharias and McClarran briefed Watson that night. Based on what they acquired, Watson informed Washington "that Japan would eventually accede to the proposed 5:5:3 ratio," corroborating the Cipher Bureau's intelligence. Here, Zacharias learned firsthand how good intelligence, acquired via careful planning, could impact policy. Furthermore, intelligence acquired via SIGINT and HUMINT had been mutually corroborative, rendering each more credible and reliable for a more complete picture.<sup>297</sup>

#### *Sato Kishiro*

Shortly after the Washington Conference, Zacharias relocated to the small seaside community of Zushi, just outside of Tokyo. He wanted a quieter environment where he could study Japanese and learn more about Japanese society and culture, anticipating that

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<sup>297</sup> Ibid, 12-14.

Zushi would facilitate both. His new home in Zushi looked out over the water, providing a view of the Yokosuka naval base.

Zacharias met his neighbor, Sato Kishiro, during a spring evening in 1922. Over the next 18 months, they developed a friendship through candid conversation and Sato's desire to confide in Zacharias. Zacharias assessed that Sato was unlike the majority of Japanese whom he had met during his assignment in Japan. Both men realized that Sato took a significant risk in developing a close relationship with an U.S. naval officer. Zacharias also knew that the Japanese authorities watched Sato closely and suspected that Sato disclosed sensitive information to Zacharias.

Zacharias used his growing friendship with Sato as cover for developing an intelligence relationship. Sato also desired a close relationship with his new American neighbor, Zacharias assessing that he "assigned to me an important role in his own scheme." Zacharias characterized Sato's behavior toward him as a "peculiar mixture of shy reserve and brutal frankness which characterizes human relations in Japan, even among the closest friends."

When Zacharias entered the room to greet his guest, Sato was viewing a *kakemono*, an artistic Japanese wall hanging designed in the form of a scroll. Sato observed: "I feel you understand Japan." Zacharias judged this complement exceedingly generous and assessed that Sato was "a unique Japanese, not blinded by the ethnocentrism which characterized the majority of his countrymen." They bowed to one another and Sato introduced himself, explaining to Zacharias that he had observed him standing on the sea wall, deep in thought, and confessed: "My wife suggested that I pay you this call so that you can share your thoughts with me." Zacharias wrote that in Japan

the “average countryman would not give credit to his wife for a pleasant thought. In fact, he would not have mentioned her at all.” Sato was no ordinary Japanese.<sup>298</sup>

Sato explained the reason for his spontaneous visit: “Perhaps you think I am too inquisitive. In a sense I am, but only because I am conducting a peculiar search.” Then Sato clarified that he sought “a tiny gap through which I could slip out of the narrow confines of our Japanese life.” He went on to ask: “What is your conception of a friend, sir?” Zacharias carefully considered the question, and then answered: “Well, we think of a friend as one who is very close to us both in our joys and our sorrows, to whom we can turn for advice and aid, and who shares with us the pleasures of our pastime.” Sato responded that his objective was to find a friend, explaining: “We in Japan have no friends in your sense of the word, since we feel that it would be an imposition to burden an acquaintance close to us with our own petty troubles and worries. I have no friend, Zacharias-San.”

Although Zacharias did not describe in his memoir whether he formally recruited Sato as a human intelligence source, he may have learned more from Sato about Japanese character than he did via any other association during his tour in Japan. Probably, Zacharias recruited Sato as a clandestine intelligence source, while Sato found someone to whom he could express his frustration about Japan’s move toward militarism and seek to obstruct the trend.

Sato was a close advisor to the mayor of Tokyo, executed important errands for him, and received small rewards for his service. Accordingly, he was privy to Japanese

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<sup>298</sup> Ibid, 24-25.

secrets including, Zacharias recorded, regarding the controversial Tanaka Memorial, allegedly created on July 25, 1927.<sup>299</sup>

Sato and Zacharias regularly discussed recent diplomatic activity between Japan and the United States. For example, Sato explained that the United States and Great Britain had played into the hands of Japan's militarists, who highlighted the 5:5:3 tonnage ratio as their greatest call to arms following the conference. Sato explained that these jingoists now could argue to the Japanese public: "You see, America and Britain refuse to accept us as their equals, and worse than that, they try to keep us inferior forever." The counter argument might have been that Japan did not necessarily possess the capacity to build much beyond the limitation to which it agreed in 1922. Sato explained, however, that the main objective of the militarists was to promote anti-U.S. propaganda in order to motivate Japanese subjects to support an increasingly aggressive foreign policy. When Zacharias delivered the counterpoint that he had used against Nomura and Nagano in the Shimbashi teahouse, Sato replied:

These things have nothing to do with reason. Those jingoists whose aims they serve are particular creatures. They reason against reason, because they know that if once they stop to think, their whole scheme will be revealed as a preposterous fraud and like a bubble will burst in their faces.<sup>300</sup>

Caught up in the moment, Zacharias asked: "What is their scheme, Sato-San?" In response, Sato stood, bowed, and departed. The question was too assertive so early in

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<sup>299</sup> For background information regarding the Tanaka Memorial, see John J. Stephan, "The Tanaka Memorial (1927): Authentic or Spurious?" *Modern Asian Studies*, Vol. 7, No. 4 (1973): 733-45, accessed August 16, 2019, <http://www.personal.psu.edu/faculty/d/g/dga11/311684.pdf>.

<sup>300</sup> Zacharias, *Secret Missions*, 26.

their relationship and Zacharias immediately lamented his error. Sato did not intend to divulge so much to his new acquaintance. He already had been exceedingly candid with Zacharias. It was also clear, however, that Sato wanted to tell Zacharias much more. Zacharias just had to permit their friendship and Sato's trust to progress. "I was to see that man again. He was to become my shadow in Zushi," Zacharias wrote.<sup>301</sup> Notably, following this first meeting, Zacharias was questioned by Japanese naval authorities about his relationship with Sato and he noticed a marked increase in aggressive physical surveillance around his home in Zushi.<sup>302</sup>

Zacharias met regularly with Sato under the guise of receiving language instruction, which was consistent with his reason for moving to Zushi in the first place. Regardless of the cover story's plausibility, Zacharias knew that Japanese authorities would continue monitoring both men. Regardless, in order to protect Sato from the Japanese authorities, Zacharias and Sato maintained a reasonable cover story. Zacharias hired Sato to replace one of his Japanese language instructors. When he visited Zacharias, Sato carried a Japanese grammar book and, when he actually tutored Zacharias, they conversed in Japanese. They discussed Japanese politics and security policy, however, in English. No one else residing in Zacharias's home spoke English.

On reflection, Zacharias sympathized with those Japanese Navy officials who had objected to their contact, since Sato "first outlined for me those grandiose plans which later formed part of Japan's grand strategy for conquest and domination." Zacharias

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<sup>301</sup> Ibid, 25-27.

<sup>302</sup> Ibid, 31, 36.

concluded that “without him I would have realized too late that the program embodied in Japan’s so-called Fundamental Policy was an aggressive scheme which would inevitably engulf the whole Pacific world in war.”

Zacharias credited the intelligence that Sato conveyed with preparing both himself and the U.S. Navy for the aggressive course that Japan eventually pursued in Asia and the Pacific although, importantly, the United States still suffered humiliating, devastating defeats in December 1941. “The picture which emerged from my conversations with Sato,” Zacharias reflected, “presented to me the whole Fundamental Policy in all its arrogant details and prepared me for a life devoted to fighting against it.”<sup>303</sup>

Pacific War historians have analyzed Japan’s geopolitical position in the 1920s and 1930s, including its 1931 seizure of Manchuria and 1937 invasion of China, in order to explain why Japan pursued war with the United States.<sup>304</sup> But in the early 1920s, when Japan faced difficult choices concerning imperial expansion, U.S. leaders failed to comprehend the important debate occurring among Japan’s leaders. Furthermore, U.S. leaders failed to understand the influence of the hardline, military faction that controlled the Japanese government during the 1930s. By 1930, Japan was not considering whether to expand, but rather where and when. U.S. leaders required a better understanding of the debate among Japanese leaders in order to determine how to safeguard U.S. interests.

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<sup>303</sup> Ibid, 29-32.

<sup>304</sup> John Toland, *The Rising Sun: The Rise and Fall of the Japanese Empire, 1936-1945* (New York: Random House, 1970). Although Toland’s main focus was the relationship between the United States during the half-decade leading into the Pacific War, and the war itself, he dedicated a considerable portion of the first of two volumes to political, social, and military conditions in Japan before Pearl Harbor.

They had an obligation to consider the issue seriously. Intelligence professionals, such as Zacharias and Mashbir, endeavored to educate intelligence consumers accordingly.

Zacharias learned from Sato that “Japan was facing both south and north as she struggled to burst the narrow confines of her island empire.” The tug-of-war between the left and right political factions in Japan was irrelevant, Sato argued. “There were cliques and cabals in every official building in Tokyo, pulling the nation now to the right, now to the left – but always toward expansion,” he explained. “All eyes were strained to the west, across the sea, toward the Asiatic continent, where white spots on the map of China marked the steppingstones of this plan.”<sup>305</sup>

According to Sato, the Japanese Navy and Army differed considerably. “The gulf that separated the Army from the Navy in Japan was far deeper than mere rivalry between two politically minded factions of the armed forces,” Sato explained, observing that “the Army and the Navy represented two planets which have their own courses in the firmament and are destined never to meet.”

“The Navy was ocean-minded and internationalist,” while “the Army, on the other hand, was land-minded and, more than that, fascinated by land masses across the sea.” The Japanese Navy had emulated the British Royal Navy and believed that it should enable imperial expansion, but it was also realistic. Many of its officers traveled early in their careers, experienced foreign countries, and learned firsthand about foreign navies. In 1922, Japanese Navy leaders believed that they could not win a major war against the United States or Great Britain. Sato explained that the Japanese Army, in

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<sup>305</sup> Zacharias, *Secret Missions*, 32-33.

stark contrast, desired war, selected lands to conquer, and was impatient to begin.

Notably, its officers did not visit foreign lands or observe foreign armies.<sup>306</sup>

Sato told Zacharias that although the Japanese Army had ceased emulating the French military model in favor of the Prussian one after the 1870-71 Franco-Prussian War, the Japanese Army did not adopt Prussian military philosophy. Sato observed: “Japan developed herself a military philosophy which is as confusing as the ideographs in which it is put to paper.” Zacharias asked: “Where is it put to paper?” Sato, however, apparently regretting his words, said: “It is not put to paper, it was just a figure of speech.” Zacharias concluded that the document probably existed.

Sato shifted the conversation to another topic, but Zacharias eventually routed the discussion back to Japanese military philosophy. “You must realize that I am here as a guest of the country, and it is not my intention to snoop into the secrets of Japan,” Zacharias told Sato, before asking, point blank: “But what is the name of the group who guide the military objectives?” Sato sighed, and said: “The Koku-Ryu-Dan,” the Black Dragon Society. Zacharias noted that the *Koku-Ryu-Dan* had been responsible in 1915 for the Twenty-One Demands, which Japan had attempted to impose on China and which would have subordinated China to Japan politically, economically, and militarily. According to Sato, they remained the foundation of Japanese policy toward China.<sup>307</sup>

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<sup>306</sup> Ibid, 33.

<sup>307</sup> Ibid, 35. The Twenty-One Demands are discussed at some length in Walter LaFeber, *The Clash: U.S.-Japanese Relations Throughout History* (New York: W. W. Norton & Company, 1998) 109-111.

The Twenty-One Demands, which Japan delivered to China in January 1915, was divided into five parts. Japan demanded that China cede to it the former German possessions on the Shantung peninsula; grant Japan considerable concessions in South Manchuria and Inner Mongolia, including a 99-year lease on the South Manchurian Railway; cede control to Japan of a successful iron and coal company in central China; and yield to Japan control of Fukien province, located directly across from the Taiwan Strait from Taiwan. Japan eventually managed to secure many of these concessions.

The fifth section was particularly troubling to U.S. and Chinese leaders. It included demands that China hire Japanese political, financial, and military advisors; grant Japan the right to erect temples and schools; and approve Tokyo's construction of three railways between the Yangtze River area and China's southern coast, an area crucial to commerce. The U.S. Minister to China at the time, Paul S. Reinsch, warned President Woodrow Wilson and Secretary of State William Jennings Bryan that the Twenty-One Demands would cause "the greatest crisis yet experienced in China."<sup>308</sup>

Zacharias was surprised to learn from Sato that the Black Dragon Society did not believe that the Soviet Union would impede a Japanese advance into Manchuria and Mongolia. The Black Dragon Society believed, rather, that the United States posed the greatest impediment to Japanese building a railroad in the territory. Sato related the resentment that Japanese military leaders felt toward the United States for its contribution to the Nine-Power Treaty, which had limited Japan's expansion into Manchuria and Mongolia. Accordingly, in a 1927 strategic memorandum that became known of as the "Tanaka Memorial," supposedly created five years after the Nine-Power Pact and

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<sup>308</sup> LaFeber, *The Clash*, 109-111.

presented to the Japanese Emperor, Japanese military strategists concluded that “in order to control China, [Japan] must crush the United States.”<sup>309</sup>

The “Tanaka Memorial” was published in China in the 1930s and in the United States in the 1940s. Most scholars, however, do not believe that it was an authentic strategic Japanese document. Rather, most scholars have assessed that a foreign country, perhaps the Soviet Union, created the Tanaka Memorial in order to encourage suspicion and criticism of Japanese imperial policies. Regardless of whether the document actually existed and was authentic, however, Sato described the Tanaka Memorial’s essential content to Zacharias in the early 1920s and argued that it represented the foundation of Japanese foreign policy. Furthermore, Japan largely adhered to the strictures of the Tanaka Memorial, beginning with the Japanese invasion, occupation, and annexation of Manchuria in 1931, followed by Japan’s invasion of China in 1937, and finally the December 1941 attacks against the United States, Great Britain, and the Netherlands.<sup>310</sup>

Similar to Mashbir, Zacharias studied the Japanese in order to gain a more sophisticated understanding of their society, culture, and intellectual currents. Although his own background and culture were vastly different from those of his Japanese counterparts, as an intelligence officer in Japan, Zacharias believed that he must understand his target comprehensively. Accordingly, he endeavored to learn how the Japanese reasoned and their cultural drivers, from the common urban laborer to the farmer; from the intellectual to the businessman; from the ideologically leftist political

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<sup>309</sup> Zacharias, *Secret Missions*, 35.

<sup>310</sup> *Ibid*, 35-36.

actor to the military conservative leader; and from the well-traveled and more worldly Japanese to those who had never left the country. Similar to Mashbir, Zacharias was limited to assessing those Japanese with whom he associated, including his Japanese naval intelligence counterparts and even his Zushi neighbor. Each was scientific in his analysis, although where Mashbir had approached it more as an engineer, Zacharias did so more as an intellectual.

Zacharias examined academic studies of the Japanese produced by Western and, through his Japanese language proficiency, Japanese scholars.<sup>311</sup> He neither dismissed the Japanese as simple or barbaric, nor glossed over their more brutal exploits. He even included an extensive review of the literature in his memoir. Zacharias maintained that he “could never bring myself to join either the blanket condemnation of uncritical admiration of the Japanese character” that “was so typical of so many observers who were either fascinated by the many positive traits or repelled by the innumerable negative characteristics of the average Japanese.” He “viewed the Japanese character in the light of their moral standards and succeeded thereby in understanding many of the motivations which were behind their acts both in war and peace.”<sup>312</sup>

#### *The Ill-Fated Mission of Earl Hancock “Pete” Ellis*

By 1923, Zacharias and his intelligence colleagues in Tokyo, including the U.S. Army Attaché, Colonel Charles Burnett and Army Captain Sidney Mashbir, observed

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<sup>311</sup> Ibid, 62-70.

<sup>312</sup> Ibid, 70.

that their Japanese counterparts were becoming increasingly aggressive toward U.S. officials. The more difficult counterintelligence environment, however, did not relieve U.S. Army and Navy intelligence officers of their professional obligations. In particular, Watson and his subordinates remained responsible for verifying Japan's adherence to the 1922 Washington Naval Treaty. ONI had to ensure that Japan adhered to the tonnage limitations on naval capital vessels stipulated in the Washington Naval Treaty, including scrapping some ships in order to satisfy the requirement. Additionally, ONI expected Watson and his subordinates to verify that Japan was adhering to its responsibilities concerning Pacific island mandates that the League of Nations assigned it following the Great War. Finally, Watson expected his lieutenants to discover the plans and intentions of Japan's naval high command, foreknowledge of which, Watson assessed, might enable U.S. leaders to prevent a war with Japan. "Otherwise," Watson observed prophetically, "we shall one day be confronted with a surprise that will hit us right between the eyes."

Along with verifying Japanese adherence to the Washington Treaty, Watson and his junior attachés sought insight into the naval strategies and tactics that Japan would develop within the treaty's parameters. Through formal liaison channels, ONI learned from the Japanese Naval General Staff that the Japanese Navy intended to emphasize "light cruisers, destroyers, and other types of escorts." This insight enabled Zacharias and his colleagues to focus on Japanese destroyer tactics. They determined that Japan would conserve its destroyers for night actions. Zacharias judged that one of the Washington Treaty's major flaws was its failure to address this area.<sup>313</sup>

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<sup>313</sup> This was evident early in the Pacific War, during the nighttime naval engagements during the Guadalcanal campaign. For an account of the naval engagements of the Pacific War's Guadalcanal campaign, refer to James D. Hornfisher,

ONI officials found verifying whether Japan was faithful to the Washington Naval Treaty concerning the Marshall, Caroline, and Mariana Islands particularly confounding. Japan had joined the Entente and seized these islands from Germany late in World War I, after assessing that the Central Powers probably would lose. Then, in 1920, the Council of the League of Nations confirmed Japanese mandates over them. ONI was responsible for verifying that Japan was not fortifying them in violation of the Washington Naval Treaty. U.S. observers, however, were limited to information available only “in the open market of peacetime intelligence.”<sup>314</sup> Japan prevented them from visiting the mandates. Meanwhile, intelligence that ONI judged reliable indicated that Japan was fortifying the islands comprehensively.<sup>315</sup>

Navy officials in Washington prohibited Watson from aggressively investigating these allegations although, since only a visitor to the islands could determine whether Japan was violating the treaty, how Watson could investigate the claims was unclear. Consequently, he contemplated bold schemes, such as landing secret observers via submarines or observers visiting the islands posing as commercial travelers and missionaries. Navy leaders, however, forbade Watson to pursue these approaches. A more plausible approach was to dispatch U.S. naval vessels to pay official courtesy calls to the mandates, but the State Department opposed this course, concerned that U.S. Navy

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*Neptune's Inferno: The U.S. Navy at Guadalcanal* (New York: Bantam, 2012). For an overall account of Guadalcanal, see Richard B. Frank, *Guadalcanal: The Definitive Account of the Landmark Battle* (New York: Penguin Books, 1992).

<sup>314</sup> Zacharias's reference to “peacetime intelligence” suggests a demarcation between intelligence collection during times of peace and war to which the United States no longer restricts itself.

<sup>315</sup> Zacharias, *Secret Missions*, 40.

visits would complicate the diplomatic relationship between the two countries. Short of ideas, ONI finally considered sending an intelligence officer possessing an advanced understanding of the subject. Navy leaders in Washington not only approved the proposal, but also selected someone to undertake the mission: Marine Corps Colonel Earl Hancock “Pete” Ellis.

From an intelligence perspective, Zacharias and his colleagues found it difficult to believe that ONI had selected Ellis, who had retired from the Marine Corps in order to undertake the mission as a civilian. Zacharias observed that Ellis’s longtime Marine Corps connection would guarantee that Japanese authorities would be suspicious of his purpose for traveling to Japan and especially to one of the Japanese mandates. Ultimately, Zacharias and his colleagues observed that Ellis drank to excess in Yokohama bars and divulged to other patrons sensitive details concerning his mission.

U.S. Ambassador Warren summoned Mashbir to the U.S. Embassy in Tokyo some weeks after his return from Vladivostok in order to attend a meeting with “a stranger in civilian clothes who was introduced as Lieutenant Colonel Peter Ellis of the Marine Corps.” Burnett explained that Ellis intended to travel to the Japanese-controlled atoll Jaluit in the Marshall Islands, ostensibly to study its flora and fauna, but really to observe Japanese activities there. Mashbir advised that the cover story would not work. If Ellis traveled alone, he almost certainly would not survive the trip, whereupon he offered to accompany Ellis. Ellis, however, insisted that he must go alone.<sup>316</sup>

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<sup>316</sup> Mashbir, *I Was an American Spy*, 104.

During an emergency meeting with his subordinates, the new U.S. Naval Attaché, Captain Lyman Atkinson Cotten, and his junior attachés determined that Ellis, or “Colonel X,” as they referred to him, had discussed his “secret” mission so openly in Yokohama bars that Japanese security officials probably had discovered it. Furthermore, Ellis’s alcoholism had impaired his health too extensively for him to complete the mission. Cotten concluded that Ellis must not proceed, whereupon Zacharias suggested that medical staff at the U.S. naval hospital in Yokohama examine Ellis and that Captain Ulysses R. Webb, a medical doctor and the commanding officer and superintendent of the U.S. Navy Medical Corps in Japan, declare him unfit to continue.<sup>317</sup> Then, Cotten could require that Ellis return directly to the United States. Cotten approved the plan and ordered Ellis to the hospital via ambulance. There, medical staff examined Ellis and the U.S. Navy’s Chief Pharmacist in Japan, Lieutenant Lawrence Zembach, “who acted as his confidant and jailer rather than as his nurse,” assumed responsibility for him.<sup>318</sup>

Ellis, however, eluded his caretakers and left the hospital. Cotten, his junior attachés, and hospital staff searched for Ellis but, failing to find him, eventually reported him missing to the Japanese authorities. Then, about two months later, Japanese naval officials informed Cotten that Ellis was on Jaluit, an atoll in the Marshall Islands. The Japanese Navy Ministry related, furthermore, that his illness had become life-threatening. Cotten asked Japanese naval officials to return Ellis to Tokyo at once but, although they

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<sup>317</sup> Ibid, 41-43. For further information regarding Ulysses R. Webb’s position at the U.S. naval hospital in Yokohama, as well as regarding Webb’s treatment of Ellis at the hospital, refer to Joshua Hammer, *Yokohama Burning: The Deadly 1923 Earthquake and Fire That Helped Forge the Path to World War II* (New York: Free Press, 2006).

<sup>318</sup> Zacharias, *Secret Missions*, 42-43.

promised to arrange his return within 24 hours, Cotten told Zacharias: “You’ll see; they have something up their sleeves. I don’t expect ‘Colonel X’ back here alive – ever.”<sup>319</sup> The next morning, Cotten learned that Ellis had died the night before, that his body had been cremated right away, and that the Japanese would deliver his remains.<sup>320</sup>

Seeking opportunity in tragedy, Cotten insisted that the United States send an official to retrieve Ellis’s remains personally. The Japanese Navy Ministry grudgingly assented to Cotten sending one representative and he selected Zembsch. ONI would finally have an opportunity to send an observer to one of Japan’s island mandates.

Zembsch was gone about seven weeks and early during his excursion the Japanese sent Cotten regular updates about his whereabouts. About when he would have reached Jaluit, however, the Japanese ceased conveying progress reports. When his ship finally returned to Yokohama, Zacharias and his colleagues discovered Zembsch on his bunk in his cabin below decks. He was in a catatonic state, clutching the simple Japanese urn containing Ellis’s remains. On examining Zembsch, Dr. Webb concluded that the Japanese must have caused his condition, but Zembsch would have to recover in order to learn more from him.<sup>321</sup>

Mashbir believed that Japanese torture had caused Zembsch’s catatonic condition. He theorized that several Japanese restrained Zembsch, while another repeatedly struck

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<sup>319</sup> Ibid, 44.

<sup>320</sup> Ibid.

<sup>321</sup> Ibid, 39-47.

Zembsch's temples with the heel of his hand, rendering him insensate. Zembsch died during the 1923 Japanese earthquake and fire, never having recovered.<sup>322</sup>

### *Mashbir and Zacharias Leave Japan*

By September 1923, Mashbir had been in Japan three years. As the hot Japanese summer approached, his wife and son returned to the United States to visit family and friends. Meanwhile, Mashbir spent his weekends in the seaside town of Oiso, approximately 55 miles from Tokyo. Normally he arrived in Oiso on Friday evening, spent much of the weekend swimming in the sea, and returned to Tokyo Sunday evening.

According to Mashbir, the surf on August 31, 1923, was so rough that swimmers were prohibited from entering the water. The sea remained rough the following morning, but Mashbir elected to swim anyway, along with four U.S. college students with whom he had become acquainted. Mashbir dove into the water and began to swim and the four American students followed. Then, when they were approximately 20 yards from shore, a strong current began to pull them out to sea. Mashbir fought it for 45 minutes before reaching shore. He checked his wristwatch; it read 11:59. "Then, I was promptly knocked off my feet and fell on the beach," he recalled. "I found it impossible to get up. For fully fifteen minutes, although I did a wrestler's spread on my hands and knees, I was shaken so hard that my teeth rattled like popcorn in a popper."<sup>323</sup> Mashbir and the four American students were experiencing the tremendous earthquake centered in Japan's Great Kanto Plain in 1923, which resulted in devastating fires, the destruction of much of

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<sup>322</sup> Mashbir, *I was an American Spy*, 79; Zacharias, *Secret Missions*, 47.

<sup>323</sup> Mashbir, *I Was an American Spy*, 149-150.

Tokyo, and significant loss of life in Japan. The disaster ultimately ended an intelligence operation that Mashbir had undertaken, which is the topic of Chapter Five, compelling him to return to the United States.

Zacharias also returned to Washington in 1923. He reported for duty in ONI's Far Eastern Section, but soon was unhappy in his new environment. "During the last forty-two months," he reflected, "so many things had occurred to give me greater insight into Japanese plans and aspirations that I naturally had to reorient my thoughts and ambitions." He was certain that Japan "was organizing a network of political and military agents both within our borders and beyond them, deploying its secret forces well in advance of the day when it would be in a position to deal the opening blow."<sup>324</sup>

On returning to Washington, Zacharias was frustrated that ONI officials in Washington did not share his concern about the Japanese threat to the United States. Zacharias also assessed that the new ONI director also failed to recognize the Japanese threat. Similar to his friend and fellow intelligence professional, Sidney Mashbir, Zacharias had learned Japanese, experienced and analyzed Japanese society and culture firsthand, and had gone up against his counterparts in Japanese intelligence. He intended to continue working against the Japanese target, but his Washington assignment was not on the front lines. Eventually, Zacharias received a lifeline. A colleague, who recently had returned from an assignment in Panama, advised him: "Why don't you look into the Panama situation? The place is full of Japs. You could continue your Japanese studies to your heart's content in that hotbed of intrigue."<sup>325</sup>

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<sup>324</sup> Zacharias, *Secret Missions*, 71.

<sup>325</sup> *Ibid*, 72-73.

Zacharias had visited the Panama Canal in 1912 and, at the time, observed a sizable Japanese presence in the Canal Zone, particularly among hotel restaurant workers, barbers, and fishermen, in addition to those associated with the Japanese Consulate.<sup>326</sup> Although ONI was relatively unconcerned, Zacharias disagreed with that posture and pursued an assignment in the Canal Zone. Ultimately, he secured an assignment aboard the U.S.S. *Rochester*, which was assigned ultimately to protect the Canal Zone. Zacharias served primarily as the *Rochester*'s navigator and secondarily as its intelligence officer.<sup>327</sup> The assignment enabled Zacharias to focus on the Japanese intelligence target in Panama, but ended abruptly, when the *Rochester* was ordered to escort General John J. Pershing to Chile, following which the Navy ordered Zacharias to Washington for a temporary duty assignment.<sup>328</sup>

In 1926, Zacharias reported to the acting ONI director, Captain William W. Galbraith. Although he criticized most of the post-war ONI directors, he approved of Galbraith and quipped that he received the position in 1925 “probably to fill the gap until a far less qualified man could be shifted to the job.” Zacharias had first encountered Galbraith as a U.S. Naval Academy Midshipman. Galbraith had been an instructor at Annapolis. Zacharias met him again on returning from Japan in 1923 and presumed that Galbraith had summoned him back to Washington because his experience in Japan was being wasted on the *Rochester*.

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<sup>326</sup> Ibid, 72.

<sup>327</sup> Ibid, 73.

<sup>328</sup> Ibid, 76-77; Maria Wilhelm, *The Man Who Watched the Rising Sun: Admiral Ellis M. Zacharias* (New York: Franklin Watts Inc., 1967), 38-40.

Admiral Clarence S. Williams, whom Zacharias described as “one of the outstanding flag officers of the United States Navy, a naval scientist as well as a brilliant tactician,” and who had just completed an assignment as head of the Naval War College, at Newport, Rhode Island, had recently been named commander-in-chief of the U.S. Asiatic Fleet. According to Zacharias, Galbraith and Williams had decided to assign him to the Asiatic Fleet as an intelligence officer, in order to address a particular, new issue. The Navy ordered Zacharias to report to Room 2646 in the Navy Department.<sup>329</sup>

### *Room 2646*

Room 2646 was responsible for “one of the most delicate, intricate, and challenging aspects of intelligence: cryptanalysis,” Zacharias observed.<sup>330</sup> He developed tremendous respect for the cryptanalysts with whom she worked during his six-month assignment in Room 2646, recalling: “My assignment was confined to Japan, to design ways and means by which we could listen in on Japanese conversations and pick up Japanese messages, and to learn what they were all about.” Zacharias praised the performance and technical skill of ONI’s cryptanalysts, but he also observed that cryptanalysis was “only one part of intelligence” and that “even the most comprehensive and efficient cryptanalysis leaves many of the gaps unfilled and many of the problems

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<sup>329</sup> Wilhelm, *The Man Who Watched the Rising Sun*; Zacharias, *Secret Missions*, 83.

<sup>330</sup> Zacharias, *Secret Missions*, 84.

unsolved.”<sup>331</sup> He argued that HUMINT and SIGINT together normally provided intelligence consumers a more complete picture.

During this period, Zacharias re-connected with a Japanese counterpart with whom he had interacted during his tenure in Japan: Captain Isoroku Yamamoto. Yamamoto, who served as the Japanese naval attaché in Washington from 1926 to 1928, attempted to contact Zacharias on arriving in the U.S. capital. When Yamamoto failed to reach Zacharias by telephone at the U.S. Navy Department, he stopped by Zacharias and his wife Claire’s apartment in Washington. Although Zacharias was not home, Claire greeted Yamamoto and received his invitation for Zacharias and several of his colleagues to attend a stag party at Yamamoto’s apartment. Both men enjoyed poker and the stag parties became regular events over the succeeding weeks, as Japanese and U.S. naval officers played poker and attempted to pry privileged information out of one another.

Although little intelligence was exchanged during these events, Zacharias learned that Yamamoto was keenly interested in using aircraft carriers to combine sea and air power in naval combat, a concept that Zacharias characterized as “an obsession with Yamamoto.” Zacharias also learned that Yamamoto was operating a commercial intelligence network in New York City, which purchased advanced technology, including an airplane, a range finder, and a fire-control system, for the Japanese Navy. ONI wanted to shut down Yamamoto’s illicit procurement operation, but Zacharias convinced his superiors instead to monitor it in order to learn more about its activities and members.<sup>332</sup>

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<sup>331</sup> Ibid, 88-89.

<sup>332</sup> Wilhelm, *The Man Who Watched the Rising Sun*, 41-42. A fire-control system is composed of components that work together, normally including a gun data

Zacharias learned from Navy officials that the Japanese used New York offices involved in Yamamoto's network largely as "mailboxes," to which agents submitted intelligence reports, and as "centers for their technological intelligence activities." Again ONI decided to disrupt the network and again Zacharias argued that doing so would eliminate ONI's best insight into illicit Japanese procurement activity in the United States. He observed that disruption was "not counterintelligence," but rather "a last resort."<sup>333</sup> Following his advice, ONI penetrated the broader scheme, ensured that purchasers received technically manipulated products, fed the network flawed information, and even introduced double agents into the network. Zacharias did not describe in detail the operation's impact, but ONI learned about technologies and products that Japan wanted and deduced how the Japanese Navy intended to use them.<sup>334</sup>

#### *Ambush by Radio*

In the summer of 1926, the Navy assigned Zacharias command of the Asiatic Fleet's destroyer U.S.S. *McCormick*. The command was cover for his real assignment, which was to intercept and decode radio messages exchanged among Japanese naval vessels at sea and between those vessels and Japan. The Room 2646 assignment, during which he had gained valuable experience in SIGINT, now made more sense to him. ONI instructed Zacharias to monitor Japanese Navy radio communications from the U.S.

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computer, a director, and radar system, designed to enable a weapon system to hit its target.

<sup>333</sup> Zacharias, *Secret Missions*, 95. "Front office" probably refers to a level of management, but to which management level it referred to in this case was unclear.

<sup>334</sup> Ibid.

Consulate General in Shanghai, China. Shortly after arriving in Shanghai, however, he determined that the Japanese monitored the U.S. Navy listening post in Shanghai too closely, risking discovery of his real reason for being there.

Consequently, ONI transferred Zacharias to the U.S.S. *Marblehead* and instructed him to target Japanese naval communication from the ship. In order to do so, the *Marblehead* would sail openly and seemingly routinely into Japanese waters. The Navy, however, would conceal that Zacharias was aboard and that the ship was monitoring Japanese communications. Since the U.S. and Japanese navies routinely observed one another's fleet maneuvers, the *Marblehead* was unlikely to attract particular suspicion.<sup>335</sup>

The *Marblehead* began its voyage on October 17, 1927, with Zacharias and radio interception equipment hidden aboard. Zacharias intercepted communications revealing that the Japanese Navy was attempting to coordinate sea and air power and that it was experiencing difficulty landing planes aboard aircraft carriers. When the Japanese fleet detected U.S. Navy vessels observing its maneuvers, Japanese destroyers placed themselves between the U.S. ships and the Japanese aircraft carriers and the destroyers deployed a smokescreen in an effort to obscure the naval drill physically. Of course, the smokescreen failed to prevent the *Marblehead's* signals collection.<sup>336</sup>

At the conclusion of the Japanese maneuvers, the *Marblehead* sailed to Kobe, Japan, where the U.S. naval attaché greeted Zacharias. The two planned to travel on to Tokyo, where Zacharias would complete his report detailing the SIGINT operation. In

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<sup>335</sup> Wilhelm, *The Man Who Watched the Rising Sun*, 44-45; Zacharias, *Secret Missions*, 102.

<sup>336</sup> Zacharias, *Secret Missions*, 105.

route, however, Zacharias and the attaché took advantage of a fleet parade in Tokyo Bay, which outsiders were prohibited from viewing, in order to acquire additional intelligence. They rented a small pleasure boat and remained inside the cabin as their Japanese pilot sifted among the parading ships. Protected within the cabin, Zacharias and the attaché took careful notes on the ships, clandestinely acquiring hitherto unknown, detailed information about the newest, most advanced Japanese naval vessels.<sup>337</sup>

Following this illicit cruise, the U.S. Navy informed the Japanese Navy that Zacharias was in Tokyo and that he would voyage aboard the *Marblehead*, at full speed, from Kobe to Shanghai. The *Marblehead* departed Kobe twelve days before it had been scheduled to leave and reached Shanghai 36 hours later. When friends in the Japanese Navy inquired about this, Zacharias jested that the *Marblehead* had merely executed a standard voyage to Shanghai. Although the Japanese did not believe this light-hearted explanation, they did not learn why Zacharias had been on the *Marblehead*.<sup>338</sup>

Motivated by these successes, Zacharias returned to Japan in the summer of 1928 for six months. He spent the summer in Tokyo, rekindled relationships from his first assignment in Japan, and observed that Japan had changed. “I visited Sato-San and found him far more taciturn than during my first visit,” he recalled. “It was no longer permissible to harbor dangerous thoughts, and the *gendarmierie*, or military police, was already at work to try to read the minds of dangerous thinkers.” Some of his old contacts were more willing than Sato to talk, but “the liberalism of the early twenties now

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<sup>337</sup> Ibid, 105-106.

<sup>338</sup> Ibid, 106-107.

belonged to history,” Zacharias lamented. “It was not regarded as good form to talk of those days of political freedom, and even friends who appeared truly liberal now spoke of those benighted days with a self-righteousness that was astounding.”<sup>339</sup>

By 1928, the Japanese Army had recovered from its failure in Siberia. Army and Navy budgets were rising. Military conservatism had gained considerable ground against the more liberal reformist ideas of the early 1920s. “I learned that the Japanese military and naval structure was undergoing a radical and highly significant reorganization, shedding its enforced timidity as the years passed,” Zacharias recalled. Although his chief concern was the Japanese Navy, Zacharias concluded during those six months in Japan that the Army was focused on Manchuria. “I realized it was only a question of time until Japan would spring its unpleasant surprise on an unsuspecting world by moving to the north, with destination Manchuria.”<sup>340</sup>

The Japanese Navy was also pursuing a more aggressive agenda, “concentrating on the development of her fleet air arm and training her carrier fliers along purely aggressive lines.” Inter-agency politics at the embassy prevented him from discovering “that a Japanese island was to be evacuated and turned into a full-scale target for these aircraft practices or that this target was to be a replica of Oahu.” The island of Shioku was “complete with full-scale reproductions of Oahu’s buildings and harbor installations.” Zacharias tried, but failed, to re-contact an acquaintance from the Japanese Navy who, he later learned, was involved in this Shioku project.<sup>341</sup>

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<sup>339</sup> Ibid.

<sup>340</sup> Ibid, 112.

<sup>341</sup> Ibid, 113.

### *Colonel Washizu and Manchuria*

Early in 1931, after six months in Japan, Zacharias was appointed to lead ONI's Far Eastern Section. Zacharias assessed that Japan intended to seize Manchuria and he learned that deposed Chinese emperor Pu-yi was being sued for divorce by his number one concubine, on the ground that he was impotent. Zacharias assumed that the suit was intended to humiliate Pu-yi publicly and determined that he must acquire evidence substantiating this theory. Toward this end, he contacted Colonel Washizu Shohai, the Japanese military attaché in Washington.

Washizu was an avid golfer and, after golfing outings and, the Volstead Act notwithstanding, he often hosted cocktail parties in his apartment in Washington, dubbed by his friends and acquaintances the "19th Hole." When Zacharias contacted Washizu, Washizu invited Zacharias and two of his friends, Sidney Mashbir and Marine Corps Major James F. Moriarty, for cocktails the next afternoon.

When Zacharias, Mashbir, and Moriarty arrived the next afternoon at Washizu's apartment, which also served as his office, Colonel Teramoto Kumaichi and Major Yutaka Hirota, both assistant military attachés, were there with Washizu. Each American guest paired with one of his Japanese counterparts, and for an hour consumed scotch and soda and endeavored to discover whether Japan intended to invade Manchuria. Eventually, Washizu ordered dinner delivered from the ground-floor restaurant.

Finally, Zacharias asked whether Japan would invade more of China after seizing Manchuria. Washizu's face turned crimson, Teramoto choked on his drink and left the room temporarily, and Hirota fell back in his chair laughing. Zacharias inferred from

these reactions that Japan indeed planned to invade Manchuria. When Mashbir asked what Washizu believed the League of Nations would do were Japan to occupy Manchuria, Hirota scornfully said: “The League just talks.” Finally, Moriarty asked whether Japan would set Pu-yi up as puppet ruler of Manchuria, to which Hirota answered: “Maybe.” Zacharias assessed that although Hirota’s answer was noncommittal, it indicated that Japan at least had considered establishing Pu-yi as Manchuria’s puppet ruler. As the evening ended, Washizu proposed meeting again in September, because he would be too busy in October. Zacharias figured that Washizu would be busy with Manchuria by October.

Next, Zacharias contacted the Japanese naval attaché, Captain Shimomura Shosuke, who also invited Zacharias, Mashbir, and Moriarty to his Washington apartment for cocktails. Scotch again was the drink of choice and, in the end, Zacharias, Mashbir, and Moriarty assessed that the Japanese Navy was not involved in planning for a Manchuria campaign and not even privy to the Army’s intention to seize the territory.

In March 1931, Zacharias provided the Director of Naval Intelligence a report of what Mashbir, Moriarty, and he had learned from their Japanese interlocutors.<sup>342</sup> Then, on September 19, 1931, Japanese Army forces invaded Manchuria, dubbed it Manchukuo, and established Pu-yi as its puppet emperor. In response to a 1932 League of Nations report criticizing these actions, Japan withdrew from the League in 1933.

In the end, although Zacharias, Mashbir, and Moriarty did not acquire express proof that Japan intended to seize Manchuria and install Pu-yi as its puppet sovereign, an

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<sup>342</sup> Wilhelm, *The Man Who Watched the Rising Sun*, 56-59.

intelligence often provides important building blocks from which to infer a target country's plans and intentions, rather than definitive information. By the time the latter becomes available, often the intelligence has been overtaken by events.

#### *Fleet Problem 14*

Between 1923 and 1940, the U.S. Navy conducted 21 large-scale naval exercises, called fleet problems, designed to simulate a threat to U.S. interests and challenge U.S. naval forces to neutralize it. In April 1933, it conducted Fleet Problem 14, designed by Admiral Frank Herman Schofield.<sup>343</sup> In Fleet Problem 14, Japan was the principle enemy and the scenario predicted several key conditions that actually existed when the Pacific War began in December 1941. According to the fleet problem, war with Japan was imminent, although not yet declared, and Japan would strike the U.S. Pacific Fleet where it was concentrated. As Zacharias observed, in 1932, when Schofield devised Fleet Problem 14, the Pacific Fleet was spread out among a number of locations, including San Francisco, Puget Sound, San Pedro, San Diego, and Pearl Harbor. Furthermore, the lion's share of the U.S. Navy was concentrated in the Atlantic Ocean. In June 1941,

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<sup>343</sup> Wilhelm, *The Man Who Watched the Rising Sun*, 61-62. According to Wilhelm, the first fleet problem was conducted in 1920. Thereafter fleet problems were conducted annually. A fleet problem was a series of naval exercises intended to produce a realistic scenario designed to determine whether naval officers would perform successfully during a real naval conflict. Normally, those administering the fleet problem began by announcing a political or war crisis, and then provided estimates of U.S. naval strength and that of the hypothetical enemy. Then, the fleet problem administrators divided the U.S. fleet into two parts and assigned each a color. Battleship, cruiser, destroyer, and carrier commanders received additional information relevant to their role in the exercise and ship commanders created a three-part battle plan. First, they identified the actions available to the enemy; second, they predicted what the enemy was most likely to do; and, third, they devised a way to thwart their opponent's plan, either by defeating the enemy or convincing it to retreat.

however, President Franklin D. Roosevelt ordered the U.S. Pacific Fleet relocated to Pearl Harbor, Hawaii, ensuring a major vulnerability that Schofield built into Fleet Problem 14.

Japan would use aircraft carriers to strike, although the force available to Japan in 1933 was much smaller than the six carriers and support vessels used to attack Pearl Harbor in 1941. The exercise postulated that Japan would conduct raids against Hawaii or the West Coast before declaring war, and that any Japanese forces east of the 180th meridian should be considered hostile. Zacharias observed that the June 1942 Battle of Midway occurred on the 180th meridian.<sup>344</sup>

Shortly after Fleet Problem 14's conclusion, Zacharias hosted a visit from the Japanese training squadron commanded by Vice Admiral Hyakutake Gengo, who arrived in the United States aboard the Japanese cruiser *Yakumo*. Zacharias expected a cordial visit, but Hyakutake and the other Japanese naval officers initially "showed a stiffness of attitude." Zacharias concluded that they had expected poor treatment from their U.S. counterparts. The reception was friendly, however, and Zacharias observed "Japanese skepticism melt as the days passed and cordiality greeted them everywhere instead of rebuffs as they had expected."<sup>345</sup> Unfortunately, however, in the end, the effort did not create lasting trust among their Japanese guests.

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<sup>344</sup> According to Ibid, 61-62. According to Wilhelm, the U.S. Navy conducted the first fleet problem in 1920. Thereafter, the Navy carried out fleet problems annually. The Navy undertook Fleet Problem 14, which Schofield modeled on information available in 1932, in 1933.

<sup>345</sup> Zacharias, *Secret Missions*, 136-37.

On June 26, 1933, shortly after the *Yakumo*'s visit, Zacharias reported for duty to the Naval War College, in Newport, Rhode Island, in order to teach a course commencing July 1.<sup>346</sup> He settled into academic life until, on September 26, Lieutenant Commander Yokoyama Ichiro of the Japanese Navy traveled from Washington to Newport exclusively to visit Zacharias.<sup>347</sup>

Zacharias welcomed this visit as well, since it represented another opportunity to gain insight into the thinking of a high-ranking Japanese naval officer and to influence his perspective regarding the United States. Zacharias believed that more contact between Japanese and U.S. naval officers would reduce the likelihood of war, observing that Japanese "who spent enough time in this country to get an idea of its magnitude and potential strength, generally arrived at the intelligent conclusion that Japan would be ruined by war with the United States." Although Yokoyama told him that the visit was "a pleasure trip prior to his return to Japan," Zacharias suspected there was more to Yokoyama's Newport sojourn. He hosted a cocktail party for Yokoyama that evening and, the next day, took a long drive together in order to have a frank conversation.<sup>348</sup>

During the drive the next day, Yokoyama expressed his concerns and those of many of his Japanese naval colleagues and asked Zacharias how he thought Japan could gain a better understanding of the United States and its intentions concerning Japan and improve relations. Zacharias answered that the Japanese government, which largely

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<sup>346</sup> Ibid, 138-39.

<sup>347</sup> Ibid, 140.

<sup>348</sup> Ibid, 140-41.

controlled Japan's media, should cease disseminating anti-U.S. propaganda to the Japanese population. In turn, Yokoyama blamed the Japanese Army for the anti-U.S. "press campaign," arguing that the Navy endeavored "to hold the reigns of the Army."<sup>349</sup>

When Zacharias advised that Japan should cease trying to subvert the 5:5:3 capital ship ratio, Yokoyama countered: "At the present time, Japan fears America!" He added that Japan assumed that the ration was intended to enable the United States to defeat Japan.<sup>350</sup> In response, Zacharias asserted that the premier U.S. and British objective via their superior overall naval capacity was to ensure freedom of the seas in order to protect international commerce. He added that the United States had significant commercial interests to protect in Asia, while Japan did not have nearly as large an investment to protect in the Western Hemisphere.<sup>351</sup> Then, Zacharias argued that a recent U.S. naval construction program was relatively far less significant than recent Japanese and British ship-building programs; that the United States would remain below its entitled allotment of capital ships regardless, and that the construction of the ships was intended to create economic stimulus during a period of economic hardship.<sup>352</sup> Finally, when Yokoyama observed that the United States had seized the Philippines, Cuba, and Puerto Rico from Spain in 1898, Zacharias disingenuously argued that Spain's oppressive imperial policies

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<sup>349</sup> Ibid.

<sup>350</sup> Ibid, 141.

<sup>351</sup> Ibid, 141-42.

<sup>352</sup> Ibid, 143-44.

had caused the conflict and the United States swiftly granted independence to the newly liberated territories.<sup>353</sup>

Zacharias and Yokoyama agreed that more prominent Japanese officials should visit the United States before the next disarmament conference, in order to consider the issues that Yokoyama and Zacharias had discussed. Yokoyama wanted these officials then to return to Japan and describe what they had learned to the Japanese people. Zacharias added that high-level Japanese naval officials should participate in such visits and Yokoyama readily agreed.<sup>354</sup> But, important differences remained. Yokoyama continued to cite the Pacific Fleet's existence as evidence that the United States intended eventually to attack Japan. Refusing to concede that the United States had commercial interests in the Asia-Pacific region to protect, he suggested that the United States could relocate the Pacific Fleet to Guantanamo Bay, Cuba, which obviously disregarded the U.S. intention to protect Pacific commerce, a major tenet of Zacharias's arguments.

Ultimately, Zacharias believed that he positively influenced Yokoyama's view of the United States, although whether he could have made an impression on the perspective of Japanese naval officers beyond Yokoyama was unlikely. Furthermore, whether Yokoyama's good will toward Zacharias and the United States would endure once he returned to Japan and was exposed only to the arguments and underlying rationale that

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<sup>353</sup> For a focused account of the strategic and imperial factors that particular U.S. leaders and strategists, including Theodore Roosevelt, Alfred Thayer Mahan, and Elihu Root, strongly considered in the decision to launch the Spanish-American War in 1898, see Warren Zimmermann, *First Great Triumph: How Five Americans Made Their Country a World Power* (New York: Farrar, Straus, and Giroux, 2004).

<sup>354</sup> Zacharias, *Secret Missions*, 144-45.

had shaped his perspective prior to meeting with Zacharias was questionable.

Regardless, Zacharias was a U.S. naval officer with whom some Japanese officials apparently believed they could do business.<sup>355</sup>

Although Zacharias had been disappointed with ONI leadership much of his career, in 1934, he assessed that Navy leadership was aware of the increasing Japanese challenge to the United States, as well as Navy's role as the first line of defense. He attributed this improvement partly to President Roosevelt's experience as Assistant Secretary of the Navy.<sup>356</sup> Now, Zacharias had adequate staffing and other resources in order to do his job in the manner that he deemed appropriate. He was determined thwart Japanese intelligence activity against the United States via aggressive CI measures.<sup>357</sup>

Based predominantly on reporting on Japanese naval maneuvers, Zacharias concluded that Japanese naval warfare doctrine was fundamentally defensive in 1933. In 1935, however, the U.S. Navy detected a marked doctrinal shift. Thenceforth, in the event of a war with the United States, the Japanese Navy would seek to lure U.S. naval forces into a trap and destroy the bulk of the Pacific Fleet, leaving the U.S. West Coast effectively undefended. Also, ONI observed increasingly aggressive Japanese intelligence activities, partly through a fortunate and credible tip.

In 1935, Navy CI suspected that the Japanese naval attaché in Washington, Captain Yamaguchi Tamon, was engaged in espionage. Furthermore, Zacharias believed

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<sup>355</sup> Ibid, 143-46; Wilhelm, *The Man Who Watched the Rising Sun*, 66-71.

<sup>356</sup> Franklin Delano Roosevelt served as Assistant Secretary of the Navy from 1913 to 1921, during the presidential administration of Woodrow Wilson.

<sup>357</sup> Zacharias, *Secret Missions*, 147-48.

that Yamaguchi's representative on the West Coast, Lieutenant Commander Miyazaki Toshio, a Japanese Navy language officer attending the University of Southern California, was collecting intelligence for Yamaguchi. Navy CI, however, could not prove it. Then, William Turrentine, a beachcomber, as Zacharias described him, from San Pedro, California, arrived at the Pacific Fleet's flagship with information that confirmed ONI's suspicion of Miyazaki.

The information that Turrentine claimed to have earned him a meeting with Pacific Fleet Admiral Joseph M. Reeves. Turrentine told Reeves that his roommate, Bill Thompson, who recently had been discharged from the U.S. Navy, had been posing as U.S. Navy chief petty officer in order to acquire U.S. Navy documents. On one occasion, Turrentine had witnessed Thompson provide documents that he had procured via this ruse to a Japanese individual, who turned out to be Miyazaki.

Turrentine's tip resulted in a CI investigation, which eventually determined that Thompson had indeed been posing as a chief petty officer to board ships and acquire classified documents, which he stashed in his apartment and eventually sold to Miyazaki. Although Miyazaki unexpectedly left the United States for Japan before authorities could close in, Thompson was convicted of espionage and served 15 years in the McNeil Island Penitentiary.<sup>358</sup>

ONI, however, did not break up Yamaguchi's procurement network. Instead, it prepared products that closely resembled those that Yamaguchi sought, but that had been modified in order to prevent him from acquiring the actual items. On one occasion, for

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<sup>358</sup> Ibid, 165-69.

example, ONI ensured that Yamaguchi received a “juggled blueprint” for a newly developed eight-inch projectile. Through a series of similar operations, ONI identified U.S. naval and military technology that Japan sought, although it failed to discover how the Japanese transported the products out of the United States.<sup>359</sup>

By the late 1930s, Zacharias believed that war with Japan had become virtually inevitable. “We had now reached the historical turning point in our relations with Japan,” he wrote, lamenting that U.S. diplomats did not recognize what was happening. He observed: “From now on Japan’s political and diplomatic moves were predetermined by military necessity, all keyed to support the grandiose strategic plan which was taking shape in the Army and Navy General Staffs.”<sup>360</sup> Perhaps Zacharias’s intimate knowledge of what actually transpired from the late 1930s through Pearl Harbor influenced his recollection. Even if it was not evident as the events occurred, however, Japan’s invasions of Manchuria in 1931 and China in 1937; its occupation of Indochina in 1940; its deteriorating relationship with the United States in 1940 and 1941; its withdrawal from the League of Nations; its entry into the Axis alliance with Germany and Italy; and its increasingly aggressive intelligence activities against the United States were indicative of the tension building between the two countries.

Mashbir, Zacharias, and their intelligence colleagues were convinced that war with Japan became increasingly likely as the interwar period progressed. They endeavored simultaneously to ensure that the United States would be better prepared for the conflict and to prevent the war from occurring. Ultimately, however, U.S. leaders

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<sup>359</sup> Ibid, 176-82.

<sup>360</sup> Ibid, 196.

neither supported adequately nor capitalized used the intelligence that ONI and MID produced nor the insight into Japan and the Japanese that these U.S. intelligence professionals produced. In the end, and unfortunately, war was required in order for Navy and Army leaders to take Zacharias and Mashbir's perspective seriously, and their exploits and achievements during the interwar period demonstrate that intelligence professionals can be highly successful, although the governments that they serve may still fail, regardless of that success.

## Chapter Five

### The M-Plan: A Failure Ahead of Its Time

During his assignment in Japan in the early 1920s, Army Captain and Assistant Military Attaché Sidney Forrestal Mashbir resigned his military commission in order to undertake what probably was the first non-official cover (hereinafter NOC), or non-government, intelligence operation in the modern U.S. intelligence experience. The operation, dubbed the M-Plan, which stood for Mashbir Plan, was bold, ambitious, and would have been dangerous for Mashbir and other participants had it been discovered by Japanese counterintelligence at an advanced stage.

Mashbir embarked on the M-Plan in response to specific requests from MID and ONI officials although, in the end, he received little assistance from either service and endured significant personal and professional setbacks for pursuing the M-Plan. Neither MID nor ONI possessed the capacity to support the operation appropriately. Either service would have had to support the operation clandestinely, so that the U.S. government nexus with Mashbir would remain covert, unknown especially to the Japanese government. Neither service, however, had the capacity to do this. Specifically, neither MID nor ONI could communicate clandestinely with a NOC officer, who neither service formally employed. Neither had the capacity to pay a NOC officer's salary or subsidize his or her operational activity. For that matter, neither service could even facilitate secretly employing a NOC officer. Neither service had done it nor possessed the capacity to do it.

These shortcomings were not surprising at the time. In fact, the human relations department of either service would have found the underlying concept of facilitating an individual's clandestine non-official employment utterly alien, would not have known how to support it, and would not have possessed the tools with which to do so. Largely because the sort of intelligence operation that the M-Plan represented had never been undertaken by the U.S. government in any even remotely sophisticated form, neither MID nor ONI had fashioned the tools with which to enable and facilitate it. Furthermore, even if either service had nevertheless determined to support the M-Plan, the resulting effort likely would have fundamentally jeopardized the operation. Ultimately, were Japan to have discovered Mashbir's link to the U.S. government, his plan would have failed, exposing anyone involved, especially Japanese subjects, to grave consequences. Furthermore, while neither service could support the operation without dooming it, each managed to obstruct it periodically, usually inadvertently.

In the end, although the vision and ingenuity of a handful of U.S. intelligence professionals resulted in the M-Plan's creation and Mashbir's decision to pursue it, in the end, the U.S. government's more compelling and pervasive failure to empower, support, encourage, and lead U.S. intelligence services doomed the M-Plan.

This chapter will examine Mashbir's creation and pursuit of the M-Plan, beginning when MID leaders instructed him to pursue the underlying objective during his assignment in Japan; leading to Mashbir's creation of the M-Plan during the assignment; and, finally, through the M-Plan's conclusive failure in the late 1930s.

Between the end of the Great War and the beginning of the Pacific War, U.S. intelligence professionals working in official capacities, accredited by the U.S.

government and recognized by their host governments, undertook the majority of human intelligence (hereinafter HUMINT) work that the United States performed abroad. This included U.S. Navy and U.S. Army officers, serving in ONI and MID, respectively and occasionally Department of State Foreign Service officers.<sup>361</sup>

The operating environment in Japan for ONI and MID officers was exceedingly challenging, but that did not diminish the intelligence requirements of U.S. leaders. Japan remained a major threat to U.S. interests in the Asia-Pacific region and U.S. required information that would enable them to anticipate Japanese actions protect U.S. interests. Furthermore, during a war between the United States and Japan, intelligence concerning the decisions, plans, and objectives of Japanese leaders inevitably would become even more crucial to U.S. leaders. Accordingly, as they briefed Mashbir concerning his assignment in Japan as a language officer, MID officials conveyed this intelligence requirement:

The most difficult of all our problems is how to get messages out of Japan in case of war. Now, to begin with, it is impossible to put spies in Japan disguised as Japanese. The Chinese, the Koreans, the Burmese, the Siamese can be easily detected by the Japanese, and could not fool them for a second. Of course, no white man could fool them. Furthermore, the country is completely within the grasp of the secret police, who know every native and have a record of him from the moment he was born, and of every stranger from the instant he arrives. We are completely at a loss. During your four years there we would like to have you give as much thought to this problem as possible, to see if you can devise a workable plan.<sup>362</sup>

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<sup>361</sup> Counterintelligence domestically was conducted principally by agents of the Federal Bureau of Investigation (hereinafter FBI), but their presence overseas was much more limited than it has been in the early twenty-first century. Notably, virtually every intelligence agency or security service conducts some degree of some variety of defensive activity that qualifies as counterintelligence.

<sup>362</sup> Sidney F. Mashbir, *I Was An American Spy* (New York: Vantage Press Inc., 1953), 127-129.

Mashbir reflected on the instruction and its underlying concept during the first year of his assignment in Japan, but he did not attempt to devise a scheme. Similar to ONI, MID leaders were inconsistent regarding expectations of their junior attachés, and there was no indication that the order was recorded beyond its oral transmission to Mashbir. Mashbir, however, supported the underlying concept.

In late June 1922, the U.S. Naval Attaché in Tokyo, Captain Edward H. Watson, visited Mashbir at the home he had rented for the summer in Kariuzawa, a mountain resort in Japan. Mashbir did not expect the visit, but Watson's reason for calling surprised him even more. "Sid," Watson began, "I have been instructed by the Navy Department to prepare a plan to get information out of Japan in time of war. Do you think you could draw up such a plan?" That Mashbir had received the request this time from the naval attaché, rather than from his superior, Colonel Burnett was, at minimum, unorthodox. The intelligence requirement, however, remained a high priority for each military service.<sup>363</sup>

Mashbir agreed to produce a plan for Watson, but imposed two conditions: First, he demanded that Colonel Burnett approve Mashbir undertaking the assignment. Mashbir understood the considerable advantage that cooperation between the two intelligence services could provide, but he also recognized the perennial rivalry and tension between the Army and Navy. Importantly, were Burnett suspicious of his Navy

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<sup>363</sup> For further information regarding the prediction by U.S. military and naval strategists during the first four decades of the twentieth century that Japan would be the most likely opponent of the United States in the next significant armed conflict, in addition to insight into the decades of naval war planning predicated on this prediction, refer to Edward S. Miller, *War Plan Orange: The U.S. Strategy to Defeat Japan* (Annapolis, MD: Naval Institute Press, 2007).

counterpart, that Mashbir even requested permission to explore Watson's request would damage Mashbir's credibility with his superior.

Mashbir's second condition was that the plan ultimately be available both to the Army and Navy. Zacharias recalled that Mashbir politely requested of Watson: "The plan must be addressed jointly to the Secretary of War and the Secretary of the Navy, and be jointly available to both services." Watson readily acquiesced to both conditions, but insisted that Mashbir complete the plan within two weeks.<sup>364</sup>

Zacharias recalled that "in just two weeks Sid returned to Captain Watson's office with a folder which contained the neatly typed copy of what we came to call our 'M-Plan'."<sup>365</sup> When he had finished reviewing the plan, Watson declared: "This is perfectly marvelous," and asked: "How on earth did you do this so quickly and so well?" Mashbir answered: "Well, Captain, I have been thinking of this problem for a long time, and I am very grateful to you for the opportunity to put it in this concrete form."<sup>366</sup> Zacharias assessed that Mashbir's "memorandum demonstrated his keen knowledge of Japan and also his long and fruitful preoccupation with intelligence," pronouncing him "an expert in both." Zacharias lamented, however, that "perhaps because of his outstanding

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<sup>364</sup> Mashbir, *I Was An American Spy*, XX. Ellis M. Zacharias, *Secret Missions: The Story of an Intelligence Officer* (Annapolis Maryland: Naval Institute Press, 1946) 53. According to Zacharias's account of the meeting, Captain Watson asked Mashbir how long it would take him to draft the plan, and Mashbir estimated: "Not more than two weeks, if I work day and night." To this, Watson replied: "Well, start at once! Write down your plan and give it to me! I'll see to it that it reaches the proper hands in Washington" (Zacharias, 53).

<sup>365</sup> For further information regarding the M-Plan, refer to Mashbir, *I Was An American Spy*, 127-150, and Zacharias, *Secret Missions*, 51-61.

<sup>366</sup> Zacharias, *Secret Missions*, 53.

qualifications, he was hampered in his own activities by the barbed jealousies within his own circle,” suggesting that Burnett may not have approved of Mashbir undertaking the assignment at Watson’s behest. Zacharias added that Mashbir “was an Army officer, responsible to the Military Attaché in Tokyo. The fact that he was now working for the Naval Attaché did not promise to enhance his standing with his superior.”<sup>367</sup>

Watson, however, claimed that the quality of the M-Plan would motivate Burnett to forget Mashbir’s “semideparture [Sic] from the old-fashioned chain-of-command principle.” He told Mashbir that he would convince Burnett of the M-Plan’s quality. On reviewing the M-Plan, however, Burnett declared: “I can’t see anything new in this. It’s merely the adaptation of the old German system.” Watson responded: “That may be. But do you have anything better? In fact, do you have anything?” Burnett confessed that he did not.<sup>368</sup> With that, Watson lost patience: “That settles it. I am sending this plan on to the Navy Department. You may keep this copy. Send it on to your people in Washington, or do with it as you please,” Watson continued, “but I would appreciate it greatly if you would give your young man appropriate credit for the splendid work he did for me.”<sup>369</sup> Clearly, Watson only made matters worse for Mashbir.

Despite inspiring and promoting Mashbir’s creation of the M-Plan’s, Watson failed to convince his superiors in Washington to support it. In his turn, Zacharias also

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<sup>367</sup> Ibid, 53.

<sup>368</sup> Ibid, 54.

<sup>369</sup> Ibid, 55.

failed to convince ONI leaders to support the M-Plan. Burnett, for his part, saw little merit in it.<sup>370</sup>

### *The Anatomy of the M-Plan*

In designing the M-Plan, Mashbir drew on experience from the First World War, during which, as an MID officer, he helped identify and unravel a German intelligence network. German intelligence had used newspaper advertisements to convey instructions to saboteurs in the United States. As Watson reviewed the seven-page, single-spaced plan, Mashbir explained its origin in the German intelligence scheme and pointed out that he had addressed the German plan's shortcomings in designing the M-Plan. According to Zacharias, Mashbir pronounced his plan unbeatable and Watson approved of it.

After the passage of what Mashbir considered ample time to review, assess, and begin implementing the M-Plan, he claimed that he was surprised to learn that neither MID nor ONI had embraced it. No other scheme had been devised to address the enduring intelligence requirement that each service had identified. While he did not expect that either service would rubber-stamp the M-Plan, he had anticipated that each would at least seriously consider it.

The M-Plan required that either MID, ONI, or the two services jointly, establish a “red herring” network apparently designed to convey intelligence from inside Japan to the United States in the event of war. Mashbir intended for Japanese security to discover and coopt the “red herring,” whereupon the Japanese probably would assume that they

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<sup>370</sup> Mashbir, *I Was an American Spy*, 136.

had eliminated the U.S. intelligence threat within Japan. Meanwhile, a separate intelligence collection network would continue operating clandestinely.

Mashbir was adamant that the U.S. government must have no connection to the operation. He argued that the M-Plan “must be financed by contributions from one or two wealthy patriots, and that *not one penny of Government funds should be used under any circumstances.*”<sup>371</sup> A U.S. government nexus could reveal the network to Japanese authorities and cost the lives of those involved.<sup>372</sup> Also, were the Japanese to discover the network, they might permit it to continue operating in order to learn more about it, or even feed false information into it in order to mislead the United States.

Mashbir observed that the orders that Major Witsell and he had received concerning their concurrent assignments in Japan, issued on June 21, 1920, were classified “Confidential,” which he claimed corresponded to “Top Secret” by the time he published his memoir in 1953. He argued that the Japanese had learned of the orders as early as June 22, before the information could have reached Tokyo, considering the international date-line. Mashbir surmised that Japanese intelligence may have penetrated the War Department in Washington, since the War Department had yet to notify Japan of Mashbir and Witsell’s assignments.<sup>373</sup>

#### *Mashbir Initiates the M-Plan*

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<sup>371</sup> Mashbir’s italics.

<sup>372</sup> Mashbir, *I Was an American Spy*, 131.

<sup>373</sup> Ibid, 132-34.

In 1922, Mashbir declared that he had, “by deliberate design, and by gambling on the accuracy of my knowledge of Japanese psychology, succeeded in getting very close to the men on the topmost political level.” He claimed to have tapped into what he had dubbed “the policy group,” the “brains behind the brains.” Mashbir maintained that these individuals determined Japanese government policies outside of Army and Navy decisions; although, arguably, as the Japanese military over time increasingly controlled the Japanese government, Japanese civilian influence correspondingly decreased.

Mashbir asserted that he had developed relationships with influential Japanese civilian leaders that even the leaders of major U.S. corporations operating in Japan had not cultivated. He became one of the Pan-Pacific Association directors in order to access influential members of the Japanese business community, although how important the Pan-Pacific Association actually was in Japan at the time is unclear.<sup>374</sup>

Mashbir assessed that having recently been a U.S. military officer would be advantageous because, ostensibly, he would have contacts among U.S. civilian and military officials on assignment in Japan, in addition to members of the U.S. business community there. He also highlighted his engineering background and claimed that several business leaders in Japan had urged him to resign from the U.S. Army and go into business with them, but that he had refused each time despite the significant financial reward that each offer promised. He considered his “hard-won commission” as a U.S. Army officer too valuable to surrender, even for significant financial compensation.<sup>375</sup>

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<sup>374</sup> Ibid, 134-35.

<sup>375</sup> Ibid, 135.

When G-2 and ONI failed to act on the M-Plan, however, Mashbir decided to accept one or more of those private-sector opportunities in order to finance the operation himself. He asked Colonel Burnett for a leave of absence, but Burnett responded with two arguments against the prospect. First, the Army probably would grant Mashbir a leave of absence of no more than one year. Second, the Japanese would learn that Mashbir had taken a leave of absence and immediately become suspicious. The resulting Japanese scrutiny would likely prevent Mashbir from launching the M-Plan. Japanese spies in the United States might also discover the real reason for his leave of absence. For several weeks, Mashbir and Burnett discussed the M-Plan and these potential pitfalls.

Finally, Burnett proposed a potential solution. He read to Mashbir Section 24E of the National Defense Acts 1916-1923, titled “Appointment of Officers,” which stated that “former officers of the Regular Army and retired officers may be reappointed to the active list, if found competent for active duty, and shall be commissioned in the grades determined by the places assigned to them on the promotion list under provisions of section 24a hereof.” On this basis, Burnett recommended that Mashbir seek a long-term contract with a private firm and eventually simply reapply for an Army commission. Burnett warned Mashbir that in being reinstated he would start at the bottom of the list in his grade, but also predicted that the Army would richly reward him for his service. In recounting Burnett’s recommendation, Mashbir claimed that Burnett’s advice had been genuine. It is difficult not to believe, however, that he was glad to be rid of Mashbir. Mashbir probably should have been suspicious when Burnett converted within a brief period from being a staunch critic or even opponent of the M-Plan to promoting a scheme through which Mashbir would resign from the Army in order to pursue it.

Mashbir finally accepted a private sector business offer that would pay a base annual salary of \$15,000, accompanied by \$150,000 in stock. He would also receive 20% of the profit from the company's engineering department, which Mashbir would organize. He estimated that he would earn \$80,000-85,000 annually, which would easily enable him to fund the M-Plan. Mashbir agonized over resigning his Army commission, but nevertheless did so on April 5, 1923, with Burnett's approval:

Captain Mashbir's place as a junior and somewhat inexperienced officer of the Army can be easily filled. With regard to the Intelligence Service, he will be in a position where he can be of much more value than if he remained in the Army. Not only will his new position require the constant use of the Japanese language in which he is already quite proficient, but he will acquire a fund of economic, and other, information that will be of great value to future Military Attachés. As a matter of fact, I consider Captain Mashbir's resignation as a big stroke of luck for the Intelligence Service.<sup>376</sup>

Few knew the real reason for Mashbir's resignation. Only Burnett and Zacharias knew fully, while Witsell and Captain Warren J. Clear realized that there was more to the story than Mashbir simply resigning to pursue private-sector opportunities. Mashbir did not even take his wife into his confidence.<sup>377</sup>

Before joining the Army, Mashbir had been an engineer and had owned an architecture firm. He leveraged this experience in order to establish himself in Japan's industrial sector, "immediately securing a large order for boilers, for several carloads of concrete mixers, for ten-ton road rollers, and other items for which my company then held the agencies." Mashbir began to pursue business opportunities in industries and with potential clients positioned. Soon, he contacted a Japanese admiral, who the

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<sup>376</sup> Ibid, 137-38.

<sup>377</sup> Ibid, 136-38.

Japanese Navy had recently placed in charge of the recently created Bureau of Submarine Research. Mashbir explained equipment that the admiral would require in his new position and offered to help him procure it.<sup>378</sup>

Mashbir identified another promising opportunity when the Japanese government deemed building a strong domestic industrial capacity essential to pursuing Japanese imperial objectives abroad. Japan, however, had to depend on already industrialized foreign states in order to develop the means to do so in its own right. For example, Japan lacked modern, technically advanced heavy equipment required to execute large-scale industrial projects. Without this equipment, these projects and, crucially, the industrial development that they were expected to facilitate, could not occur. Mashbir intended to provide a solution by offering to broker sales of advanced Western equipment to Japanese firms that those companies required to advance. Ultimately, since Japan's industrial development was tied to the government's economic and national security priorities, Mashbir anticipated that his business ventures ultimately would provide him insight into Japanese industries involved in the country's adventures abroad. Furthermore, he would be able to develop contacts working in the right companies.

Mashbir negotiated an \$87,000 contract for a boiler with the Asano Company. When his chief engineer recommended that he add ten percent to the bid in order to bribe one of the Asano Company engineers, Mashbir objected, immediately reported the event to company's owner, Soichiro Asano, and his son, Ryozo Asano. Mashbir threatened to withdraw his bid, whereupon the elder Asano fired the engineer, who would have received the bribe, in Mashbir's presence. Then, Soichiro Asano accepted Mashbir's bid.

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<sup>378</sup> Ibid, 138.

Mashbir became close friends with Asano's managing director, a certain Mr. Yokoyama. This relationship bore fruit when Yokoyama informed Mashbir that the Asano Company had allocated \$1 million toward constructing a wire-drawing mill and Yokoyama described the type and capacity of the mill desired. Then, Yokoyama informed Mashbir that Mr. Asano intended to ask Mashbir to oversee the entire project, including the equipment's procurement and factory's construction. Based on his swift progress, Mashbir assessed that he would be able to launch the M-Plan within a year.<sup>379</sup>

Mashbir attributed one tactic that he deployed in competing for bids to his intelligence experience although, more likely, it was just a good tactic. The Japanese Diet had secretly passed the National Defense Law, according to Mashbir intended to promote the steel industry. Japanese law mandated that business proposals for certain equipment include the high import duty that the Japanese government assessed. One provision of the National Defense Law, however, permitted a bidder who had won the contract to receive a refund for the tariff's sum. Were a bidder aware of this provision of the National Defense Law, he or she consistently could underbid competitors and then make up for loss via the refund. Mashbir capitalized on this opportunity.

As he developed a plan to import agricultural equipment to Japan, Mashbir also learned of a law, largely unknown to foreigners, intended to promote Japanese agricultural development. Mashbir planned to import one of every agricultural machine or tool available and then invite a group of academics from the Imperial Agricultural University in Hokkaido to examine and evaluate them. Mashbir anticipated that the academics would effectively market the equipment for Mashbir via their positive

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<sup>379</sup> Ibid, 139.

assessments. Viscount Inouye and Baron Kitasato Shibasaburo, the latter whom Mashbir described as a highly accomplished and respected academic and medical specialist, and who later served in the Japanese House of Peers, strongly supported the plan. They pledged to select a good committee from among the faculty of the university, while Mashbir also enlisted H. Mayesawa, an agricultural engineer educated at Cornell University, in his scheme. Ultimately, the professors would test and evaluate the tools and equipment and identify that equipment which they deemed beneficial to agriculture.

Next, Mashbir would arrange for the tools and equipment to tour Japan via train from one farming community to the next, under Mayesawa's supervision, enabling farmers to evaluate the implements based on their local requirements. Mashbir planned eventually to sell farming tools and equipment to individual farmers via their local agricultural associations and in accord with Japan's law for the promotion of agriculture. The local agricultural association would have twenty years to pay for the tools or equipment, while the Japanese government provided an interest free loan to each community covering the total cost. The Japanese government meant to promote agricultural advancement and Mashbir intended to facilitate the process.<sup>380</sup>

Mashbir also placed a \$3 million bid for a project to build a bridge over the Hei-Ho River in China. In still another endeavor he ordered an exceptionally large steam-shovel, which was nearly twice as large as the largest steam-shovel then produced, for use in the Fushun coal mines in Manchuria. He also placed orders for several five-ton steamrollers for Japanese Army airfield construction. Mashbir's business activities soon produced intelligence, when he discovered that the Japanese South Manchurian Railway

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<sup>380</sup> Ibid, 140-41.

intended to acquire “a complete installation of link-belt coal-loading equipment” for a “certain seaport.” Mashbir believed initially that the South Manchurian Railway must have intended the equipment either for Seishin or Rashin. Mashbir claimed that he discovered that the equipment was actually intended for a railroad project in Manchuria that ultimately was used to transport Japanese troops for the territory’s invasion and occupation in 1931.<sup>381</sup>

As a businessman and engineer brokering the acquisition of non-indigenous heavy equipment, Mashbir inferred that he impressed his Japanese clients, even convincing some to invest in expensive products whose purpose they did not fully comprehend.<sup>382</sup> On one occasion, Mashbir promoted large Jaeger concrete mixers to the Shimidzu Gumi, at the time “one of the largest contractors in Tokyo.” Mashbir explained and demonstrated how the mixers worked over several hours, whereupon Mr. Shimidzu agreed to purchase a number of them. Then, Mr. Shimidzu confessed that he still did not understand how sand and gravel loaded into one end emerged from the other as concrete.<sup>383</sup>

Mashbir was surprised that an important business leader would invest to much in something that he did not comprehend and, based partly on this experience, determined that “*the greatest obstacle to Japan’s progress is its own language.*”<sup>384</sup> In order to explain what he meant, Mashbir argued that “*oral* explanations mean nothing to them,”

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<sup>381</sup> Ibid, 138-43.

<sup>382</sup> That Mashbir impressed his Japanese clients was his own assessment.

<sup>383</sup> Mashbir, *I Was an American Spy*, 143-144.

<sup>384</sup> Mashbir’s italics.

because “they can only fully understand the *written* language.”<sup>385</sup> He blamed “the large number of homonyms in the language” and concluded that the language itself would contribute to Japan’s defeat in a war against the United States. His experience leading the Allied Translator and Interpreter Section during the Pacific War fortified his opinion.<sup>386</sup>

Mashbir criticized Japan’s fundamental education system’s structure and overarching philosophy. He observed that the 1922 annual report of Japan’s Department of Education indicated that of 7,500,000 Japanese primary-school children, just 250,000 advanced to middle school. Then, only about 30,000 middle school students eventually went to college or university. Furthermore, Mashbir lamented, Japanese students were obliged to study ideographs during a significant portion of their educational experience which, he argued, explained the poor eyesight among the Japanese as well as their tendency not to think individually in order ultimately to pass their examinations. Mashbir believed that Japan’s significantly regimented approach to education and the system’s general failure to encourage individual thought inhibited creativity and free expression, ultimately limiting pragmatism and progress.

Mashbir discussed introducing correspondence schools to Japan with several influential Japanese: Prince Tokugawa, Viscount Inouye, and Baron Shiba. Each contributed one or more idea that reinforced the concept considerably. Mashbir also enlisted the support of Charles H. Nolte, Vice President of the International Correspondence Schools. At the time, Nolte was vacationing in China. He agreed to

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<sup>385</sup> Mashbir’s italics.

<sup>386</sup> Mashbir, *I Was an American Spy*, 144.

visit Japan in order to promote the idea, ostensibly not only to assist Mashbir, but because it would enable the company to access the Japanese market. Additionally, Mashbir secured at least professions of support from Robert F. Moss, Vice President of the Trucson Steel Company; Mr. Frazier of Sale and Frazier, Ltd., Roy Geary, vice president for Japan of General Electric; and J. K. I. Cody, manager for the National Cash Register Company's Japanese operations. Mashbir considered these individuals important and influential foreign business leaders then operating in Japan. Mashbir argued that creating the *Nippon Tsu-Shin Gakkai*, or Correspondence Schools of Japan, would promote Japan's vertical, rather than horizontal, economic expansion. He also assessed that the M-Plan was on track to succeed.<sup>387</sup>

Mashbir continued to pursue business contacts and opportunities. He became a member of the Pan-Pacific Association, and one of the directors of the Pan-Pacific Club of Tokyo, whose luncheons he oversaw. Membership in these groups enabled Mashbir to become acquainted with and network via additional well-connected Japanese business leaders, whom he described as "the really powerful men of Japan."<sup>388</sup>

On one occasion, Mashbir hosted a dinner at the American Association of Japan commemorating "Balboa Day," although he had not expected such strong Japanese enthusiasm for the fifteenth century Italian explorer. He invited Prince Tokugawa to deliver the keynote address, and Tokugawa insisted that Mashbir deliver his introduction entirely in Japanese. When Tokugawa spoke about the 500th anniversary of Balboa's arrival in Japan, Mashbir recalled experiencing an epiphany, specifically that the

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<sup>387</sup> Ibid, 143-46.

<sup>388</sup> Ibid, 146.

Japanese considered the Western explorers to be barbarians, rather than themselves. Shiba Chuzaburo's comments, delivered next, reinforced Mashbir's discovery. Shiba observed: "Our ancestors had a silk-clad civilization, a culture, and a literature when your ancestors were still wearing skins for clothing and living in caves and trees."<sup>389</sup> He described the course of Western colonial expansion into the Asia-Pacific region, which the Japanese perceived ultimately to represent a threat, and compared this expansion to opposition among the Western powers to Japanese imperial expansion. Mashbir lamented that the Japanese government's control of the media, and thus of the public's access to information, reinforced this perspective, although Shiba's charge had merit.

Notably, according to Mashbir and *Grace's Guide to British Industrial History*, Shiba was a well-known, influential engineer, industrialist, and educator, who studied engineering in Europe for two years, beginning in 1899, and then taught mechanical engineering at the Imperial University of Tokyo for 37 years. He died in 1934.<sup>390</sup>

Mashbir found it difficult to overcome the suspicion that many Japanese felt toward the United States. He lamented that the United States did not present a clearly defined foreign policy, but instead seemed to exacerbate Japanese suspicion. Evidently, he expressed this view to the extent that his War Department file included the remark: "This officer has publicly criticized the foreign policy of the Administration." He argued that the comments inclusion in his file resembled the "Gestapo technique" and

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<sup>389</sup> Ibid, 146.

<sup>390</sup> *Grace's Guide to British Industrial History*, "Chuzaburo Shiba, 1934 Obituary," accessed June 17, 2019, [https://www.gracesguide.co.uk/Chuzaburo\\_Shiba](https://www.gracesguide.co.uk/Chuzaburo_Shiba).

maintained that his assessment was true nonetheless. He argued that the U.S. State Department promoted policies toward Japan that made war far more likely.<sup>391</sup>

### *The M-Plan Derailed*

Mashbir lost nearly everything because of the massive Great Kanto Plain earthquake and resulting firestorms in 1923 and the M-Plan suffered a corresponding blow. Although he endeavored to recover financially, the toll from the disaster proved impossible to overcome in the short term.

Just six months had passed since Mashbir had resigned his commission in the U.S. Army. Not having had enough time to establish his business interests in Japan, he returned to the United States to seek reinstatement to the Army. Mashbir presented letters from Colonel Burnett and other influential U.S. Army officers to the War Department in order to bolster his application.<sup>392</sup> He learned, however, that a 1920 ruling from the Army Judge Advocate General (hereinafter JAG) prohibited the Army, as of December 20, 1922, from re-appointing Army officers who had resigned or retired under the very reinstatement clause of the law under which Mashbir had resigned. According to the JAG, the army had to fill vacancies only via promotion.

When he resigned his commission, Mashbir was unaware of the JAG's 1920 decision. He claimed that Burnett also had been unaware of it. Furthermore, Mashbir

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<sup>391</sup> Mashbir, *I Was an American Spy*, 146-149.

<sup>392</sup> *Ibid*, 149-161.

asserted that in 1926 the law was still being printed without the amendment.<sup>393</sup>

Regardless, the amendment was binding and Mashbir confronted the prospect that his military career had ended.<sup>394</sup> Furthermore, there was no record of why he had resigned, since he had pursued the M-Plan unofficially, without any formal link to the U.S. government. Mashbir, then 32 years old, had no job and no income.

Mashbir considered re-starting his former engineering firm, assessing that it would produce enough income to sustain his family which, as detailed in Chapter Four, had returned to the United States to visit family for the summer before the Kanto earthquake struck. He remained, however, determined to pursue the M-Plan, arguing that in his obsession to do so he had developed “a Nathan Hale complex.”<sup>395</sup>

He attempted several business ventures between U.S. and Japanese companies, but each failed. He blamed the U.S. companies rather than their Japanese counterparts for these setbacks, observing that he loathed and abhorred the conduct of Japanese chauvinists and militarists, but that in all of his “dealings with the Japanese – not the military caste, but socially and commercially – I have found only the most scrupulous honesty and honor.” Then, comparing U.S., French, and British business persons with whom he had dealt against their Japanese counterparts, Mashbir asserted that he had

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<sup>393</sup> Regardless of whether he could have done so, Mashbir did not seek any legal recourse in order to seek a new U.S. Army officer’s commission.

<sup>394</sup> Mashbir, *I Was an American Spy*, 165.

<sup>395</sup> Ibid.

“never known a highly placed Japanese to break his business word,” including when “it could have resulted in great financial advantage.”<sup>396</sup>

Mashbir expressed these assessments after the Pacific War, when many Americans, motivated by opinions shaped during the recent conflict, associated the Japanese people with the most heinous behavior and deeds. Although Mashbir was highly critical of the Japanese military’s conduct and periodically stereotyped the Japanese, he remained fairly objective concerning the Japanese population more broadly.

Mashbir finally secured a position selling cash registers. He did this for three years, eventually becoming a regional manager for the company. That Mashbir accepted this job and held it for three years begs the question of why he did not just re-start his engineering firm, as he claimed he could have done. Meanwhile, he served as a Major in the Military Intelligence Reserve.<sup>397</sup> Then, after three years in cash register sales, he applied to serve two weeks on active duty in Washington as a U.S. Army reserve officer. During those two weeks, with the assistance of contacts among the Army General Staff, he secured “a tour of extended active duty,” which meant another six months on active duty, and the War Department could extend the tour for an additional six months.

In summer 1927, Mashbir was assigned to the office of the Assistant Chief of Staff Army intelligence (hereinafter G-2), as a member of the War Department General Staff. In this capacity, he spent the next 12 months re-writing the War Department’s “Order of Battle Manual” concerning Japan. The manual was intended to be an up-to-

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<sup>396</sup> Ibid, 167.

<sup>397</sup> Ibid, 167-68. According to Mashbir, “the yen debenture matter was my last attempt to raise a large amount of money quickly, to finance the M-Plan.”

date and off-the-shelf guide to Japan's military capabilities. Theoretically, the U.S. Army would rely on it in the event of a war with Japan. Additionally, calling on on his experience as a businessman in Japan, Mashbir "made a study of the iron and steel resources in Japan, and a study of the manpower of the world, actual and potential." He also devised an ultimately unsuccessful plan to return to Japan to pursue the M-Plan.<sup>398</sup>

Still pursuing business opportunities that would enable the M-Plan, Mashbir received an offer from the Toledo Scale Company to become its representative in Japan. He refused the offer, however, when he discovered that a Japanese company had purchased a Toledo scale, reverse engineered it, and patented its parts in Japan. Then, in 1928, the Toledo Scale Company offered Mashbir a job as its government representative. This time Mashbir accepted the offer, whereupon he requested that the Army relieve him from active service for eight months in order that he might pursue it. Instead, the Army promoted him Lieutenant Colonel and placed him on the General Staff Eligible List.<sup>399</sup> Perhaps understandably, Mashbir was conflicted. Although he had failed thus far to launch the M-Plan, he was recovering his career as a military officer.

Mashbir was certain that the United States and Japan would be at war against one another within the next fifteen years. Accordingly, he accepted or at least welcomed an assignment to investigate, in collaboration with an Army Quartermaster Corps official, U.S. readiness to fight such a war. Mashbir concluded that the U.S. government had no definitive plan to mobilize its armed forces; had not determined what it possessed in

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<sup>398</sup> Mashbir, *I Was an American Spy*, 171.

<sup>399</sup> *Ibid*, 172.

order to fight a war; or how it would produce what it would require. He lamented that many U.S. officials either were unaware or indifferent regarding these inadequacies.<sup>400</sup> Clearly, the U.S. government's failure to empower, oversee, and benefit from intelligence was not the limit of its failure where national security was concerned.

Recognizing opportunity in these failures, Mashbir established an engineering sales office in Washington. He contacted the various departments responsible for military readiness, determined what they required, and established relationships with reputable manufacturers that could provide or even develop the products. Mashbir's plan ultimately bore fruit during World War II as "no less than fifty major developments were put into war use." All of them had "come over my desk and were produced either by the companies which I represented or those which I later owned." Mashbir argued that this broader project saved the United States millions of dollars during the Second World War, since it enabled the government to avoid more costly wartime procurement and research-and-development programs. Mashbir also benefitted personally and professionally from these programs, although he claimed that he did it predominantly to prepare the United States for a war that he believed was inevitable, and to enable the M-Plan.<sup>401</sup>

Mashbir's engineering and sales company grew enough that eventually he established a corporation and hired several additional engineers. He maintained that he charged conservative fees and refused to lobby U.S. officials on behalf of his projects. Furthermore, he argued that his efforts to improve U.S. military technical standards and procurement benefitted the United States considerably. For example, Mashbir created a

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<sup>400</sup> Ibid.

<sup>401</sup> Ibid, 173.

new method for laying concrete, proportioning concrete by weight, rather than by volume. He convinced the Chief Designing Engineer of the Department of Interior and the chief of the Cement and Concrete Materials Section of the efficacy of his system.

The Toledo Scale Company constructed the first model based on the design and Mashbir demonstrated it to key individuals empowered to approve the new design. Unfortunately, as Mashbir observed, the invention was not used in constructing the Hoover Dam, but it was used in the Thomas W. Koon Dam, built to supply water to Cumberland, Maryland. Mashbir ultimately formed the Scientific Concrete Service Corporation and the new method was employed increasingly, including in the construction of the Pentagon in Arlington, Virginia; the Dodge automobile plant in Chicago, Illinois, at the time the world's largest factory; and the Saugatuck Dam, in Connecticut. Mashbir believed that these projects rendered the United States better prepared for a war with Japan, permitted him to promote U.S. national security interests, and could enable him eventually to finance the M-Plan.<sup>402</sup>

### *Collaborating With Admiral King*

During the 1930s, the U.S. government reduced spending on scientific research in a manner corresponding to broader public sector spending restrictions. According to Mashbir, this caused “a drastic curtailment of aeronautical radio research.” When a U.S. National Bureau of Standards official alerted Mashbir that the U.S. government was about to abandon an important aeronautical radio project and asked Mashbir to find a way

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<sup>402</sup> Ibid, 179-81.

to prevent it from happening, Mashbir obliged.<sup>403</sup> The official asked Mashbir specifically to investigate whether one of the companies with which he was affiliated would employ the project's young radio engineers who, for more than five years, had been developing an important aeronautical radio device. The engineers were about to suffer a 40% pay reduction that ultimately would doom the project.

Mashbir initially told the official that, due to the country's considerable economic problems, probably no company would employ the radio engineers. But when the official responded that the engineers had received offers to continue their work in Great Britain, France, Switzerland, and Japan, with Germany and Japan ultimately the most likely beneficiaries, Mashbir became convinced that he must intervene.

The War Department initially rebuffed Mashbir, but he secured an introduction to Rear Admiral Ernest J. King, then director of the Bureau of Aeronautics. King asked Mashbir a number of questions concerning the device, many of which Mashbir could not address. Then, he asked Mashbir to arrange for the engineers to meet with King's subordinates. Mashbir set up the meeting and the project impressed its audience.

King was determined to acquire the aeronautical radio device project so that the United States would retain the results but, consistent with the U.S. Navy rule against hiring civilians, he requested that Mashbir establish a corporation that could employ the young scientists via an experimental contract. Mashbir agreed and established the Washington Institute of Technology.<sup>404</sup>

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<sup>403</sup> The U.S. National Bureau of Standards was replaced by the U.S. National Institute of Standards and Technology in 1988.

<sup>404</sup> According to the U.S. Patent and Trademark Office, The Washington Institute of Technology applied for a patent for the "Air Track" on November 14, 1936. Mashbir

Mashbir designed the Washington Institute of Technology so that it appeared to be an educational institution, but “its real purpose was the secret experimental development of electronic aids to aerial navigation, which we carried on for four years with Doctor Frank Gregg Kear and Gomer L. Davies as Co-Chief Engineers.”<sup>405</sup> The Washington Institute of Technology established a small laboratory in College Park, Maryland, protected by Navy security guards wearing civilian clothing. There, engineers devised “a practical and usable instrument landing system for aircraft” called the “Department of Commerce Instrument Landing System.”<sup>406</sup>

According to Mashbir, the Washington Institute of Technology ultimately hosted a number of other secret technologic projects that King deemed important to U.S. national security. King, according to Mashbir, was far-sighted in promoting “a research

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is listed as the Washington Institute of Technology, Inc.’s President in the patent record, which has been digitized and is available online from the U.S. Patent and Trademark Office, 18, accessed July 9, 2017, [https://archive.org/stream/TheHistoryAndDevelopmentOfTheWashingtonInstituteOfTechnology/MarzolfJoseph-univarch-014542\\_djvu.txt](https://tsdrapi.uspto.gov/ts/cd/casedocs/bundle.pdf?rn=349772,349798,349808,349846,349880,349887,349904,349928,350059,350113,350117,350122,350152,350183,350224,350325,350329,350660,350725,350729,350768,350769,350770,350771,350772&category=RC; Joseph Mazhoff, Jr., “Brief Background of the Washington Institute of Technology,” November 18, 1938, accessed July 25, 2017, <a href=).

<sup>405</sup> Mashbir, *I Was an American Spy*, 182-83. For an account of the work of Frank Gregg Kear on electronic aids to aerial navigation, see Frank Gregg Kear, “Maintaining the Directivity of Antenna Arrays,” *Proceedings of the Institute of Radio Engineers*, Volume 22 (July 1 934) Number 7, accessed August 15, 2019, <https://www.americanradiohistory.com/Archive-IRE/30s/IRE-1934-07.pdf>.

<sup>406</sup> Mashbir, *I Was an American Spy*, 184.

group of unquestionable loyalty” to which research projects that he assessed were unsuited for the Naval Research Laboratory or the private sector could be allocated.<sup>407</sup>

Mashbir generously praised King for his far-sighted approach to the development of such technologies in the early 1930s, assessing that King also believed that another significant war approached. Mashbir noted that King used the same quasi-private sector method to secure the services of engineer Carl L. Norden, who developed the Norden Bombsight, although Mashbir did not claim to have been involved in that project. According to Mashbir, the U.S. government invested approximately one billion dollars in the corporation “Carl L. Norden, Inc.”<sup>408</sup>

Not all such inventions, however, remained secret and under U.S. government protection. Recounting a dramatic anecdote in order to justify the projects that he supported, Mashbir recalled that he and Zacharias endeavored to support several new technologic development projects, including one developing a radio direction finder. They ultimately failed and, on December 7, 1941, a Japanese navigator used the device to direct the first wave of Japanese airplanes raiding U.S. Army and Navy targets in the Hawaiian Islands. Mashbir was adamant that such technologic achievements should remain available only to the United States and especially not to potential adversaries.<sup>409</sup>

According to Mitsuo Fuchida, the Japanese pilot who led the first air raid against Pearl Harbor, on realizing that the Japanese raiders would not be able to use “dead

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<sup>407</sup> Ibid, 183-84.

<sup>408</sup> Ibid. For additional insight into the Norden Bombsight, see Albert L. Pardini, *The Legendary Norden Bombsight* (Atglen, PA: Schiffer Publishing, Ltd., 1999).

<sup>409</sup> Mashbir, *I Was an American Spy*, 184-185.

reckoning navigation to measure [their] drift” in reaching Oahu, he relied on the radio direction finder. “While useful devices like radar were not yet installed, the General Commander’s plane alone was equipped with a radio direction finder called ‘*Kruesi*,’ imported from the US [and made by Fairchild Co., Ltd.],” Fuchida recounted. Before deploying the device, he “did not put much faith in this equipment.” When he realized that the Japanese planes were off course and in danger of missing Oahu entirely, however, he tried it. Fuchida tuned the equipment to “swinging jazz music” from “a Honolulu broadcasting station” and “measured the direction with the frame-type antenna.”<sup>410</sup> Fuchida advised the General Commander pilot to correct his aircraft’s trajectory by five degrees. The remaining Japanese planes followed suit and thenceforth relied on radio navigation to reach their targets.<sup>411</sup>

Mashbir lamented that many of these products ultimately reached Japan via U.S. companies, whose leaders, he argued, were motivated more by profit than principal. For example, he recounted that “a duplicate of the original Bureau of Standards radio blind-landing setup” was dispatched to Japan along with an engineer to install the product, despite strong opposition from Mashbir and others. Ultimately, however, “neither the manufacturer nor his engineer had sufficient technical skill or knowledge to make it work, nor could the Japanese get the hang of it.”<sup>412</sup>

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<sup>410</sup> Mitsuo Fuchida, *For That One Day: The Memoirs of Mitsuo Fuchida, the Commander of the Attack on Pearl Harbor* (Kamuela, HI: Experience, Inc., 2011), 90-91.

<sup>411</sup> Ibid.

<sup>412</sup> Mashbir, *I Was an American Spy*, 185.

Regarding U.S. exportation to Japan of devices that could provide advantage during a war, Mashbir claimed to have “one ready and invariable reply”: “I’ll be damned if I will sell anything to them that they can hurl back at us, as they will the Sixth Avenue E!” Mashbir viewed the issue in black-and-white terms. He asserted that “the action of such men has always been a little short of treason,” and that he “would always regard them as deliberate traitors in their hearts, although their transactions were legally permissible.” He contended, furthermore: “It is not as if they went about this cold business in ignorance of the possible results.”<sup>413</sup> Reflecting on these pre-World War II issues, Mashbir asserted:

One of the vital functions of the over-all Intelligence group which must someday emerge will be to determine the status of any particular development in any particular country at any particular time, and be able to recommend that exports to that country be interdicted if they are of a nature that might imperil our national defense. Frankly, this will require trained minds; trained in industrial and technical as well as in military Intelligence; trained also in strategic Intelligence; and loyal beyond price.<sup>414</sup>

In this case, aside from the dramatic manner in which he expressed it, Mashbir’s perspective was far-sighted and foreshadowed policies that the United States and its treaty allies promoted during the Cold War and continue to practice. The U.S. Department of State chairs interagency committees staffed by representatives from U.S. intelligence and law enforcement agencies. These committees focus on enforcing export-control restrictions predicated on U.S. and international non-proliferation laws and multi-lateral, multi-national treaties, concerning fields including nuclear weapons, ballistic

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<sup>413</sup> Ibid.

<sup>414</sup> Ibid, 185-86.

missile, and chemical and biological weapons technology, in order to limit the proliferation of products contributing to weapons of mass destruction.

After three and a half years in existence, the Washington Institute of Technology was in debt \$18,000. Regardless, it was directed to “manufacture a number of secret devices for the Government,” ultimately leaving it in the red \$86,000 by the time World War II ended. The Institute paid more than \$500,000 in income tax, however, during the same period, reflecting the revenue that it had produced during its lifespan.<sup>415</sup>

Among the devices that the Institute developed were a stainless steel high-tension ignition cable which, according to Mashbir, eventually was standard on every Allied airplane. The Department of the Navy kept this a secret for seven years and, probably unjustly, the U.S. government paid no royalties to the inventor. Additionally, with the assistance of the United States Rubber Company, the Washington Institute of Technology’s David L. Reilly developed expansion joints for warships, in addition to the gas mask tube that connected the canister with the mask, among a number of devices secretly produced from wire or rubber, rendering the production and servicing of gas masks simpler and cheaper. Mashbir claimed that through these projects production increased approximately 500% as manufacturing costs dropped by the same percentage.<sup>416</sup>

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<sup>415</sup> Ibid, 186.

<sup>416</sup> Ibid, 186-87. As President of the Washington Institute of Technology, Mashbir received the patent rights to the “Air Track,” application date November 24, 1936, 18, accessed August 15, 2019, <https://tsdrapi.uspto.gov/ts/cd/casedocs/bundle.pdf?rn=349772,349798,349808,349846,349880,349887,349904,349928,350059,350113,350117,350122,350152,350183,350224,350325,350329,350660,350725,350729,350768,350769,350770,350771,350772&category=RC>.

Additional inventions included “latex-covered assault wire, the W 130, the so-called Spiral 4, and control cables on ships.” When mica, normally acquired from Madagascar, became unobtainable, threatening the spark plug industry and by extension U.S. aviation, the Washington Institute of Technology collaborated with the Champion Spark Plug Company to develop an alternative ceramic spark plug. According to Mashbir, where 1,000 mica plugs had been produced by hand in a single day, now one million ceramic plugs could be produced within the same period and at a far lower cost.<sup>417</sup>

Early in the Pacific War, just before Mashbir departed for overseas duty, Zacharias took him to say farewell to Admiral King. During this encounter, King told Mashbir that although he had not been in the regular Army during their collaboration, which King recognized disappointed Mashbir, he had served his country better outside of the military than he could have from within. In reply, Mashbir claimed that he asked King to “establish a permanent Intelligence agency which will prevent our ever again being caught unprepared.” According to Mashbir, King pledged that he would try.<sup>418</sup>

Between 1926 and 1937, Mashbir endeavored to earn a living and raise enough capital to finance the M-Plan. During this period, he collaborated frequently with Zacharias, who served three ONI tours in Washington during the stretch. Mashbir recalled that he was happy to do it, since he was making only limited progress toward reinvigorating his U.S. Army career.

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<sup>417</sup> Mashbir, *I Was an American Spy*, 187.

<sup>418</sup> Ibid.

Mashbir remained in contact with important Japanese individuals with whom he had developed close working relationships during his assignment in Japan. When an opportunity arose, Mashbir leveraged these relationships to influence Japanese perspectives and even policies. On one occasion, the Japanese Military Attaché in Washington, General Washizu Shohei, informed Mashbir that Prince Tokugawa would be visiting the United States. Washizu suggested that Mashbir visit Tokugawa the following morning at the Mayflower Hotel, in Washington, in order to pay his respects.<sup>419</sup>

During their meeting the following morning, Tokugawa asked Mashbir whether Japan should formally propose that the United States relax immigration restrictions on Japanese. Mashbir recommended against it, observed that then President Herbert Hoover's political position was weak vis-à-vis Congress, which would oppose any administration proposal, regardless of its merit. Mashbir warned that U.S. lawmakers would view the proposal "as another chance to defeat Mr. Hoover."<sup>420</sup>

Later that day, Mashbir received a telephone call from Zacharias. Each, in turn, employed the greeting that the two men normally used with one another: *Moshi, Moshi*, which, in Japanese, means: "Speaking, Speaking." Mashbir related the details of his

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<sup>419</sup> In *I Was an American Spy*, Mashbir referred to the Japanese Military Attaché, during the late 1930s, as "General Washizu." In *Secret Missions*, Ellis Zacharias referred to the Japanese Military Attaché in 1931 as "Colonel Shohei Washizu" and described discussions concerning Japanese activities in and around Manchuria during a golf outing in 1931, in Washington. Zacharias, Mashbir, and Major James F. Moriarty, who was a U.S. Marine Corps intelligence officer, aviator, and Russian linguist, attended for the U.S. side, while Washizu and his two assistants, Lieutenant Colonel K. Teramoto, the Japanese air attaché, and Major Yutaka Hiroto, attended for the Japanese side. Washizu was a Colonel in 1931 and therefore could have attained the rank of General by the late 1930s. Zacharias, *Secret Missions*, 121-127.

<sup>420</sup> Mashbir, *I Was an American Spy*, 189-90.

conversation with Tokugawa. A week later, Zacharias called Mashbir again and read over the telephone to him an editorial from the Tokyo newspaper *Nichi Nichi*. The title was: “This Is Not the Time to Reopen the Immigration Question.” The editorial reproduced Mashbir’s warning to Tokugawa nearly verbatim.<sup>421</sup>

### *M-Plan Re-Visited*

Intelligence collection against Japan remained challenging in the mid-1930s and, in 1936, Mashbir and Zacharias decided to attempt again to convince Navy and War Department leaders to support the M-Plan. Accordingly, Zacharias broached the topic to his superior, Captain Walter L. Puleston, Director of Naval Intelligence, whom Mashbir evaluated positively.<sup>422</sup> Although Puleston supported the concept, implementing the M-Plan required adequate funding and other support. Mashbir assessed that it also required revision in light of “international changes in Japan’s political alignments” since 1921.<sup>423</sup> Toward the first end, Zacharias arranged a lunch with Captain Puleston and Admiral King, hoping to secure King’s support for the M-Plan. The meeting, however, failed when, perhaps responsibly, neither would discuss sensitive topics.<sup>424</sup>

Puleston offered to pay Mashbir’s travel expenses for the trip to Japan intended to reinvigorate his business contacts in order to pursue the M-Plan. Mashbir, however,

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<sup>421</sup> Ibid, 190.

<sup>422</sup> Ibid, 193.

<sup>423</sup> Ibid.

<sup>424</sup> Ibid, 194-95.

remained steadfast that no U.S. government funding could be associated with the operation. Then, Mashbir's fortune improved. On November 27, 1936, a Pennsylvania Central Airlines DC3 airplane flew from Washington to Pittsburg, taking off, flying, and landing in "zero-zero conditions." The DC3 employed the blind-landing system that one of Mashbir's research-and-development corporations had created. The device's success provided Mashbir the capital that he needed to fund the trip to Japan, a "minimum royalty of many thousands of dollars a year to support the [M-Plan]."<sup>425</sup>

On February 21, 1937, Mashbir departed for Japan, accompanied by his wife and son, "with high hopes that, although I felt the hour was close, there might still possibly be time to get the plan into operation before the war started."<sup>426</sup> Mashbir, Zacharias, and Puleston planned Mashbir's strategy for the trip. They determined that Mashbir should "avoid the [U.S.] Embassy crowd, particularly the military and naval attachés, as much as possible."<sup>427</sup> Mashbir also traveled to Japan aboard a Japanese ship, in order to refresh his Japanese and ensure that his return to Japan would become better known there.

Mashbir took other measures to lead the Japanese authorities to infer that his travel to Japan was not for nefarious purposes. He discussed the trip with Colonel Theodore Johnson, a classmate then on the Army General Staff. He convinced Johnson and Moriarty to write him letters in which they observed that they had heard that he was returning to Japan and recalled how interested Mashbir "had always been in promoting

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<sup>425</sup> Ibid, 194.

<sup>426</sup> Ibid, 195.

<sup>427</sup> Ibid.

the cause of peace, and continuing at length about equally disarming topics.” Mashbir handled the letters in a manner that made them appear older and more worn. He dog-eared corners, treated the pages chemically, and finally planted them in different places in his luggage. Later, Mashbir determined that his baggage had been examined, the letters opened, and assumed that Japanese authorities read them and copied them photostatically.<sup>428</sup> Importantly, Mashbir proved unwilling or unable not to associate with U.S. military officials, which could have reminded Japanese authorities of his U.S. Army background, rendering them more suspicious. Furthermore, Japanese security officials may have been aware that Mashbir had been serving as a U.S. Army reserve officer off and on since departing Japan in the mid-1920s.

General Matsumoto greeted Mashbir upon his arrival in Yokohama, Japan. Matsumoto explained that he had left his division, which was then conducting maneuvers at Sendai, in order to greet Mashbir. Lodging was scarce at the time, so Matsumoto arranged through a contact for Mashbir to secure space at the Grand Hotel of Yokohama. Then the Matsumotos and the Mashbirs dined together.

The following morning, Matsumoto accompanied the Mashbirs to Tokyo’s Imperial Hotel, where Mashbir “discovered a large poster announcing that the guests of honor for the Pan-Pacific luncheon, to be held the following day, would be Doctor Nils Bohr, the noted physicist, and Mr. and Mrs. Sidney F. Mashbir.”<sup>429</sup> As Mashbir viewed the poster, T. Inumaru, an old friend, greeted him and asked where he had been the

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<sup>428</sup> Ibid.

<sup>429</sup> Ibid, 196.

previous evening, since the Mashbirs had been designated good lodging in the hotel. According to Mashbir, the next time that Inumaru greeted him was during the afternoon of August 13, 1945, when U.S. General Douglas MacArthur sent Mashbir to Tokyo just prior to the August 15 Japanese surrender.<sup>430</sup>

Mashbir had not seen Tokyo since it was destroyed in the fall of 1923 by the earthquake and fire. He was “amazed at the extremely modern buildings and broad streets” that had been built since his departure in the early 1920s. Nearly all of Mashbir’s Japanese civilian and military friends called on him, although he noted that General Teramoto was a conspicuous exception.<sup>431</sup> Mashbir assessed that virtually all of his former social and professional relationships in Japan remained intact.

Although he claimed to be vacationing in Japan following a lucrative business success, Mashbir’s premier objective in Tokyo was to establish a business connection that would enable him to visit Japan at least once or twice each year. He enlisted the assistance of his “oldest friend and closest companion” during his earlier time in Japan, Robert Faulkner Moss who, by 1937, had become the head of the Republic Steel Company in Japan. Mashbir discussed with Moss the possibility of establishing what Mashbir proposed to call the Inter-Continental Service Corporation. Mashbir intended for the company to become a resource for other U.S. companies seeking patents in Japan. He believed that it would provide a reason for him to visit the country periodically.

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<sup>430</sup> Ibid.

<sup>431</sup> The General Teramoto, whom Mashbir referenced, may be identifiable with Teramoto Kumaichi who, as a Lieutenant General, committed suicide via *seppuku* on August 15, 1945, the date of the Japanese surrender to the United States.

Moss proved a willing and able potential partner, although Mashbir did not disclose to him his true objective.<sup>432</sup> Together, Mashbir claimed, they secured legal counsel focused on patent law in the fields of physics, chemistry, and mechanics, and secured office space. Mashbir intended to represent U.S. firms with patent infringement claims and secured power of attorney from one major company authorizing him to represent its interests in Japan.<sup>433</sup> Mashbir and Moss also intended to introduce more advanced concrete production methods to Japan. Mashbir assessed that developing interests in these fields also would enable him to travel to Japan regularly.<sup>434</sup> The process of reacquainting himself with Japan's commercial and industrial environment and familiarizing himself with changes in Japan's international alignments since he left Japan in 1923 took three months, at which point Mashbir and his family returned to the United States via the Hawaiian Islands. Notably, however, Mashbir endured significant attention from MID and law enforcement officials in Honolulu, who were suspicious of his activities related to Japan and who, of course, had no insight into the M-Plan.

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<sup>432</sup> Current U.S. law prohibits U.S. intelligence agencies or professionals from employing the services of U.S. persons or companies without informing those persons or companies of the individual's U.S. intelligence affiliation.

<sup>433</sup> Mashbir, *I Was an American Spy*, 197-198.

<sup>434</sup> Ibid, 198. Further information on the Washington Institute of Technology is available in a United States Tax Court decision finding against the Institute, titled "Washington Institute of Technology, Inc. v. Commissioner, United States Tax Court," accessed July 25, 2017, [http://www.leagle.com/decision/19512710etcm17\\_123/WASHINGTON%20INSTITUTE%20OF%20TECHNOLOGY,%20INC.%20v.%20COMMISSIONER](http://www.leagle.com/decision/19512710etcm17_123/WASHINGTON%20INSTITUTE%20OF%20TECHNOLOGY,%20INC.%20v.%20COMMISSIONER). The decision details Mashbir's involvement in the concrete industry from 1928 through World War II. Furthermore, it tends to corroborate Mashbir's account of his connection to the concrete industry and Mashbir's invention of "a method of proportioning concrete aggregate by weight."

Soon after their return to the U.S. mainland, infantile paralysis afflicted Mashbir's son, Don, recovery from which required several weeks. Unfortunately, during this period, Commander A. H. McCollum replaced Zacharias in his position at ONI in Washington and Admiral Ralston S. Holmes succeeded Captain Puleston as ONI Director. Mashbir lamented the tendency in both MID and ONI for personnel to turn over so abruptly that continuity virtually always suffered.<sup>435</sup>

Despite Zacharias having endorsed McCollum as a strong successor, McCollum knew nothing about the M-Plan and was unaware of the purpose of Mashbir's trip to Japan. Furthermore, the scrutiny that Mashbir endured from Army G-2 officials in Honolulu became clearer. Although virtually no one in MID had been aware of the M-Plan, MID knew that Mashbir had been involved in a number of business ventures during his trip to Japan. Consequently, FBI agents scrutinized Mashbir and his luggage over several days on his arrival in Hawaii.<sup>436</sup> Ultimately, McCollum's G-2 counterpart informed him of what had transpired, albeit only from MID's perspective. Mashbir was unable to reverse the damage that the negative report caused with McCollum and ONI and with the U.S. Army. The Army terminated his military commission and Mashbir failed to secure reinstatement for the duration of the interwar period.

After the Pacific War began and he had returned to active duty as Chief of the Intelligence Branch of the Army Signal Corps, Mashbir claimed that he was examining files and happened to encounter his own. "I would have been less than human had I not

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<sup>435</sup> Mashbir, *I Was an American Spy*, 201.

<sup>436</sup> *Ibid*, 200.

read my own file, which was almost six inches thick,” he confessed, and recalled: “Starting with an utterly fantastic and scurrilously false report from the agent in Honolulu, it showed that my phone had been tapped, my mail had been covered, and I had been completely under suspicion!”<sup>437</sup> Mashbir immediately demanded a court of inquiry. The Chief Signal Officer, however, told Mashbir that he would not receive one until after the war. He argued, furthermore, that the MID report from Honolulu was virtually meaningless, considering Mashbir’s position as Chief of the Signal Corps Military Intelligence Branch.<sup>438</sup>

In reviewing his personnel file, Mashbir discovered that none of the letters that Zacharias had written to correct the record and clear Mashbir’s name had been included.<sup>439</sup> Zacharias finally managed to correct the record regarding Mashbir and the M-Plan with MID when he became Assistant Director of Naval Intelligence in 1941. Then, Zacharias met with Colonel Rufus Bratton of G-2 and explained to Bratton what had transpired regarding the M-Plan and Mashbir’s 1936-37 trip to Japan, whereupon Bratton ensured that the negative report from G-2 in Honolulu was clarified in writing.<sup>440</sup>

Another issue that Mashbir believed had obstructed his effort to clear his name and implement the M-Plan concerned an episode involving his old MID colleague from Tokyo, Edward Witsell who, in 1936, was the G-2 officer in the Panama Canal Zone.

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<sup>437</sup> Ibid, 202.

<sup>438</sup> Ibid.

<sup>439</sup> Ibid, 203.

<sup>440</sup> Ibid, 203-04.

Witsell contacted Mashbir early in 1936 and expressed his frustration over his knowledge of the operation of a significant Japanese intelligence network in the Panama Canal Zone, as well as his suspicion that the Japanese intended to conduct sabotage in the Zone “on M-Day or before.” Witsell indicated that he had repeatedly requested that G-2 provide a particular apparatus that he had learned about from Mashbir, which had been employed during the Great War. G-2 had ignored the requests. Consequently, Witsell, determined in spite of the G-2’s failure to respond, decided to pursue a solution outside of official channels. Witsell counted on Mashbir to deliver what he needed.

Witsell informed Mashbir that he was sending him a replica of the telephone in the Japanese Consulate General. He requested that Mashbir outfit the replica with microphones that could record conversations conducted via the telephone as well as in the room in which the telephone was located. Mashbir received the telephone and immediately contacted the manufacturer to acquire an identical model. But Mashbir experienced significant delay in securing the telephone and, eventually, the FBI questioned Mashbir concerning his effort to acquire the telephone. He showed the FBI special agents the letter from Witsell, but the letter only increased their suspicion of Mashbir. In the end, the FBI placed a document concerning the issue in his file. Mashbir discovered the letter in 1942 while reviewing his file.<sup>441</sup>

Army CI officials interviewed McCollum which, ultimately, also undermined Mashbir’s capacity to execute the M-Plan or, for that matter, to perform other intelligence duties. McCollum indicated that he did not believe that Mashbir had been, or was,

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<sup>441</sup> Ibid, 204.

disloyal; but he also stated that the only connection that Mashbir had with ONI concerned a voluntary espionage network, which ONI could not countenance. The McCollum memorandum ended, once and for all, Mashbir's effort to implement the M-Plan. He no longer was permitted access to the ONI director and never had the opportunity to report the results of his 1936-1937 Tokyo trip.

Mashbir ultimately attributed his failure to execute the M-Plan to his refusal to discuss details regarding the Tokyo trip with G-2 officials in Hawaii, concluding: "I was forced, at last, to recognize the dismal truth: that nearly twenty years of hoping and planning had been a wasted effort. I was absolutely stymied." For his failure, he blamed "the stupidity of the very officers of the Army and Navy who should have been most eager to cooperate." He claimed, therefore, that "our chance for having a real warning of an impending attack was wiped out, and our hope of getting communications out of Japan and into Japan during wartime had forever vanished."<sup>442</sup> Mashbir, of course, assumed that the M-Plan would have worked, which cannot be proved. Furthermore, the M-Plan ultimately failed. He also did not acknowledge that he had endeavored to undertake a complicated intelligence mission of which neither MID nor ONI was effectively even aware, outside of a handful of individuals. In the end, although he accomplished some preparation for it, Mashbir utterly failed to launch the M-Plan.

### *Was It Ever Really Possible?*

As an intelligence officer, Sidney Mashbir was ahead of his time in some respects. By the time he deployed to Japan as a language student in August 1920, his

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<sup>442</sup> Ibid, 204-206.

instincts already had developed to a degree more advanced than many who benefitted from superior training. Perhaps that Mashbir became so adept an intelligence officer before the creation of the post-World War II national security system, before intelligence finally became a dedicated profession, should be surprising.

Mashbir's penchant to set ambitious goals, combined with poor and aloof leadership among policy makers, military leaders, and intelligence officials, especially within MID and ONI, repeatedly condemned him to disappointment. Ultimately, the M-Plan sidelined his military intelligence career for most of the period between the world wars and, regardless of whether he should have staked so much personally and professionally on the M-Plan, he undertook the operation after being tasked to do so by both MID and ONI, the two premier U.S. intelligence services. At the very least, Mashbir proved adept at developing close, working relationships with intelligence colleagues and Japanese military and intelligence officials, and he demonstrated that he possessed the instincts to succeed undertaking difficult intelligence operations.

In assessing how and why the M-Plan failed, Zacharias provided a fairly reasonable explanation, arguing: "Caught in the cross fire of contrary views, our M-Plan went the way of all unorthodox proposals advanced within a bureaucracy." Although Watson had forwarded the plan to Washington for review by a limited number of ONI officials, he had departed Tokyo shortly thereafter for a new assignment and was unable to support the M-Plan from that new position. Zacharias explained:

When the plan thus lost its greatest advocate, it also lost its effectiveness, since from then on it became merely one of the innumerable memoranda in all government offices. The rest of us were too young and too junior in rank to support the plan with the effectiveness of a senior proponent.

Zacharias found the M-Plan in the files of ONI in 1936 and, as recorded above, along with Mashbir and ONI director Puleston, tried again to promote it. He concluded, however, that “inability to visualize the vital necessity for such a concrete intelligence plan by those in a position to initiate it completed its final doom.” Reflecting after World War II on the M-Plan’s failure, Zacharias lamented that his “regret increases a hundredfold that it was permitted to be pigeonholed between Tokyo and Washington.”<sup>443</sup>

The M-Plan was complicated. Perhaps, even had Mashbir succeeded in implementing it, it ultimately would have failed. Japanese counterintelligence probably continued to view Mashbir with suspicion even after he had resigned from the U.S. Army and, when he returned to Japan in 1937, he openly socialized with U.S. military officials, highlighting his enduring connection to the U.S. government. Furthermore, in the 1930s, Japan was a police state. As Japan’s conflicts in Asia intensified, the U.S. government imposed crippling economic sanctions, and the Pacific War approached, the Japanese government became increasingly repressive. Implementing the M-Plan, which would have required that Mashbir gain significant access to Japan’s commercial and industrial sectors, may have become decreasingly realistic.

The M-Plan’s failure, however, was not an intelligence failure. It represented the first serious effort by U.S. intelligence professionals to pursue a long-term, strategic intelligence operation against a serious and sophisticated adversary. Ultimately, intelligence services and professionals are charged with anticipating security challenges and enabling policy makers to address those challenges. Mashbir pursued the M-Plan toward this end, anticipating the condition that ultimately existed throughout the Pacific

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<sup>443</sup> Zacharias, *Secret Missions*, 55.

War. Governments create and empower the intelligence services that they require and, via the intelligence requirements of their leaders, theoretically crafted in order to support national security priorities, direct and enable those intelligence services to acquire non-public information or influence foreign entities and events. Governments even direct bureaucracies to provide cover for intelligence professionals and their activities abroad. Furthermore, intelligence services themselves are responsible for educating and advising their consumers regarding threats to national security and practicable solutions for securing and protecting national interests.

Mashbir, Zacharias, and the other U.S. intelligence professionals evidently failed to understand the implications for the M-Plan of the shortcomings of their own services and the absence of any bureaucracy that could have and, perhaps, should have, supported Mashbir's pursuit of the M-Plan. They were poorly served by their superiors in Washington, who ultimately had inspired the operation, but then had failed to support it. But, in the end, the intelligence services were fundamentally unprepared to support the M-Plan.

## Conclusion

*“After World War I, and before World War II, there was virtually no foreign Intelligence set up worthy of the name in our Army and Navy, and very little security, if any. Congress had managed to bring this about, over the protests of both services, by the simple expedient of cutting off funds, and yet this action by Congress was a true reflection of the will of the people.” – Sidney Forrester Mashbir*

Although the cause of the disaster that the United States experienced in December 1941, represented by Japan’s destruction of most of the U.S. Pacific Fleet at Pearl Harbor, often has been characterized as an intelligence failure, the origin of the U.S. catastrophe actually was the inability or unwillingness of U.S. civilian and military leaders to understand, support, and use intelligence appropriately and effectively. In the end, the mistakes that permitted those significant military setbacks in the Hawaiian Islands and several other locations in the Asia-Pacific region occurred predominantly in Washington. There, U.S. leaders responsible for formulating and conducting the country’s foreign policy, as well as for creating, supporting, enabling, and directing the diplomatic, intelligence, and military agencies and bureaucracies responsible for executing that foreign policy, failed to use the information at their disposal in order to anticipate Japan’s decision to go to war in order to secure its imperial interests.

In addition to the signals intelligence, human intelligence, and counterintelligence success against Japan discussed in this dissertation, as the Pacific War approached, U.S. leaders failed to leverage the government’s most intimate knowledge of Japan, the Japanese government, and the Japanese people. Much of this expertise resided among the intelligence professionals on whose experiences and exploits this dissertation focused, such as Sidney Mashbir and Ellis Zacharias. These intelligence professionals developed

close, working relationships with their Japanese Army, Navy and civilian counterparts. They understood the cultural inclinations and idiosyncrasies of their Japanese interlocutors, the ambitions and fears that drove Japan's interaction with the United States and other Western states and even Japan's regional neighbors. Because the U.S. military, especially the Navy, considered Japan the most likely country against which the United States would fight its next major war, intelligence services discussed throughout this dissertation, such as the Cipher Bureau, SIS, OP-20-G, MID, and ONI, dedicated considerable resources toward Japan, at least to the extent that U.S. leaders made those resources available. Lamentably, the intelligence services often were plagued by inadequate budgets, inconsistent leadership, and the failure of U.S. leaders to understand and exploit intelligence resources appropriately in crafting foreign policy. Exemplifying the government's inadequate support to intelligence, ONI employed as many as 300 officers during the Great War; by early 1924, its officers totaled just 40.<sup>444</sup>

Although the U.S. government began enabling intelligence services to expand in 1941, the change began too late to enable appreciable improvements before the Pacific War began.<sup>445</sup> Meanwhile, the growth of Japan's military capabilities matched the development of its industrial capacity between throughout the interwar period, but especially between 1936 and 1941. During this five-year span, the Japanese Army nearly

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<sup>444</sup> Douglass L. Wheeler, Association of Former Intelligence Officers, *The Intelligencer: Journal of U.S. Intelligence Studies*, Vol. 20, No. 1, Spring/Summer 2013, accessed October 29, 2019, [https://www.afio.com/publications/WHEELER%20Douglas%20Intelligence%20Between%20the%20War%201919%201939%20from%20AFIO%20INTEL\\_SPRGSUM2013\\_Vo120\\_No1\\_FINAL.pdf](https://www.afio.com/publications/WHEELER%20Douglas%20Intelligence%20Between%20the%20War%201919%201939%20from%20AFIO%20INTEL_SPRGSUM2013_Vo120_No1_FINAL.pdf).

<sup>445</sup> Thomas G. Mahnken, *Uncovering Ways of War: U.S. Intelligence and Foreign Military Innovation, 1918-1941* (Ithaca, NY: Cornell University Press, 2008), 29-31.

doubled, its total divisions rising from 20 to 50, while its air force tripled from 50 to 150 squadrons. The war in China, furthermore, produced experienced soldiers and pilots and enabled the Japanese Army to test its aircraft, weapons, and tactics. The Japanese Navy also grew significantly in the late 1930s. By 1940, the Japanese Navy's combat tonnage totaled more than one million and it was stronger than the U.S. and British navies combined in the Asia-Pacific region.<sup>446</sup>

Furthermore, even when U.S. intelligence services performed reasonably well in collecting and analyzing intelligence concerning Japan's military capabilities, they did not necessarily leverage the broader intelligence community effectively.<sup>447</sup> In the end, Japan expanded and improved its Army and Navy in a manner consistent with its imperial objectives. In contrast, the United States failed to appreciate Japan's military expansion or anticipate what it would do with it.

Even as U.S. leaders failed to prepare the United States for a potential war with Japan, regardless of how undesirable that war would be, U.S. leaders made conflict more likely. During the 1930s, and especially beginning in 1937, when Japan invaded China, the United States applied increasingly tough commercial and economic pressure on Japan in an effort to convince it to end its military adventure in China and moderate its imperial objectives more broadly in the Asia-Pacific region.

Because Japan had invested so much commercially, economically, and militarily in the broader region, however, the Japanese government determined that it could not

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<sup>446</sup> Kent Roberts Greenfield, *Command Decisions*: (Washington, D.C.: Government Printing Office, 1987), 101.

<sup>447</sup> Mahnken, *Uncovering Ways of War*, 42-85.

adjust its policies without abandoning vital Japanese national interests. U.S. intelligence professionals, who had made careers of focusing on Japan, realized this and endeavored both to reduce Japanese suspicion of U.S. intentions vis-à-vis Japan through their Japanese interlocutors and to warn U.S. leadership of the Japanese government's increasingly anti-U.S. perspective and the corresponding increasing threat.

U.S. leaders either failed to view the impasse with Japan from Japan's perspective. They also did not appropriately consider the domestic implications for Japanese leaders were they to accede to U.S. demands and significantly restrain their country's commercial, economic, and military endeavors in the Asia-Pacific region. For their part, while Japanese leaders largely preferred to avoid a conflict with the United States, they refused to concede to U.S. demands. In the end, rather than convincing Japan to make greater concessions in order to secure a diplomatic solution to the impasse, U.S. commercial and economic sanctions rendered a diplomatic solution decreasingly likely. U.S. demands were too great for Japanese leaders to accept, while U.S. leaders refused to countenance the new status quo that Japan was imposing in the Asia-Pacific region.

Over the course of five chapters, this dissertation detailed and assessed intelligence operations conducted by dedicated U.S. intelligence professionals, who possessed an advanced understanding of Japan, the Japanese, and the elements driving Japanese civilian and military leaders. Importantly, although these intelligence professionals represented the intelligence services that employed them, they performed exceptionally, standing out among their peers and within the agencies in which they served. They acutely understood the implications of Japanese activities and ambitions, tactical and strategic, and the perspectives and ambitions ranging among Japanese leftist,

moderate, and rightist political perspectives, and the leadership of Japan's Army and Navy. These U.S. intelligence professionals approached their work, and particularly Japan, intellectually, as well as via sound intelligence tradecraft and instincts.

Ultimately, however, U.S. leaders did not benefit from the expertise that these U.S. intelligence officers possessed or from their intelligence products.

As Chapter One illustrated, within two years of its creation, Herbert Yardley's Cipher Bureau was solving Japanese diplomatic codes and ciphers and producing sensitive, timely, and impactful intelligence directly in support of premier U.S. foreign policy objectives. U.S. leaders had determined to stop Japanese naval expansion in the Asia-Pacific region through diplomacy and the Cipher Bureau's intelligence enabled U.S. diplomats to extract the maximum possible concessions from Japan during the 1921-22 Washington Naval Disarmament Conference. Meanwhile, as described in Chapter Four, over the course of weeks of intensive discussions, U.S. naval intelligence officers in Japan acquired important insight from their Japanese interlocutors into Japan's strategic considerations regarding the negotiations in Washington. They learned how far U.S. diplomats could press their Japanese counterparts. Ultimately, intelligence professionals in two different services obtained mutually corroborative SIGINT and HUMINT that enabled U.S. negotiators to secure strategic foreign policy objectives.

In the end, exemplifying the inconsistency and ultimately the inadequacy of U.S. government support even to intelligence services that had demonstrated great success, within two years of the end of the Washington Conference, the Cipher Bureau suffered a debilitating budget reduction, forcing Yardley to shed key staff. Then, in 1930, the Department of State, the U.S. government consumer that the Cipher Bureau had

supported more than any other in 1921-22, abruptly ceased funding Yardley's SIGINT service entirely, forcing it to close.

As Chapter Two described, however, despite the Cipher Bureau's dissolution, U.S. military intelligence leaders continued to believe that the War Department must continue pursuing SIGINT. Thus, in 1930, three years after the U.S. Army formally created it, William F. Friedman, became director of the Signal Intelligence Service. Friedman hired and personally trained his first Junior Cryptanalysts, beginning with Frank B. Rowlett. Then, under Friedman's direction, Rowlett, and a handful of other dedicated SIS cryptanalysts, the service expanded and flourished throughout the decade.

Friedman informed his protégés that Japan presented the greatest foreign strategic challenge to the United States and that, therefore, Japan would be SIS's foremost focus. Rowlett and his colleagues began with the products that the Cipher Bureau had left behind and, during the 1930s and early 1940s, produced a series of tremendous successes against Japanese diplomatic codes and ciphers, ultimately surpassing Yardley and the Cipher Bureau's accomplishments.

Rowlett's Japanese diplomatic section engineered these breakthroughs, ultimately collaborating with OP-20-G and ONI to facilitate unprecedented inter-agency collaboration and deliver compelling intelligence products to high-level U.S. consumers, including Secretary of War Henry L. Stimson, Secretary of State Cordell Hull, and President Franklin D. Roosevelt.

President Roosevelt and high-ranking officials in the U.S. Department of War, Department of the Navy, and Department of State began to pay more serious attention to intelligence as a consequence of SIS's remarkable successes in the late 1930s and early

1940s. SIS's far-sighted collaboration with its Navy counterpart, OP-20-G, in addition to OP-20-G's parent organization, ONI, contributed considerably to this progress, reducing the previous inter-agency barriers between the armed services. Furthermore, MID, SIS, ONI, and OP-20-G's successful marketing of the intelligence breakthroughs against RED and PURPLE led to an unprecedented professionalization of intelligence production, and secure handling and dissemination, as well as a growing appetite among senior civilian and military intelligence consumers for the intelligence products predicated on RED and PURPLE. Intelligence consumers began to understand and demand good intelligence concerning Japan and, consequently, intelligence budgets began finally to grow. The Pacific War, however, arrived too soon for this evolution to progress enough to prevent or even limit Japan's military successes against the United States in December 1941.

Notably, in a different context, some historians have endeavored to undercut the compelling intelligence that SIS produced especially in the late 1930s and early 1940s. For example, Peter Irons, in *Justice At War: The Story of the Japanese American Internment Cases* (1983), argued that "none of the 'Magic' cables showed that Japanese Americans had provided intelligence to Tokyo," notwithstanding that, as demonstrated in Chapter Three, PURPLE intercepts described in detail how Japanese diplomatic establishments in the United States employed *Issei* and *Nisei* in order to collect the intelligence that Tokyo tasked them to acquire.<sup>448</sup> Irons judged MAGIC information narrowly in order to prove a particular point. In so doing, he applied standards and conditions fundamentally inappropriate for assessing intelligence information, and

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<sup>448</sup> Peter H. Irons, *Justice At War: The Story of the Japanese American Internment Cases* (Berkeley, CA: University of California Press, 1993), 374-75.

erroneously evaluated that intelligence in a legalistic context. Irons failed to appreciate that MAGIC was intelligence information, rather than, for instance, evidence acquired during a law enforcement investigation that must satisfy particular legal standards in order to support a criminal conviction. MAGIC intelligence, by its very nature, was unsuited to satisfying the legal standard that Irons expected of it. He was at best misguided in using the content from PURPLE intercepts in order to prove, disprove, or otherwise settle a legal issue, especially one that he had so narrowly focused. Greg Robinson, in *The Tragedy of Democracy: Japanese Confinement in North America* (2009), similarly assessed MAGIC intelligence inappropriately, in a narrow legal context, alleging shortcomings fundamentally inapplicable to intelligence.<sup>449</sup>

As demonstrated in Chapter Three, in dozens of PURPLE cables that SIS and OP-20-G deciphered in 1941, Japanese officials at diplomatic sites throughout North, Central, and South America, and the Hawaiian Islands, dispatched to Tokyo intelligence collected via ethnic Japanese and non-Japanese agents on Japan's behalf. Although the intercepts periodically identified particular *Issei* and *Nisei* acquiring intelligence for Japan, usually the cables only included the objective intelligence that the collectors had acquired, with only occasional, limited information concerning sources and methods. For the purpose of source protection, a paramount concern in intelligence work, this not only was normal, but reflected responsible tradecraft. In the end, intelligence is fundamentally ill-suited to employment in legal contexts principally because the elements normally required to satisfy a legal standard tends to expose sources and methods, thrusting each into the

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<sup>449</sup> Greg Robinson, *The Tragedy of Democracy: Japanese Confinement in North America* (New York: Columbia University Press, 2009), 42-47.

public sphere. Furthermore, in the case of the intelligence gleaned from PURPLE intercepts, U.S. leaders only had to learn that Japan was employing *Issei*, *Nisei*, and others in and concerning the United States, and observe the intelligence that they submitted to Tokyo, in order to factor the intelligence into their policy prescriptions.

Ultimately, MAGIC intelligence provided U.S. leaders tremendous insight into Japanese activities, plans, and intentions. It also enabled intelligence consumers to infer Japanese strategic objectives. Arguably, by 1941, MAGIC constituted the most sensitive intelligence that the U.S. government possessed. Although law enforcement agencies such as the FBI used it principally as lead information in order to fuel criminal and counterintelligence investigations, neither MID nor ONI, nor senior U.S. leaders privy to MAGIC's PURPLE origin, were prepared to permit its use to prosecute individuals suspected of committing espionage against the United States. Those seeking to protect MAGIC viewed disrupting Japanese subversive activities targeting U.S. security interests to be satisfactory where the risk-versus-gain analysis was concerned. Using MAGIC to prosecute *Issei* or *Nisei* suspected of espionage would have jeopardized future collection.

Chapter Three focused on the confluence of SIGINT, HUMINT, and counterintelligence, particularly in 1940 and 1941, as Japan pursued diplomacy with the United States while also preparing to incapacitate the United States militarily. This chapter demonstrated the extent to which intelligence from different disciplines, including human and signals intelligence, could contribute to greater success in each discipline, as well as enable successful counterintelligence operations against an increasingly aggressive Japanese antagonist. But, even as U.S. intelligence professionals overcame bureaucratic impediments, poor leadership, and inter-agency rivalry in order to

deliver valuable information concerning Japanese intelligence activity targeting U.S. interests, their consumers failed to capitalize on the advantages that their efforts yielded.

Chapter Four concerned human intelligence broadly, examining the discipline principally through the experiences of ONI's Ellis M. Zacharias, MID's Sidney F. Mashbir, and a handful of their intelligence colleagues. Zacharias and Mashbir built their careers as intelligence officers through their relentless pursuit of intelligence concerning Japanese military capabilities, plans, and intentions; adroit counterintelligence work thwarting Japanese intelligence activity; and regular efforts to convince their Japanese counterparts that the United States did not constitute a threat to Japan. They served contemporaneously in Japan in the early 1920s and became intimately aware of the increasing threat that Japan posed to U.S. interests. Each viewed a war between the United States and Japan to be virtually inevitable and, perhaps for that reason, continued to focus on Japan for a quarter-century, through 1945.<sup>450</sup>

Finally, Chapter Five provided a detailed account of Mashbir's effort to launch what probably was the most audacious and complex U.S. commercial intelligence operation to that point in time, which Mashbir and Zacharias called the Mashbir Plan, or M-Plan. The chapter also described why and how the M-Plan ultimately failed. The Army and Navy officials who urged and perhaps even assigned Mashbir to create what ultimately became the M-Plan desired the means to acquire intelligence from within Japan during an anticipated war between the two countries. This intelligence requirement

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<sup>450</sup> Viewed from the U.S. perspective, Japan posed an ongoing and increasing threat to U.S. interests in the Asia Pacific region and beyond. Certainly, from Japan's point of view, the United States similarly posed an unrelenting and increasing threat to Japanese national interests.

and Mashbir's fifteen-year struggle to address it ultimately stemmed from two examples of forward-leaning strategic thinking. Unfortunately, however, Mashbir's War Department superior in Washington, D.C., who tasked Mashbir to explore the possibility of such a scheme as he prepared to depart for his assignment in Japan, and Zacharias's naval intelligence superior in Japan, who later asked Mashbir to draft such a plan, constituted just two examples of pragmatic, strategic thinking among U.S. military leaders. In the end, as Chapter Five recounted, Mashbir did not receive enough support from either MID or ONI to succeed. Furthermore, neither MID nor ONI possessed the experience, capacity, cohesiveness, or leadership to support such a novel concept.

Ultimately, Mashbir believed in the M-Plan enough to pursue it largely on his own, probably unwisely. Nevertheless, it was a testament to his dedication to his profession, and in the M-Plan's pursuit he endured a profound series of professional and personal failures. In the end, reflecting the inadequacy of U.S. intelligence and the failure of the government that was supposed to support, empower, direct, and oversee it, neither MID nor ONI could facilitate or at least avoid obstructing Mashbir.

The U.S. intelligence professionals, whose experiences, knowledge, successes, and failures this dissertation examined, including Herbert O. Yardley, William F. Friedman, Frank B. Rowlett, Sidney F. Mashbir, and Ellis M. Zacharias, in addition to intelligence colleagues and friends who supported and often collaborated with them, embodied both the strengths of U.S. intelligence during the interwar period, as well as the U.S. government's failure to support and capitalize on the intelligence community's accomplishments in order to safeguard U.S. national interests. The intelligence consumers whom the intelligence professionals served, including leaders in the White

House, Department of State, the Army, and the Navy, failed in the final assessment to leverage good intelligence in order to anticipate events such as Japan's series of attacks in December 1941 and to prepare the United States accordingly.

Intelligence often is the first line of defense between states. In Japan's case, as its leaders prepared for war beginning in late 1940, it became the first line of offense, too. Whether a country invests adequately in intelligence and uses the return on that investment effectively enough often defines that country's ability to anticipate and address threats to national interests. Between the end of World War I and the U.S. entry into World War II, U.S. intelligence received insufficient support and was underutilized, although intelligence professionals such as Yardley, Friedman, Rowlett, Mashbir, and Zacharias nevertheless produced generated outcomes. Their superiors and U.S. leaders, however, capitalize sufficiently on the accomplishments of those intelligence professionals. Consequently, the United States was poorly prepared in December 1941.

The appreciation and role in intelligence that U.S. leaders increasingly demonstrated following World War II was perhaps the greatest legacy of the failure of U.S. leaders before Pearl Harbor. Ultimately, despite its many flaws and failures, the United States has not yet, since World War II, faced a strategic defeat or disadvantage comparable that which the country faced as U.S. Army and Navy bases and U.S. ships and planes burned, smoldered, and smoked in December 1941 in multiple locations in the Pacific Ocean. Although significant, the attacks against the United States on September 11, 2001, did not leave the United States virtually undefended, or at a strategic or even tactical disadvantage against al-Qa'ida.

That even staunch critics of U.S. intelligence among U.S. Presidents and law-makers ultimately have supported U.S. intelligence, and funded and empowered intelligence agencies to undertake operations in support U.S. foreign policy objectives, reflects a significant change in the U.S. government's broader appreciation and understanding of the advantages that good intelligence work provides to diplomacy, achieving foreign policy objectives, and preserving national interests. Furthermore, leaders from both the executive and legislative branches understand that they are responsible for systematically enabling, directing, and overseeing intelligence services and their operations. Notably, however, that dedicated, creative intelligence professionals are vital to the U.S. intelligence community's success, remains as relevant as it did between World War I and World War II.

In the end, although the United States emerged as a world power in 1898, when it defeated Spain in the Spanish-American War and acquired an empire ranging from the Caribbean Sea to the western Pacific Ocean, many U.S. leaders and much of the American public did not accept the burdens associated with the arrival of the United States on the world stage and the empire for which it became responsible. Following Pearl Harbor, U.S. leaders could no longer afford to deny what the United States had become and the responsibilities associated with that transformation.

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