SIGNALS INTELLIGENCE AND THE WASHINGTON NAVAL CONFERENCE. ONE ELEMENT IN THE DECISION-MAKING PROCESS

by

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Decision-making can be as simple as deciding to draw to an inside straicht in poker, the favorite game of Herbert O. Yardley, head of the American cryptographic unit from World War I to 1929. It can also be as complex as the process of formulating the national war plan. In statecraft and the making of war, intelligence-knowledge of one's opponent-has long been recognized as a part of the decision-making process. Knowing the peaceful intentions of a potential enemy can free a nation to take the initiative elsewhere. In warfare, information of the enemy's route of march, strengths and intentions can affect the outcome of battle. The purpose of this paper is to examine the Washington Naval Conference of 1921-1922 and the relationship between the agreements reached and the knowledge provided Secretary of State Charles Evans Hughes through a particular type of intelligence, signals intelligence.

Little used until the twentieth century, signals intelligence or SIGINT is the gathering of information from communications sources: cables, telegrams, radio, television, correspondence, and even today's satellite telecommunications. The process is three-fold. First is the interception of the information, second, its deciphering into a plain text, and finally, the most subjective aspect of the process, the interpretation of data and intent.

Analysis of the information and the owner's intent is then incorporated into the overall assessment of the situation and thereby influences the decision-making process. The impact of

SIGINT varies with the information collected and the abilities, personalities and perspectives of the users. Also, SIGINT is only one factor considered in the making of decisions. For example, SIGINT may inform an army that the enemy appears to be building up for an offensive against a certain part of the front but, due to political concerns such as the safeguarding of the capital, the extra forces needed to blunt the possible attack may not be available.

The most spectacular SIGINT revelation in the twentieth century has been the use of ULTRA to read German messages during World War II. Information obtained by ULTRA was instrumental in preparing the Allies to absorb the German counter-attack in early August 1944 against the American sector. 1 Even so, much of the time ULTRA served only to confirm tentative conclusions previously reached by the Allies. Additionally, out of fear of compromising ULTRA as a source of intelligence, much information could not be acted upon. Thus, SIGINT alone is rarely the only basis for reaching decisions.

Although the sensational events of ULTRA have received the majority of attention, significant use of SIGINT occurred earlier during World War I. Early in the war the British set up a decoding and deciphering organization in Room 40 of the Old Admiralty Building. The precursor of the Bletchley Park team of ULTRA, Room 40 provided the starting point for signals intelligence in the twentieth century. Indeed, some of Room 40's personnel returned in 1939-1940 to again serve their country in the field of signals intelligence. Throughout four years of war Room 40 worked diligently to supply the Admiralty with

information ranging from German fleet and U-boat movements, to blockade running, to various diplomatic correspondence including the Zimmerman telegram.

Several years prior to the Washington Naval Conference of 1921-1922, the War Department created an intelligence unit for code and cipher work. Unofficially called the American Black Chamber and directed by Herbert O. Yardley, this unit followed in the footsteps of Room 40 and provided a link of continuity in SIGINT between the world wars. This unit cracked the Japanese diplomatic ciphers then in use and during the conference decripts were regularly forwarded to Secretary Hughes, head of the American delegation. The information ranged from one day to as much as two weeks old, depending on the cipher used and on the work load of the Chamber.

Since the unveiling of ULTRA, the tendency has been to sensationalize and perhaps ascribe too much credit to signals intelligence in war and peace. Examining available evidence suggests that rather than providing information for a specific breakthrough, Hughes utilized the Black Chamber more to confirm and reinforce decisions previously reached before the conference.

Information gained during the summer prior to the conference indicated a Japanese willingness to reduce armaments and compromise. Japanese cables deciphered during the conference along with face to face seetings with the Japanese delegation tallied with those earlier intercepts. Although the Black Chamber provided both hard information such as the naval ratio options the Japanese would consider, and "soft" information relative to their negociating attitudes and intentions, the

consistency shown by Hughes from the outset indicates a pre-conference plan little altered during the negotiations. SIGINT's role during the Washington Naval Conference illustrates the continuity of signals intelligence from Room 40 during World War I to the more publicized accomplishments of ULTRA in World War II.

This is to thank Dr. Donald Mrozek, who made me into a better writer, in spite of myself, and thanks to the rest of my committee for their support. I would also like to thank my wife, Catherine, for her patience—she must have wanted to kick me on occasion to move me along but somehow restrained herself.

While the episodes of ULTRA in Europe and NAGIC in the Pacific were the two most spectacular examples of signals intelligence in the twentieth century, they were by no means the first applications of SIGINT. Looking back from ULTRA and NAGIC a line of continuity can be traced to Yardley's Black Chamber and then to Britain's Room 40 of World War I. The literature of signals intelligence reflects this continuity and, not surprisingly, the majority of it appeared after the ULTRA revelations in the mid-1970's, with many of the works dealing with World War II SIGINT efforts. Examining the SIGINT literature aids in understanding the origins, uses and continuity of signals intelligence, as well as the American Black Chamber's place within that context.

Although works on intelligence and cryptography can be found dating from the 16th and 17th centuries, as a field of study the subject is a product of the twentieth century. As a general rule the historiography of intelligence, including SIGNTY, emphasizes the sensational breakthroughs such as ULTRA and MAGIC or broad histories as in The Armies of Ignorance, a history of American intelligence. Very little has been written on intelligence as part of the decision—making process: is it more useful for the hard data provided or for the light it sheds on the enemy's intentions? Does signals intelligence consist mainly of dramatic discoveries or the more mundame job of decoding and deciphering routine communications? This aspect of

intelligence, especially in signals intelligence, requires closer examination in the future.

A good starting point for twentieth century intelligence literature are Herbert O. Yardley's works and the subsequent furor surrounding them. Yardley's first book, The American Black Chamber appeared in 1931. Disappointed at the disbanding and reorganizing of the cryptographic unit, Yardley hoped to maintain an income through the sale of a book recounting the exploits of the Chamber. Especially significant was the revelation of the Chamber's efforts at deciphering Japanese messages during the Washington Naval Conference. Specific information about the messages delivered to Charles Evans Hughes tended to be sketchy; nor was there any detailed picture of the lawrican delegation's decision-making process. Still, the book indicated important points to consider. First and most basic was the introduction of SIGINT take the decision-making process itself. Information on what the "other side" had, planned to have, and that they intended to do with their military hardware became a part of the contact in which legislans were sade.

Yardley stated that both Fig. The will first Departments jointly funded the Black Chamber with Fig. State Department carrying most of the costs. This accomposes a state for over the years, and so it would seem plausible that both departments found the information provided useful. The uproof over the publication of The American Black Chamber reinforces this conclusion. Lieutement-colonel O.S. Albright, Chief of the Communications Section reviewed the book in June 1931 for Colonal

Alfred T. Smith, Army Chief of Staff, G-2, and concluded that although the book contained many exaggerations and distorted statements relative to Yardley's role, the basic facts were correct. Thus, while it is difficult to know the exact extent of Yardley's and the Chamber's role at the Washington Conference, this official assessment makes it credible to assume that the Chamber's efforts were relevant.

The hornet's nest stirred up by Yardley's book continued, with the pros and come of the Chamber's activities and Yardley's revelations bandied about in newspaper articles and journals. 4 Official concern about additional disclosures by Yardley continued into 1933 when agents of the federal government seized a second "Yardley" manuscript prior to publication. Entitled Japanese Diplomatic Secrets, it contained a more in-depth picture of the Chamber's work during the Washington Conference. Of most value were the decoded messages to and from the Japanese delegation. Again, little information was provided pertaining to the deliberations of the American delegation. Still, the seizure and withholding of the manuscript in the Justice Department files for fifty years indicated its potentially sensitive nature and reinforce Yardley's claims on behalf of the Black Chamber.

Several classified histories dealing with intelligence and SIGINT followed Yardley's sensational revelations. In 1942-1943 William F. Friedman, another major figure in American intelligence history, wrote A Brief History of the Signal Intelligence Service. Declassified in 1979, it is a short survey of American signal intelligence efforts and organization into the

1930's. Priedman leaves no question about his opinion of Yardley, believing him a disgruntled careerist primarily interested in obtaining a secure and lucrative position within the federal government. In Priedman's opinion, Yardley's book damaged American security interests, making it difficult to procure funds for the cryptanalytic bureau and thus impairing the general decision—making process.

Three years later Friedman prepared another classified survey that covered the 1930's up to the outbreak of World War II. Expansion of the Signal Intelligence Service from 1930—TDecember 1941. Here Friedman described the organization of the Signal Intelligence Service, the heir of Yardky's operation of the 1920's. within the War Department and the difficulty of securing adequate funding in order to maintain peace—time training for the section. He related how the service consolidated the various duties of signals intelligence: code and cipher compiling and solving, interception and location of enemy transmissions and the developing and detecting of secret inks. Friedman then briefly touched upon the expansion of the service after 1939, the breaking of the Japanese Purple code and the general developments of the period immediately before Pearl

Laurance P. Safford, USN (retired) prepared another classified manuscript in 1952, entitled <u>A Brief History of Communications Intelligence in the United States</u>. Safford's work was similar to Friedman's in that he covered the evolution of the intelligence services as institutions. Interestingly enough,

Army-Navy collaboration on Japanese diplomatic codes in the 1930's did not extend to Japanese naval and military codes. Although information was occasionally passed back and forth, the deciphering procedures remained within the respective services. In contrast, Yardley's organization was unique with its interdepartmental funding.

Safford related several examples of SIGINT successes in his brief history. A Japanese code stolen in 1922 by the FBI, ONI and the New York Police provided a comprehensive picture of the Grand Japanese Naval Maneuvers of 1930. With this information, the Chief of Naval Operations knew that the Japanese army invading Manchuria a few months later had "its rear quarded by Naval forces superior in strength to the peace-time U.S. Navy."8 The breaking of the 1930 Naval Code provided the invaluable information that the battleship Nagato's post-modernization speed was twenty-six knots, the same as the Kongo class battle cruisers. By inference, the speed of the modernized Mutsu and the new Yamato class battleships would also be twenty-six knots. This information directly influenced the American decision to give the battleships North Carolina and Washington twenty-seven knot speeds and later battleships a speed of twenty-eight knots.

In 1967, The Codebreakers and The Broken Seal explored the under-reported subject of SIGHT and intelligence. The paucity of works reflected three things: the sensitive nature of the topic in government circles, the lack of declassified source material for research and a general neglect of intelligence as an aspect of military and diplomatic history. In <u>The Codebreakers</u>, David Kahn tied together the various threads of espionage, codework and intelligence gathering from antiquity to the present. A comprehensive effort, <u>The Codebreakers</u> remains a natural starting point for anyone doing research on the subject as it existed before the mid-1960's.

Kahn covers the history of the science and art of signals intelligence with good detail on Yardley and the Black Chamber. He then describes the reorganization of the section within the War Department in the 1930's, with William F. Friedman as the guiding light. Kahn provides the reader with numerous examples of SIGINT's influence from the Dreyfus Affair at the turn of the century to post-World War II espionage and SIGINT efforts. A sound work, it will need periodic updating due to newly discovered or declassified material.

More specific in scope, The Broken Seal (1967) by Ladislas Farago traces the breaking of the Japanese Purple code,
Operation MAGIC. Essentially, Farago makes no new major
disclosures about events leading up to Pearl Harbor, but instead fleshes out earlier accounts. In reference to the Washington Naval Conference, Farago argues that Japan's objection to the ratio assigned her was not remarkable but rather it was the United States refusal to compromise that catches one's attention. According to Farago this obstinacy resulted in much criticism of the Americans. Parago also states a courier arrived daily in Washington with deciphered cables from Yardley's unit. Farago's work implies that Bughes' negotiating tactics and

subsequent success depended essentially upon the information furnished by the Black Chamber. 10

In retrospect, the tone of <u>The Broken Seal</u> is one of oversimplification and uncritical credit to signals intelligence for success at Washington. Writing in the "popular narrative" style without footnotes but only general chapter notes, Farago fails to couple the narrative flow of a Bruce Catton or Shelby Foote with their solid historical research. In reference to Yardley and Washington Conference, Farago is unsophisticated in his analysis of the information produced by the Black Chamber and fails to examine the flow of events or determine the Black Chamber's place in the decision—making picture.

Those interested in the early organizational history of American intelligence would do well to start with <u>The Emergence</u> of the <u>War Department Intelligence Agency</u>. 1885-1918, a Master's thesis by Marc Powe, Kansas State University (1974). In it Powe argues that the War Department created a Bureau of Military Information in 1885 to provide data. Beginning as an element of the General Staff, the reorganization of 1908 placed the unit within the War College Division. The Bureau fell into general disuse from 1910 to 1916, when the demands of World War I marked an upswing in military intelligence fortunes. Powe concludes that the Military Intelligence Agency of 1917 was not new but provided information as did its predecessors, indicating institutional continuity. ¹¹

The year Powe's thesis appeared marked an increase in works dealing with intelligence and SIGINT. Acting as the catalyst for

the works were private memoirs and source material available from World War II, the principal subject being ULTRA. The book that signaled the new rawas The Ultra Secret by F.W. Winterbotham. As the original head of the overall ULTRA team, Winterbotham obviously knew or had access to information on the breaking of the German codes and the uses thereof. Winterbotham continued the trend, still alive today, of ascribing virtually total credit for winning the war to signals intelligence without analyzing the decision-making process itself and SIGINT's place within that context. 12

Numerous claims have been made for ULTRA, but not all can be clearly substantiated. It has been argued that Lord Gort retreated to Dunkirk upon receiving the ULTRA information that von Runstedt had turned his forces north, yet Gort had already planned to retreat before such information reached him. In fact, since Chief of the Imperial General Staff Ironside went in person to forbid Gort to retreat, one wonders just what, if any, ULTRA's role was at Dunkirk. This example indicates that since the deliberations of those making the decisions are often not available, care must be taken when evaluating SIGINT's contributions.

A number of other works also deal with ULTRA and its impact in World War II. Ronald Lewin's <u>Ultra Goes to War</u> (1978) continued the praise of ULTRA, pointing out its value in deducing such information as Rommel's supply shortage in North Africa, the German belief that Normandy was safe from invasion, and Hitler's orders for a counter-attack in early August at Normandy.

Even so, Lewin wisely emphasizes that men, material and will-power win battles, secret information notwithstanding.

In a book with a different thrust, Gordon Welchman's <u>The Hut Six Story</u> (1982) did more than describe the inner workings of the ULTRA team of which he was part. Welchman also stresses the flexibility and originality that led to the ULTRA breakthrough and its implementation. Welchman concludes that these attributes are necessary if the West is to survive the Soviet threat.

Ralph Bennet, an historian before the war and another of the Bletchley Park team, wrote <u>Ultra in the West</u> in 1979. The value of Bennet's work is the emphasis he places on <u>ULTRA</u> as an information provider, the product of which would be acted upon by others. Since he points out that strategic analysis was done by the various service intelligence agencies and not <u>ULTRA</u>, Bennet places <u>SIGINT</u> within the overall decision-making context rather than as the omniscient fount of knowledge and sole actor in the process. ¹⁴

Ronald Lewin's <u>The American Magic</u> (1982) shifts attention to the Pacific theater during World War II. Relative to Pearl Harbor, Lewin concludes that SIGINT and the means of evaluating and distributing it were not sufficiently developed to avert disaster. As do most other scholars, whether "fans" of SIGINT or not, Lewin argues that MAGIC aided the American efforts at Coral Sea and Midway. More pertinent to this paper, Lewin, too, pictured Hughes at the Washington Conference as possessing all useful knowledge of the Japanese position and mentality. With such information he need not compromise but only wait for the

Japanese to give in.

A short work by William F. Friedman and Charles J. Mendelsohn entitled The Zimmerman Telegram of January 16, 1917 and its_Cryptographic Background appeared in 1978. According to the introduction, it is "an authoritative background story of the Zimmerman Telegram which was classified CONFIDENTIAL by the U.S. Government for 45 years after World War I." Although short, the book nicely ties together the story of the telegram: the German proposal to Mexico, the British interception and deciphering of the message and the general uproar it caused once released to the public. What is particularly interesting about this work is the double classification involved with the subject. First, the British and Admiral Hall kept the secret of Room 40's involvement in the Zimmerman telegram for as long as possible. On top of that, Friedman and Mendelsohn wrote this work some twenty years after the incident and then the US Government classified it. Apparently neither the United States nor Great Britain wished the details of the Zimmerman decoding to be made public.

Three works published in the 1970's dealt with intelligence on a broader scale than simply ULTRA or MAGIC. F.H. Hinsley's British Intelligence in the Second World War and David Kahn's Hitler's Spies focused on the respective British and German intelligence efforts in World War II while William R. Corson's The Armies of Ignorance attempted to trace the history of American intelligence through the Carter administration.

Although using extensive source material, Corson leaves the

impression of having attempted too much. His treatment of early American intelligence history is skimpy, and Corson's lack of footnotes reinforces the desire for more information. In spite of listing Yardley's <u>The American Black Chamber</u> in the bibliography, scant mention is made of Yardley and none of the Washington Naval Conference. While valuable in many respects to intelligence historiography, <u>The Armies of Ignorance</u> deals weakly with the period of 1900-1930.

Both <u>Hitler's Spies</u> and <u>British Intelligence in the Second World War</u> (v.I) make substantive contributions to intelligence historiography. Kahn breaks his book into four sections: sources of intelligence, the analyzers of German military intelligence, three major military intelligence cases (Sarbarossa, Torch and Overlord), and a concluding epiloque.

Kahn argues that German intelligence suffered from a variety of problems. In the preparation for Operation Barbarossa, Hitler desired only tactical intelligence, the number of Soviet units and their locations. German intelligence did not have a role in the assessment of the Soviet military machine or Germany's chances in a war with the Soviet Union. To compound the errors of omission, German and Nazi arrogance prevented a more objective appraisal of Soviet military capabilities.

Kahn believes that with respect to Torch and Overlord, the Germans suffered from a lack of adequate intelligence sources and at the same time were simply fooled by Allied deception efforts. Kahn concludes that German military intelligence ultimately failed in its mission, particularly in the interpretation of data.

British Intelligence in the Second World War by Hinsley and his associates is the very interesting first volume of an official history. Rather than dwelling exclusively with the major intelligence coups, as do most of the ULTRA and MAGIC works, Hinsley examines the general process of intelligence gathering, analyzing and interpreting. Hinsley does not constantly praise British intelligence efforts but critically examines the failures and bureaucratic infighting that reduced intelligence effectiveness. Hinsley guite correctly points out how outside factors intruded into the intelligence process. Thus, the large mass of data from non-SIGINT sources (photo-reconnaissance, the Secret Intelligence Service, captured documents, etc.) curtailed the analysis time for signals intelligence resulting in a misinterpretation of the information indicating Operation Barbarossa, the German invasion of the Soviet Union. Due to bureaucratic jealousy, the War Office, Air Ministry and Admiralty refused to cooperate and pool resources. Also, the services did not always utilize intelligence information in formulating policy. According Hinsley, if the Air Ministry had contacted Whitehall they would have learned that the make-up of the Luftwaffe indicated the intent to use it for close support of the German army rather than as an independent strategic instrument. 15

A very valuable contribution to intelligence studies is the multi-volume United States Military Intelligence 1917-1927 (1979), edited by Richard Challener of Princeton University. The

set consists of recently declassified daily and weekly military intelligence summaries from the period and serves to illustrate military intelligence perceptions of world events. Regarding the Washington Conference it is informative to note that military intelligence analysts concluded that the Japanese plan for a larger fleet enhanced the probability of the renewal of the Anglo-Japanese Alliance. The potential threat of an enlarged Japanese fleet would act as a lever to persuade the British to continue the alliance. The analysts believed that Japanese naval expansion was not directed primarily at the United States but was a tool to help maintain the Anglo-Japanese Alliance. The "relatively minor importance" of American Pacific possessions made the United States a secondary strategic concern for Japan, 16

Finally, the appearance of Patrick Beesly's Room 40 in 1982 perhaps best reflects the tendency to concentrate on World War II signals intelligence. Not until eight years after the ULTRA disclosures occurred did a book appear that dealt with the organization that preceded the Black Chamber and Bletchley Park. Beesly's book provides excellent information on the uses and limitations of signals intelligence, and the dangers of overcentralization and secrecy. For example, at the Dogger Bank action of January 1915, Room 40 decoded messages pinpointing the locations of U-boats. Unfortunately, due to overcentralization, that is, the concentrating of control of such information into only three or four hands, the locations were not signalled to Admiral Beatty for two hours. Beatty believed the U-boats

were nearby and ordered a change in course which slowed British
pursuit of the German squadron. Only later did Beatty receive
information indicating that the U-boats were forty miles to the

Beesly gives other such examples of the problems inherent in a new process such as utilizing signals intelligence. Even so, he argues that Room 40 provided the Royal Navy with the edge it needed. The British quickly knew of the German fleet movements even if not the purpose behind them. This information made it possible for the Royal Navy to prepare for German sorties and lay traps for the High Seas Fleet. If the Royal Navy did not ultimately destroy the German fleet, it was not due to the failure of Room 40, but reflected the complexities of the decision-making process as a whole, of which SIGINT was only one part. Room 40 contributes much to the understanding of the signals intelligence role and joins Kahn's The Codebreakers as a basic work in the field.

Although numerous works on intelligence and SIGINT have appeared since The Ultra Secret in 1974, much remains to be investigated. The role of SIGINT after World War II in particular requires examination. Perhaps the greatest weakness of the field at present is the tendency to view SIGINT as an independent maker of history, rather than as one part within the decision—making process.

Ronald Lewin, <u>Ultra Goes to War</u>, (McGraw-Hill, 1978), pp.337-39.

²William F. Friedman, <u>A Brief History of the Signal Intelligence Service</u>, National Archives, Record Group 457, SRR-029, p. 3.

³National Archives, <u>A Selection of Papers Pertaining</u> to Herbert O. Yardley, 1917-1950, Record Group 457, SRH-038, p.151.

⁴Ibid., pp.154-68.

 5 William F. Friedman, $\underline{\text{A}}$ Brief History of the Signal Intelligence Service, p.7.

6Ibid., pp.11-12.

⁷Laurance F. Safford, <u>A Brief History of Communications</u>
Intelligence in the <u>United States</u>, National Archives, Record
Group 457, SRH-149, p.10.

8_{Ibid}., pp.6-7.

9Ladislas, Farago, The Broken Seal, (New York: Random House, 1967), p.25.

10 Ibid., pp.26-31.

11Marc B. Powe, The Emergence of the War Department Intelligence Agency: 1885-1918, Master's Thesis, Kansas State University, 1974, p.VIII.

12 F.W. Winterbotham, The Ultra Secret, (New York: Harper & Row, 1974), pp.187-91.

¹³A.J.P. Taylor, <u>The New Statesman</u>, 15 November 1974, p.703.

14Ralph Bennet, <u>Ultra in the West</u>, (New York: Charles Scribner's Sons, 1979), pp.11-15.

¹⁵R.H. Hinsley, <u>British Intelligence in the Second World War</u>, v.I., Her Majesty's Stationary Office, pp.77-79.

16Richard Challener, ed., <u>United States Military</u>
<u>Intelligence</u>, (New York: Garland Publishing, Inc., 1979),
vol.120, p.9136.

 $$^{17}{\rm Patrick}$ Beesly, $\underline{\rm Room~40}$, (London: Hamish Hamilton, 1982), p.61.

Chapter II. SIGINT in the Twentieth Century and the Origins

The tools of the intelligence process evolved throughout the twentieth century, paralleling man's scientific and technical progress. While the instruments changed, the fundamental functions remained constant, providing information to aid in defining enemy capabilities and intentions. Hard data of various types furnished information such as the speed and degree of strength with which the German army could mobilize in 1938. The scope of useful data was broad and really limited only by the analyzer's imagination. The intentions uncovered ranged from the specific, such as a delegation's objectives at a conference, to the general, as in the overall direction of a nation's foreign policy.

Signals intelligence is a specific type of intelligence.

SIGINT provides information based upon another party's

communications. The first step in the signals intelligence

process is the interception of communications, for example,

tapping into cable lines, listening to radio signals or obtaining

documents. If the information is in a code or cipher it must be

broken down so as to be understandable. Decoding involves the

use of a codebook containing the coded words and their agreed

meaning. In decipherment there are substitutions or

transpositions of letters and in order to understand the message

the pattern must be discovered.

Direction finding or triangulation is another method

utilized in signals intelligence. The interception of a signal at two known points makes possible the pinpointing of the transmitter. The known points become the vertices of a trangle with a known baseline. With the two direction finders aimed towards the signal's strongest point the transmitter can be pinpointed by extending two lines from the direction finders, where they intersect is the location of the transmitter. Direction finding is a valuable war-time tool and was utilized in both world wars. Opposing navies found it useful for pinpointing enemy naval forces such as the British Admiralty keeping watch over the German Hidn Seas Fleet.

Once obtained, signals intelligence can be combined with information from other sources to create a broad and more detailed picture. The hard data indicates capabilities and possible designs, while soft information from various sources such as television and radio, communications networks, journals and newspapers add substance to the framework of hard data. Interpretations can then be made based upon this picture of capabilities and intentions. Since drawing conclusions is a subjective procedure, the results are often influenced by the biases, prejudices and even interests of those evaluating the information. This frequently results in conflicting conclusions by those utilizing the data.

Decision-making, potentially a very complex process, demands that many factors be weighed before a conclusion is reached. Often the data conflict with one another, hard data may be contradictory or very different from soft and either or both of these may be at variance with the assumptions or interests of the decision-maker. The question of credibility further complicates the process. Data provided by a loyal agent could be at odds with that provided by signals intelligence but still considered more credible or vice versa. Obviously, SIGINT is only one element integrated into the decision-making process and care must be taken as to how much influence is credited it.

Although its potential would be more fully realized during the two world wars, nineteenth century strategists recognized the implications of cable communications and signals intelligence. The telegraphic cable of the mid-180's provided speedy international communications but was subject to interception if it was part of a land network passing through foreign nations. In contrast, submarine telegraph cables provided a potentially more secure communications system. Under friendly control speedy communications could be effected throughout a nation or empire. In threat of war, mobilization would be swifter and strategic plans implimented with less delay, although if intercepted by an enemy, this information would be subject to the enemy's evaluation and use.

As a holder of the most wide-flung empire, Britain pioneered the attempt to create an empire-wide communications system at this time. The projected "all red" system would never touch foreign soil, thus securing British communications from signals intelligence efforts of other nations. ¹⁸ In case of war, an empire-wide cable system would allow the government to coordinate its armed forces and would be especially valuable for fleet

control. In turn, the system provided a sense of security for colonies far from the mother-country.

Offensively Britain drew up plans to sever the cable communications of her likely enemies. In 1898 these plans centered around Russia, Japan, and the United States. By 1911, changes in the international situation replaced these three powers with Germany or the Triple Alliance. 19 The cutting of cables and occupying of transmitting stations could isolate Britain's enemies, as actually happened to Germany in World War I. By controlling cable systems Britain would possess valuable information to use as needed, as she did the Zimmerman Telegram of 1917.

The British efforts to set up the "all red" system did not escape the attention of other powers. The United States annexed Guam and Midway in order to provide cable stations to the Philippines. The Germans also attempted to set up a system under their control but dependence upon British technical expertise undermined this venture. ²⁰ Perceiving the advantages of Britain's control of the world-wide cable system, the French government noted in its telegraph bill of November 1900: "England owes her influence in the world perhaps more to her cable communications than to her navy. She controls the news, and makes it serve her policy and commerce in a marvellous manner." ²¹

Prior to World War I the Dreyfus Affair in France also illustrated the potential usefulness of signals intelligence. In mid-October 1894, Captain Alfred Dreyfus of the French army was arrested for providing Germany with information. The anti-Semitic journal La Libre Parole broke the story on November 1, accusing Dreyfus of being in the pay of Germany or Italy. The next day the Italian military attache telegrammed Rome requesting an official denial of the story if it was false. The French obtained a copy of this telegram which was taken to the Foreign Ministry for solving.²²

The Foreign Ministry had produced an exact solution except for the ending by November 6. The translation read: "If Captain Dreyfus has not had relations with you, it would be wise to have the ambassador deny it officially. Our emissary is warned." This last sentence hinted at Dreyfus' guilt, and Colonel Jean Sandherr, head of army intelligence passed the translation on to his superiors hoping it would help convict Dreyfus.

Continuing their efforts, the cryptanalysts worked at deciphering the ending. By November 10 the French believed they had a more accurate decipherment of the message. The telegram now read: "If Captain Dreyfus has not had relations with you, it would be wise to have the ambassador deny it officially, to avoid press comment." In order to confirm the accuracy of the translation the French tricked the Italian military attache into passing specific information on to Rome. The French again obtained a copy of the telegram and began deciphering it. They completed the decipherment on November 13 and it confirmed the accuracy of the second decipherment exonerating Dreyfus. At this point other interests intervened. Some officers argued it was better to convict Dreyfus rather than openly admit

a mistake by the French army. Other officers followed their anti-Semitic inclinations and continued to press for DreyYus' conviction. The court refused to allow the deciphered telegram to be entered as evidence, and sentenced Dreyfus to Devil's Island. In 1899 the correct version of the telegram finally entered the records. Still, not until 1906 did Dreyfus win vindication.²⁴

Although the ordeal of Dreyfus stretched out over a decade, information provided by signals intelligence could possibly have terminated the proceedings within several months. Rather than reflecting a shortcoming of SIGINT, the Dreyfus Affair illustrates the varied elements that contribute to the decision—making process. In this instance institutional concerns, domestic politics and anti-Semitism outweighed information provided by SIGINT alone.

The development of wireless communications in the early 1900's influenced both communications in war-time and signals intelligence. Radio promised, at least potentially, new flexibility on the battlefield or at sea. Ships or units would no longer be tied to the use of cables or visual signals and communicating would be much quicker than in the past. Potential limitations naturally existed concurrently with the advantages of radio communications. Units utilizing radio would be wulnerable to location through the previously mentioned technique of direction finding. This weakness would be especially crucial at sea if rival fleets attempted to surprise and engage each other on the "ground" of their own choosing. Patterns in traffic

volume could possibly alert an enemy to future intentions. Finally, the actual information contained in the broadcasts could be used by the enemy if he obtained the current codebooks or broke the cipher then in use. Thus, while radio offered swift communications without the need of land or sea cables, the message signals were available to anyone wishing to intercept

If the Dreyfus Affair pointed out the potential for SIGINT, World War I in large part realized that potential. The majority of the belligerents utilized signals intelligence from one degree to another with varying success. Of the three military antagonists on the Western Front, France found herself the best prepared to intercept and decode or decipher enemy messages. Virtually overwhelmed during the initial German onslaught, the French found time to work on many early intercepts once trench warfare had settled in. These early messages enabled the French to work up a somewhat crude profile of German strategic and tactical tendencies in warmaking. Analyzing deciphered German messages helped the French to understand "why the Germans made the historic turn to the east that led to the crucial Battle of the Marne....and shed light on the thinking of German commanders during the critical race to the sea. "25 Appreciating these cryptanalytic achievements, General Joffre, the Commander-in-Chief, wrote the Minister of War: "I have, like all the army commanders, during the last few days learned to realize the value of the services which have been rendered by the cryptanalytic bureau of your department. "26

The British military cryptanalytic bureau did not reach the proficiency of the French but did perform valuable service. Attached to the War Office, the British military intelligence system resembled that of the French. Once in France, the British established a field agency with the British Expeditionary Force, while individuals were placed within the various field armies.

The most significant development in the field of signals intelligence on either side during World War I was the organizing of the British Naval Intelligence unit, Room 40, in 1914. Prior to the war the Royal Navy had a single wireless station which reported its message intercepts to Rear Admiral H.F. Oliver. Director of the Intelligence Division. For the first two months of the war the British essentially "muddled through" with signals intelligence, following in their long tradition of just getting by. The event that crystallized the signals intelligence effort was the recovery of a number of German codebooks in late August by the Russians. The light cruiser Magdeburg had run aground and the appearance of two Russian cruisers rattled the German crew, as a result the codebooks were not destroyed. In a spirit of cooperation, the Russians offered copies of the books to the British and they found their way into the hands of the 1st Lord of the Admiralty, Winston Churchill.

Although by no means complete, the <u>Magdeburg</u> codebooks gave the British a solid basis for decoding a number of German message types. Later, in December, the British supplemented the <u>Magdeburg</u> cache with books found by a trawler out fishing. In the meantime, Oliver had persuaded Director of Naval Education

Sir Alfred Ewing to organize the British codebreaking effort. Ewing brought in a number of naval students and achoolmasters from Dartmouth and Osborne naval colleges plus an ex-Foreign Office member and, also the son of a Lord Chancellor. Overall, the group was well educated and somewhat of an elite. ²⁷

In early November Churchill drafted Room 40's charter. Essentially Room 40 would decode and decipher intercepted German messages and pass the translations on to Oliver, now Chief of Staff. Churchill characteristically consolidated the authorization to see and utilize the information in a very few hands. Only four men--Churchill, Oliver, Admiral Fisher and Admiral Wilson-- were to have the "full" picture. They would take the decodes and decripts of Room 40 and combine them with any other information available. Neither Captain Reginald Hall, the new Intelligence Division Director nor anyone else, including Admiral of the Fleet John Jellicoe, knew what information was available overall. The decision-makers desired secrecy above all else and therefore did not solicit evaluations from anyone, acting as intelligence analysts themselves and not always with favorable results. ²⁶

Two episodes, the battles of the Dogger Bank and Jutland, illustrated both the uses of Room 40's SIGINT and its limitations. In January 1915, through the monitoring of German radio traffic the British became aware that Rear Admiral Franz von Hipper had been ordered to take his battle cruisers out on a reconnaissance of the Dogger Bank. More than two hours after decoding the message, orders were sent to the various British

commanders to put to sea. Due to the delay in sending out the orders there was not enough time for Jellicoe and the home fleet to reach the engagement which left British fortunes in Beatty's hands alone. ²⁹

In what became a running battle, Beatty's force pursued Hipper's force hoping to close and destroy it. At 10:54 U-boats were reportedly spotted and Beatty ordered his force to turn at right angles in evasive action. This slowed the British pursuit, needlessly as it turned out. Two hours later Oliver signalled the locations of the nearest U-boats, forty miles to the south and thus out of the battle. Although Room 40 knew the location of the U-boats, it had been up to Churchill and company to issue any intelligence bulletins, and this one obviously came too late. 30

Even after the U-boat scare, Beatty's force still had the opportunity to savage Hipper's force. Unfortunately, Beatty's flagship Lion dropped out of the battle and his signal, "Attack the rear of the enemy," was interpreted as an order to concentrate on the damaged Blücher. As a result, the British sank the helpless Blücher and only damaged the Seydlitz and Derfflinger, which escaped. Although they lost only one ship, the psychological damage to the Germans resulted in their attempting no major sorties for over a year. Frustration characterized the British after Dogger Bank. Room 40 had performed brilliantly but decisions taken after Room 40's intelligence came in undercut the British advantage. In this instance, Room 40's efforts were negated by faulty utilization of

SIGINT and unfortunate events in battle.

The Battle of Jutland was perhaps the most famous naval engagement of the First World War. Once again the Royal Navy had the opportunity to cripple the High Seas Fleet and again Room 40 played a central role in the episode. Several occurrences in May 1916 indicated that the High Seas Fleet was preparing for a major operation. In mid-Nay a number of U-boats put to sea, their intended mission to scout and report British naval movements. While generally ineffective at this, the fact that the U-boats did not appear on the trade routes tipped Room 40 off that something unusual was coing on. 31

Room 40 began picking up German wireless messages at the end of May that also pointed to a major operation. On the 28th Scheer ordered the fleet to a special state of readiness. The next day he ordered the fleet to assemble in the outer Roads by 7:00 p.m. Another message informed the Admiral Commanding the 2nd Battle Squadron that prize crews were to be left behind on this mission. Also, Room 40 had noted unusual activity by German minesweepers and barrier breakers. ²²

Room 40 passed its information up the chain of command, leaving it up to Oliver to decide what information should be sent to Jellicoe and what orders to give him. At 5;40 p.m., Jellicoe put to sea in anticipation of a German sortie, Beatty's battle cruisers set out from Rosyth a half hour later. Room 40 had performed its mission, a German fleet sortie was expected and the Royal Nayy was preparing to meet it.

At this point Churchill and Oliver's original

overcentralization of information began once again to take effect. Later, Jellicoe stated that he been led to believe that several new capital ships had been added to the High Seas Fleet and would be opposing him. As it turned out, the exact composition of the German fleet was known but not widely disseminated. Thus, very basic information about the enemy existed but had never been forwarded to the operational commander responsible for engaging the enemy. In addition, as instances of this sort occurred, Jellicoe's confidence in the Admiralty's intelligence service waned. 33

If information on the German order of battle was valuable enough that Jellicoe would certainly have desired to have it. then he quite as certainly would have preferred never to have received a message sent at 12:30 p.m. This message gave "no definite news of the enemy," but with directionals placed the German flagship in port at 11:10 a.m. According to this, the Germans were most likely still in their home port. This message was based on a rare visit by Captain Thomas Jackson, Director of Operations, who dropped by Room 40 to inquire as to the location of the transmitter using the call sign DK (Scheer's call sign). The Room 40 people informed Jackson that it was located at Wilhelmshaven. Unfortunately, Jackson simply strode out of the room without learning that Scheer had ordered Wilhelmshaven to use his call sign once the fleet began to put to sea. The people of Room 40 knew perfectly well that it was a ruse to lead the British into believing that Scheer was still in port. As a result of the message sent to him, Jellicoe maintained an

economical speed in order to conserve fuel, he did not wish elements of the fleet to run low when the Germans put in their appearance. This in turn meant that the Grand Fleet arrived on the scene an hour or two later than necessary, thus leaving Beatty's battle cruisers on their own and losing precious daylight. To top off the situation, three hours after receiving the message that the Germans were still in port, Beatty spotted Hipper's battle cruisers. This did little to enhance the credibility of the Admiralty's intelligence for Beatty or Jellicos. 34

During the ensuing engagement, Hipper attempted to draw Beatty's battle cruisers into the arms of the High Seas Fleet, while Beatty hoped to ascertain whether Hipper was operating on his own or with the German fleet. At 4:30 p.m. Beatty reversed course to the north in order to draw the Germans into Jellicoe's force. Since Scheer did not know that the Grand Fleet was at sea he pursued Beatty. Taken by surprise at the appearance of the Grand Fleet, Scheer then reversed course to disengage. Nightfall prevented further action but Jellicoe placed his fleet between Scheer and the German's home port in the hope of continuing the battle the next day.

During the night another piece of intelligence that Jellicoe did not possess possibly cost the British their victory. There were four routes Scheer could take home and he decided on the most direct one by way of Horns Reef Channel. Jellicoe concluded that Scheer would probably take the route by Ems channel. Unfortunately for Jellicoe, he had never been informed that Room

40's intercepts indicated that the Germans did not consider Ems channel free of mines. This piece of information on its own might not have placed the Germans in Jellicoe's grasp but considering that none of the British commanders had any idea of Scheer's whereabouts, Room 40's intelligence would have been welcome.³⁵

Jutland, like Dogger Bank, tantalized the British with the possibility of destroying the High Seas Fleet, but like Dogger Bank, left a sour taste in the mouths of the British. And what of Room 40's contributions to Jutland? The information provided by Room 40 gave the British the opportunity to engage the German fleet, but the results emphasized the fact that signals intelligence is not the omnipotent key to victory. Not all of the available information was promptly sent to Jellicoe and some never sent at all. One message received by Jellicoe and 10:23 p.m. simply stated the course and location of the rear German battleship, it was not mentioned the source was a German destroyer. Jellicoe believed the information inaccurate and combined with the message that the Germans were still in port destroyed his confidence in the intelligence sent him. 36

The system of overcentralization and excessive secrecy devised by Churchill and administered by Oliver contained glaring defects that reduced Room 40's value. Of sixteen decodes passed from Room 40 to the Operations, only three were sent to Jellicos. ³⁷ Perhaps the main lesson to be drawn from Jutland, and the Dogger Bank was that signals intelligence was only one aspect of a process. Besides gathering information from various

sources, it was necessary to analyze and eveluate it, alone and combined into a whole, reach a conclusion and disseminate the material. While it is certainly true that too many cooks can spoil the broth, for the first two years of Room 40's existence too few cooks messed it up as well.

It should be remembered that Room 40's situation was new and mistakes were to be expected. Fortunately, changes were made. Jellicos became let Sea Lord after Jutland which helped to decentralize things somewhat. Captain Hall received more latitude in coordinating Room 40's efforts with the rest of the Intelligence Division. In fact, Hall became rather a James Bond type, or at least Bond's superior. Not particularly concerned with the morality of signals intelligence, Hall energetically adopted "deception, disinformation, double-agents, bribery, and black-mail." It was Hall who coordinated the revealing of the Zimmerman Telegram in 1917 to the United States in a tactful manner that did not give away Room 40's existence.

Minite Room 40 has not received the publicity or accolades of the ULTRA or YAGIC operations of World War II, the line of continuity in signals intelligence certainly ran from Room 40, through Yardley's Black Chamber in the 1920's to ULTRA and MAGIC. Although Room 40 had its share of dramatic intercepts such as the Simmerman Telegram, what signals intelligence generally came down to was routine work, "Good intelligence depends, not on a few brilliant coups, but on the patient study of an accumulation of small, often dull and seemingly unisportant facts; on the establishment of norms so that any deviation from the standard

pattern of behavior immediately sets the alarm bells ringing for the expert. $^{\rm n}^{\rm 38}$

Unlike the French and British, the Germans entered World War I with no cryptanalytic service or analysts on the Western Front. Even had such a unit existed there would have been little for it to do early in the war. Since the French held the dublous advantage of fighting on their own soil, they relied more on their wire and cable network for communications. Not until 1916 did the French heavily utilize radio communications. As the war progressed, the Germans recognized the potential opportunities and organized the Abhorchdienst (Intercept Service) to monitor Allied communications.

An example of signal intelligence's usefulness to the Germans occurred later in 1916. Despite the protests of a subordinate, a British major read his brigade's operations orders in full over a field telephone. After sustaining significant casualties in achieving their objective, the British discovered a complete transcript of the orders reflecting German success at tapping into the British telephone lines. 39

Signal intelligence successes were not restricted to the Western Front. In the east, due to a foul up in the distribution of cipher keys, the Russians were forced to transmit "in the clear" with no code and this contributed to the twin German victories at Tannenberg and Masurian Lakes. Reading the Russian transmits and combining the information with other intelligence data, the German staff realized that the two advancing Russian armies were uncoordinated. This allowed the Germans to screen

one while concentrating and destroying the other. Thus, a willingness to gamble plus a detailed picture of Russian intentions resulted in German success. 40

What one writer described as "the single most far-reaching and most important solution in history" occurred in January 1917. 41 Solved by the British Room 40 unit, the message became known as the Zimmernan Telegram. Unable to break the war's deadlock on land, the German officer corps advocated resuming unrestricted submarine warfare, a move that quite probably would bring the United States into the war. The German Foreign Secretary hoped to offset this by proposing an alliance with Mexico. For her part, Germany promised that Mexico would recover the "lost territories of New Mexico, Texas, and Arizona."

Unknown to the Germans, Captain Hall of Room 40 was aware of both routes used by the Germans to send messages to the Western hemisphere. One was a circuitous route to Sweden, Buenos Aires, and then to the German minister in Mexico by way of Washington. The other ran from the American embassy in Berlin to Copenhagen, London, and finally Washington. Originally, Colonel Edward House had set this second route up to enable the Germans to communicate directly with President Wilson. In this instance, however, the Germans planned to use the cable system for purposes other than Deace initiatives.

The first decode of the Zimmerman Telegram was incomplete due to the use of a new code, 0075, which left Hall with only an idea of the telegram's contents. A possible solution occurred to Hall. Although German Ambassador Bernstorff in Washington possessed a copy of the new code, no other German diplomat in the Western hemisphere did. Thus, in order to communicate with them Bernstorff would have to use the old 13040 code, broken by Room 40 in 1915. Fortunately for Hall, the British Chargé d'Affaires in Mexico City, Tom Hohler, knew two English brothers living there. One, a printer, had run afoul of the Carranza government and the second brother had approached Hohler for help. Hohler was able to get the brother released and the two promised to help Hohler in any way they could. As it turned out, the second brother worked in the Telegraph service and thus, Hall had access through Hohler to any messages coming into Mexico City. Since telegrams coming into the city were sent in the old code, Hall had a decoded copy of Zimmerman's instructions by Fegruary 19, one month after its original dispatch.

Hall then began working with Edward Bell, Secretary of the US Embassy and US Ambassador Walter Hines Page. With permission from Prime Minister Balfour, Hall coordinated the giving of the telegram's information to the Americans, who then brought in American security agencies to make it appear that the United States had discovered and exposed the telegram. This protected the secret of Room 40's existence while at the same time bringing the German plot to President Wilson's attention. Page and Bell both believed Germany to be a threat to the world order and that she must be defeated, and so were pleased that the incident would bring the United States closer to belligerency on the side of the Allies. Once made public, the telegram influenced the American public's desire to enter the war and played a significant part in

the decision to assist the Allies in defeating the Central Powers. 43

Prior to her entry into World War I, America's efforts in cryptanalysis were erratic. In Geneva, Illinois, a private cryptanalytic unit funded by one George Pabyan worked on codes and ciphers forwarded from the War, Navy, State, and Justice Departments. 44 Temporarily directed by William P. Friedman, the Riverbank Laboratories operated until 1919. Generally working parallel to the cryptanalytic unit set by the War Department in 1917, Riverbank occasionally disagreed with the military unit over the methods of solving codes and the usefulness of enciphering machines. 45

At this time the future head of the American Black Chamber was working as a code clerk in the State Department. Herbert O. Yardley had been born in a small Indiana town in 1889. An average student in school, Yardley did well in machematics and was busy with school related activities such as editing the school paper, captain of the football team and president of his class. Yardley was popular and enjoyed taking charge of activities that he involved himself in. Although he wanted to become a criminal lawyer, he instead found himself working as a clerk in the State Department. 46

A romantic with a desire for action rather than the routine, it was probably too much to expect Yardley to simply pass the time playing solitaire or reading. One night Yardley decided to tackle the code used by President Wilson and Colonel House. Expecting a difficult challenge, Yardley solved it in a few hours

and picked up what became known as the "Yardley symptom." "It (cryptanalysis) was the first thing I thought of when I awakened, the last when I fell asleep. 4

While Yardley passed his time in the State Department code room, the American military found itself in need of an effective cryptanalytic service to handle the requirements of warfare. The possibility of full-time work with codes and ciphers certainly appealed to Yardley and he presented himself to Major Ralph Van Deman, later called the Father of American Intelligence. Impressed with Yardley's skills, Van Deman commissioned Yardley a lieutenant and made him head of the new cryptologic section of the Military Intelligence Division, MI-9.48

The unit grew rapidly and as with their Eritieh counterpart, Room 40, much of the staff consisted of university professors and instructors holding Ph.D.'s. Dr. John Manly headed the Department of English at the University of Chicago and became Yardley's chief assistant. Others from Chicago included David H. Stevens, instructor in English; Thomas A. Knott, associate professor of English; and Charles H. Beeson, associate professor of Latin. Later achievements of the various staff members included directing the division of humanities of the Rockefeller Poundation and the editing of Webster's Dictionary. Yardley and his more middle class, non-academic background made an interesting contrast to the more elite staff of the Slack Chamber.⁴⁹

Laboring diligently throughout the war, MI-8 worked at various aspects of signals intelligence such as discovering secret ink messages in letters and deciphering them. One such message revealed a plot to smuggle explosives for sabotage within the hollow figures of saints and the Virgin Mary. ⁵⁰ Manly personally solved a cipher designating Lothar Witzke, alias Pablo Waberski as a German agent. Although the agent was sentenced to death, this was commuted to life imprisonment and he was released in 1933. ⁵¹

Yardley visited Great Sritain and France in 1918, hoping to learn from their four years of experience. He did observe MIL-1(b), studying how the British Military Cipher Bureau attacked codes and ciphers. Although he found MIL-1(b) helpful, Yardley made no headway in gaining entrance to now Admiral Mall's Room 40. It is not surprising that Yardley had little success with Hall. S2 Edward Bell maintained an excellent relationship with Hall through genuine friendship and discretion about Hall's activities, yet he certainly did not know all of the details about Room 40 and there was really no reason why Hall should filing open the doors to Room 40 for the rather pushy Yardley. This was particularly true in light of the fact that Yardley had nothing to "trade" with Hall. To give away secrets gained through years of hard work without something tangible in return simply made no sense to Hall. S3

Yardley did little better on his visit to France. He did meet the famous Captain Georges Painvin, possibly the greatest cryptanalyst of the war. Once convinced that Yardley understood cryptology, Painvin opened his files and allowed Yardley to study with him. As for the French Diplomatic Cipher Bureau, like Room

40, it remained closed to Yardley. Yardley pulled what strings he could and discussed the situation with US Ambassador Sharp, Major Warburton, the Military Attache, and Colonel Van Deman. Still. France's own Black Chamber remained closed to Yardley and its very existence or location denied by many in the French Covernment. 54

Once the war ended, Yardley faced returning to the State Department. Using his salesmanship, Yardley convinced the State and War Departments to finance jointly a permanent cryptanalytic bureau. In May 1919, Army Chief of Staff Peyton C. March and Frank L. Polk, acting Secretary of State, approved Yardley's plan. Of the recommended \$100,000 budget, \$40,000 was to come from the State Department and \$60,000 from funds allocated for "Contingency Military Intelligence Division" and not subject to review by the Comptroller General. 55 The budget broke down as follows: rent, light, and heat—\$3900; reference books—\$100; Yardley's salary—\$6000; ten code and cipher experts—\$30,000; 15 code and cipher experts—\$30,000, a total of \$100,000.\$56

Since the State Department funds could not legally be spent within the District of Columbia, the unit moved to New York City. Here, out of the State and War Department's need for information was born the Black Chamber. The State Department in particular valued the Chamber's efforts, and when the War Department's share of the PY 1921 budget was cut to \$10,000, the State Department maintained its level at \$40,000. According to PYiedman, with United States at peace, the Chamber's work mainly interested the

State Department, and the majority of the funding this came from there. 57

After the war, friction between the United States and Japan grew, and one of Yardley's primary assignments was to break the Japanese diplomatic codes. The task required the remainder of 1919, but by Pebruary of 1920 the first translations of Japanese cables arrived by courier in Washington. Arthur Bliss Lane, a Poreign Service officer and liaison from the State Department to the Chamber may have arranged the courier service. ⁵⁸ From them on the Chamber deciphered diplomatic messages from various mations for an appreciative State Department.

Although perhaps not taken for granted as it is today, intelligence work was an accepted and expected part of the decision-making process in the 1920's. Besides cryptanalytic reports, G-2, the Chamber's parent organization, issued daily and weekly summaries of military, diplomatic, political, social, and economic events from around the world. These summaries circulated throughout the War and State Departments and the White Mouse. ⁵⁹ During the period immdiately after the war the Navy continued to rely heavily on the British Admiralty's Room 40. The Navy did maintain the Code and Signal Section created in 1917-1918, and during the 1920's it assumed many functions similar to those of the Black Chamber. ⁶⁰

The Chamber's role before and during the Washington Conference was that of an information provider to aid in the making of decisions and the formulation of plans. The value and use of the Chamber's information depended upon the individuals

receiving the information and their system for processing it.

Data furnished before the conference convened may have aided in
the preparation of the American position with subsequent
information reinforcing that position. The majority of the
information provided by the Chamber was of the routine sort that
shocks no one but over time fills in the picture of the other
party's capabilities and possible intentions. In such a case,
little hard evidence would exist that SIGINT influenced the
situation when in fact its role was of considerable importance.

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18 Paul M. Kennedy, ed., "Imperial Cable Communications and Strategy, 1870-1914," from War Plans of the Great Powers, (Boston: Allen & Unwin, 1979), p.77.
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19 Ibid., p.87.

²⁰Ibid., p.91.

21 Ibid.

 $$^{22}_{\rm David}$$ Kahn, The Codebreakers, (New York: The Macmillan Company, 1967), p.255.

²³Ibid., pp.259-61.

24_{Ibid.}, pp.261-62.

²⁵Ibid., p.306.

26 Ibid.

²⁷Patrick Beesly, <u>Room 40</u>, (London: Hamish Hamilton, 1982), pp.11-12.

28 Ibid., pp.16-17.

29_{Ibid.}, p.59.

30 Ibid., p.61.

31_{Thid., pp.151-52.}

32_{Ibid., pp.152-53}.

33 Ibid., p.154.

34_{Ibid., pp.155-56}.

35<u>Ibid</u>., p.159.

³⁶Ibid., p.160.

37 Ibid., p.162.

38_{Ibid., p.311}.

39 David Kahn, The Codebreakers, p.314.

⁴⁰_Lieutenant General Nicholas N. Golovine, The Russian Campaign of 1914, trans. by Captain A.G.S. Muntz, (Ft. Leavenworth: Command and General Staff Press, 1933), p.172.

41 David Kahn, The Codebreakers, p.282.

42 Patrick Beesly, Room 40, pp.207-15.

43 Ibid., pp.216-18.

44William F. Friedman, A Brief History of the Signal Intelligence Service, (Washington D.C.: National Archives, Record Group 457, SRH-029), p.1.

45_{National} Archives, <u>Riverbank Laboratory Correspondence</u>, 1919, (Washington D.C.: Record Group 457, SRH-050), pp.3-12.

46 David Kahn, The Codebreakers, p.351.

47 Ibid., pp.351-52.

48National Archives, <u>A Selection of Papers Pertaining</u> to <u>Herbert O. Yardley, 1917-1950</u>, (Washington D.C.: Record Group 457, SRH-038), p.l.

49 David Kahn, The Codebreakers, p.352.

⁵⁰Ibid., p.353.

51_{Ibid., pp.353-54}.

52 Herbert O. Yardley, The American Black Chamber, (Indianapolis: Bobbs-Merrill, 1931), pp.217-18.

53 Patrick Beesly, Room 40, p.249.

 $^{54}\mathrm{Herbert}$ O. Yardley, The American Black Chamber, pp.224-30.

55William F. Friedman, A Brief History of the Signal Intelligence Service, pp.3-4.

56 Ibid., p.3.

57 Ibid., p.6.

58 David Kahn, "The Annotated The American Black Chamber," Cryptologia, vol.9, no.1, January 1985, p.26.

59Richard D. Challener, ed., <u>United States Military</u>
<u>Intelligence</u>, (New York: Garland Publishing, Inc., 1979),
editor's introduction.

60_Laurance F. Safford, <u>A Brief History of Communications</u>
Intelligence in the United States, (Washington D.C.:
National Archives, Record Group 457, SRF-149), p.4.

The major powers had discussed the possibility of an arms limitation conference since the end of World War I. Since many of the proposals had elicited negative responses from the United States, both the Japanese and British believed that the United States would have to originate and host a conference; otherwise she would not attend. ⁶¹ By the summer of 1921, the United States had concluded that a conference to limit armaments would be in its interests. Secretary of State Hughes issued informal invitations to Britain and Japan in early July 1921, hoping to easin the infitiative with respect to conference proposals.

After Britain and Japan responded favorably to the proposal, Mughes busied hisself with obtaining the information necessary to formulate the American position and safeguard American interests. This information came from a variety of sources, including the Black Chamber. The Chamber supplied the bulk of its preconference intercepts during the month of July. A July 4 cable from Baron Hayashi Gonsuhe, Ambassador to London, commented upon the disagreement in British circles over continuing the Anglo-Japanese Alliance. According to Lord Curzon, British Foreigh Secretary, there was no need to hurry in resolving the question; in order to insure peace and stability in the Far East, the alliance would remain in force after the July 13 expiration date. Some British believed the circumstances that had created the alliance had changed and questioned the alliance's necessity. No longer concerned over India's safety, they wished to explore

other possibilities for insuring peace in the Pacific and Par East. In this cable, Curzon casually proposed holding a Pacific conference in the United States. It was this proposal, made public in the House of Commons on July 7, that prompted Hughes to seek the initiative in the calling of the armaments conference.⁶³

Immediately after informal invitations were issued, the Chamber deciphered cables indicating two obstacles to be overcome before the conference would take place. In cables to the home government in Tokyo, Ambassador Hayashi advised accepting the invitation and worrying about the conference agenda later. 64 Whether to accept the invitation first or to determine if the agenda would be limited to armaments only or possibly include broader Pacific and Par East issues preoccupied the Japanese throughout July. Lord Curzon further complicated matters when he inquired about holding a preliminary meeting in London to discuss the Pacific and Par East questions and possibly set the agenda for the main armaments conference. 65 The two obstacles then were to settle the agenda issue and deal with the unexpected suggestion of a preliminary meeting in London.

For Tokyo, whether to attend the conference and the scope of the agenda became intertwined. The Japanese ambassador to Paris cabled Tokyo on July 11, arguing that it would be dangerous to accept the invitation blindly without any concrete idea of the agenda. Still, since the Japanese public seemed to support armament reduction, the ambassador thought it a good opportunity to "do away with the militaristic element in our foreign policy. *66 Officials in Tokyo told the American Chargé
d'Affaires Edward Bell that they would agree to deal with
armaments limitation or reduction, but they must know the scope
of the other topics before they commit their government to the
conference. Bell in turn relayed to the Japanese that the United
States wished to combine arms reduction and Pacific and Far East
policy into one conference. This put the United States at odds
with Great Britain and left the Japanese unsure of what course of
action to take. 67

By the third week of July, the situation had polarized, with the United States desiring one conference in Washington to deal with armaments and any relevant Pacific and Far East issues. In contrast, Lord Curzon proposed a preliminary meeting in London during August which the Dominion premiers could attend. Due to the peculiarities of diplomatic intercourse, neither nation had made its position completely clear nor asked for a definite yes or no answer to its proposal.

This situation left Japan in the middle and somewhat confused. The Japanese considered araments limitation and the Pacific issues as two different subjects, not to be combined at one meeting. On the other hand, Japan had not expected to be in the position of the possible swing vote on the issue of one conference or two, and possibly alienate either Britain or the United States. On July 14, Ambassador Haysahi in London asked the home government if it knew the agenda. On The next day Tokyo cabled London inquiring if the United States objected to a conference in London. On the 21st, Haysahi informed

Tokyo that Lord Curzon desired a preliminary conference in London, and suggested that Japan should make it clear if she supported either the United States or London for the site!

The Black Chamber continued to keep Hughes informed as the situation developed. By following the course of events through the intercepts and his own communications, Hughes concluded that Japan was not really concerned over the preliminary meeting and was not working with Britain against the United States. At the end of July, Tokyo cabled its London ambassador that it felt caught in the middle over the Pacific conference question. Tokyo then indicated its concern with the nature of the preliminary meeting, which, according to Lord Curzon, would create guarantees parallel to the Anglo-Japanese Alliance to assure peace in the region.⁷²

In addition to deciphering cables that reassured Hughes that Japan and Britain were not in league against him, the Chamber furnished intelligence which disclosed that the ambassadors were pressuring Japan to attend the conference. As a new international power, Japan was sensitive to world public opinion and criticism by the established powers. The Japanese believed that their recent problems in the Pacific and Far East, such as with China, had been "overly magnified" and that Japan had been made the "goat" for all problems in the region. 73 On the 13th, Ambassador Hayashi sent two cables to Tokyo recommending acceptance and that Japan should respond to world public opinion, for too long a delay would result in speculations and suspicions of Japan's good intentions. ⁷⁴ From Washington, Barch Shidehara

Kijuro informed Tokyo that Britain had prematurely announced that discussions about a Pacific meeting were underway and that Hughes had decided to combine the broad topic of Pacific and Par East policy with armaments. Shidehara then pointed out that Japan was the only power that had not yet accepted its invitation to the conference and that it must be careful not to create the impression of blocking the conference.

The issue of a preliminary conference persisted until mid-August. Hughes maintained that one conference in Washington would serve everyone's purpose more effectively than adding a supposedly "informal" meeting to discuss the agenda and Pacific and Far East policy. As the conference host, Hughes had only to wait on the British decision. Since Britain had already accepted the invitation to Washington, Lord Curzon had little choice but to give up on his preliminary meeting. Curzon then declared the whole agenda and conference to be America's responsibility and would have nothing more to do with defining them. ⁷⁶

In the last week of July and then again in September, the Black Chamber deciphered several cables which indicated the general approach of Japan in reference to the conference agenda. In the last week of July and then again in September, the Black Chamber deciphered several cables which indicated the general approach of Japan in reference to the conference agenda. In a cable to Ambassador Shidehara in Washington, Tokyo outlined a policy strategy. Concerning the Pacific and Far East questions, Japan wanted to take the initiative and introduce some of the issues such as the Open Door and equal commercial

the Shantung peninsula from Germany during World War I and her continued control of the region was one of the compromises President Wilson reluctantly made at the Paris Peace Conference. Now, two years later, not everyone was content that Japan still occupied Shantung and Japan was sensitive about the issue. If the broader question of China arose, the delegation was to point out the liberal policy that Japan had formulated with respect to China in December, 1918, which included: a) abolishing exterritoriality b) abolishing spheres of influence c) the withdrawal of foreign troops and d) ending the Boxer indemmity. 77

Japanese ambassadors sent several other suggestions to Tokyo in July. The ambassador in París favored the abolishing of spheres of influence as stipulated in Japan's China policy on the grounds that the Open Door would favor Japanese economic penetration into areas presently closed to her. From London, Ambassador Hayashi recommended that Japan handle Chinese issues directly with China and not submit them to a conference as China desired. Hayashi also passed on Under Secretary Crowe's comments that the purpose of a Pacific conference would be to reach general agreements which would insure peace in the Pacific. 78

In September, Tokyo finally received some hard data on the agenda. In a discussion with Ambassador Shidehara, Hughes suggested a number of topics including the territorial integrity of China, the Open Door, railroads in China, and League mandates. The topics were indeed broad, with Hughes even proposing the powers deal with the Chinese Eastern Railway, which belonged to

the Soviet Union! According to Hughes, the powers could act as trustees until a "lawful" government was set up in Russia. Shidehara acknowledged to Tokyo that it would be difficult to prevent specific topics from being brought up when the agenda covered so much, but "accomplished facts," as he put it, could be defended. He therefore recommended that Japan be fair but firm when her interests were at stake. 79

As the convening of the conference approached, Hughes received two final pieces of information in October. According to a military intelligence summary, Japan's chief objective at the conference would be the non-fortification of Pacific possessions. Quam must not be fortified; and Hawaii, the Philippines, and the Panama Canal must be de-fortified. Apparently, this was part of a grand strategy which placed non-fortification as a higher priority than fleet ratios and dove-tailed with the information provided by the Black Chamber. 80

The Black Chamber's final piece of intelligence related to armaments and fortifications. On October 20, Tokyo cabled the Japanese delegation in Washington their opening position. They were to inform their counterparts that Japan might be willing to modify the size of her army and navy, both present and building. To do so, it would be necessary for Japan to maintain her "proper ratio" with the United States and Britain and for the status of the Pacific region to remain substantially unchanged. 81

Hughes incorporated this information plus ideas of his own and that of colleagues into the decision-making process. The US

delegation was well aware of its Navy's wish to keep a large fleet and to fortify America's Pacific possessions. Secretary of War Elihu Root inquired about the possibility of Congress appropriating the required funds for the Navy's plans. Senators Henry Cabot Lodge and Oscar Underwood informed Root that there was no chance Congress would fund the Navv's proposals. 82 Thus, the shortage of military appropriations might force the United States to work to maintain the status quo in the Pacific; otherwise any building by other powers would leave the United States at a disadvantage. Japan also favored maintaining the status quo in the Pacific. Due to her close proximity to the various Pacific possessions, Japan could more quickly move her naval and military forces to a specific area than could the United States or Great Britain. If the naval and fortifications status duo were maintained, then Japan would save a great deal of money while preserving her geographic advantage for concentrating naval and military forces. Since as much as one-third of Japan's national budget was going into naval construction, the savings were potentially substantial and could be used in other sectors of the economy. 83

Hughes did receive information before the conference that contrasted with that of the Black Chamber, military intelligence and congressional leaders. In July, Secretary of the Navy Edwin Denby requested that the General Board of the Navy prepare a study on the limitation of armaments to provide Hughes with the Navy's analysis of the situation. The Board's study advocated a stronger navy and continued fortifying of US outposts in the

Pacific. Reflecting a distinctly social Darwinistic outlook, the Board stated: "All life is a constant struggle for existence, not only for life but existence on a higher plane." To be successful in its struggle, the Board recommended a world class navy with a 2:1 naval ratio to Japan to offset her geographic advantage. Also, the Board strongly argued against the raring of American fortifications in Manila, Oahu, and Guas. "A set against congressional refusals to provide the necessary expenditures, signals intelligence decrypts that Japan would reduce armaments, and Hughes' own desire for concrete results at the conference, the General Board gave ground. Although it provided information for Hughes to utilize in formulating policy, the General Board's views were utilizately not adhered to.

After studying the situation prior to the conference, Hughes concluded that the naval ratio should be established on a "stop now, as is" basis. He believed that if each power bargained on the basis of its own specific needs, the negotiations would result in an endless round of escalating requirements. BS Still, Hughes maintained that the United States must build up to treaty limits to insure her relative naval strength. BS Later, Hughes concluded that nonfulfillment of these limits resulted in future conference failures such as London in 1930.

By the time the Washington Conference convened on Movember 13, a great deal of information had been provided to Secretary Hughes and the American delegation from various sources, not the least of which was the Black Chamber. The majority of the deciphered cables had dealt with three subjects: first, Japanese concern over the imminent expiration of the Anglo-Japanese Alliance; second, the confusion over the agenda, preliminary meeting and whether Japan should accept her invitation; and third, what Japanese policy was likely to be once the conference opened.

Japan's concern over the Anglo-Japanese Alliance assumed potential significance since it coincided with a high probability that the US Congress would not appropriate the money required to enlarge greatly the US Nawy, nor construct the desired fortifications on America's possessions. The problem of fiscal cutbacks meant that for practical purposes Hughes would need to maintain the status quo in the Pacific or the United States would possibly become strategically vulnerable. The British desire to re-evaluate and replace the Anglo-Japanese Alliance left Japan with the choice of preserving the status quo in the Pacific or of spending vast sums to insure Japan's strategic security. Being aware of both the American and Japanese situations allowed Hughes to concentrate on the naval ratio issue, which he deemed vital, and to use the non-fortification issue for bargaining purposes if necessary.

Reading the series of decrypts provided by the Chamber about the agenda and preliminary meeting issue supplied Hughes with several pieces of useful information. First, the confusion in Tokyo and among the various ambassadors strongly implied that Japan and Britain were not coordinating their positions for the conference, which had been a genuine concern of Hughes. In fact, it was clear that Japan cared little about the preliminary meeting issue, wishing only to avoid taking sides and to obtain some idea of what the agenda would include. Hughes' awareness of Japan's indifference to a preliminary meeting made it easier for him to resist such British proposals. Secretary Hughes had simply to recommend combining the Pacific and Far East issues with the armaments conference and remain firm. This required Britain to accept the invitation "as is" or place herself in the awkward position of holding out for a preliminary meeting.

The Japanese cables dealing with conference policy revolved mainly around China, the Pacific, and how to deal with undesired topics. It was not until the final cable on October 20 that Tokyo discussed the armaments aspect of the conference and even then it shared attention with the strategic situation in the Pacific. Apparently, Japan's principal concerns were of a grand strategic nature and related to geography and regims. On the other hand, the centerpiece of the conference to Hughes was the naval limitations issue. The near certainty that Congress would not provide the funds for a strategic build-up in the Pacific left Hughes little choice but to concentrate on the naval ratio. The SIGINT decrypts' indication that Japan was preoccupied with China and the Pacific meant that Hughes could, if he chose, use the status quo in the Pacific as a tool to achieve naval

When Hughes opened the conference on November 13, 1921, he immediately took the initiative and made a specific proposal for naval reductions along with the customary welcome to the delegates. Bughes' opening statement reflected both his personal

views on disarmament, and also the various information he had received from intelligence services and collegues indicating that domestic and world opinion welcomed the possibility of significant reductions of military and naval armament. Hughes' proposal contained a "naval holiday" which would stop construction and place a ten-year moratorium on the building of capital ships. He then described a plan to reduce the existing fleets based upon their current size with the United States scrapping thirty ships, Great Britain twenty-three and Japan twenty-five. The result would be a ratio of 10:10:6, roughly the same as before the reductions. The scope of the plan surprised most of the delegates, who expected the typical opening speech of welcome and generalities. In fact, the Japanese had not even established guidelines for naval ratios by the opening of the conference. 87 As one commentator put it, "Hughes sank in thirty-five minutes more ships than all the admirals of the world have sunk in a cycle of centuries."88 At a press reception later that day, Baron Kato joined in the spirit of the conference by pointing out that Japan's naval program was defensive and that she did not wish to challenge or rival the American or British navies.89

Although Hughes also brought up the subject of Pacific and Far East questions in his opening speech and recommended parallel discussions, his main interest appeared to the Japanese to lie with armaments reduction. Accordingly, Baron Kato attended the meetings on armaments reduction and Baron Shidehara those meetings dealing with Pacific and Far East issues.

The Black Chamber continued to monitor the Japanese diplomatic communications. The day after the conference opened, Ambassador Hayashi in London cabled Tokyo his reactions to Hughes' opening speech. While stating that there existed room for changes in detail, Hayashi voiced general approval for the plan. He advocated using the money saved for internal improvements and argued the urgency of changing the present policy from military preparations to one of national

On the 16th a cable from the Japanese delegation in Washington to the home government contained what was evidently the delegation's middle plan in response to Hughes' opening proposal. This plan included a 1017 ratio for American-Japanese naval strength and an equality in aircraft carriers. Also, the delegation made it clear that there might be further changes in the future, dependent upon the results of the negotiations. 91 Tris significant to note that the Japanese desire for a 10:7 ratio originated in Washington rather than Tokyo. Thus, this condition does not appear to have been a preconceived and integral part of Japanese defense policy, fixed and nonnecotiable.

Within days of the opening session, the Japanese delegation wavered somewhat on the ratio issue. When members of the Japanese press corps expressed reservations about Japan's insistence on a 10:7 ratio, Baron Kato called a special news conference for the afternoon of the 17th. There he insisted upon the absolute necessity for the 10:7 ratio to safeguard Japanese

national defense. In contrast to this statement, Kato called a second press meeting a few hours later where he then stated that Japan should maintain a naval ratio of "slightly greater than sixty per cent." What occurred in those intervening hours is not clear as the surviving records of the Black Chamber hold no evidence of instructions from Tokyo. Since the cable informing Tokyo of the delegation's desire for a 10:7 ratio had been sent only the day before, it is unlikely that the home government would have immediately responded with instructions for the delegation to lower their demand. It seems more plausible that Baron Kato acted on his own or with the delegation's approval in modifying the desired ratio. The original 10:7 ratio demand had originated in Washington, and, at the time, the delegation had informed Tokyo that it might be necessary to make changes and amendments to the Japanese position.

Further evidence that the Japanese delegation modified its own 10:7 ratio was contained in a cable from Tokyo to Washington on the 19th. In it the home government stated that to attain the 10:7 ratio the United States need not acrap more ships but allow Japan to retain the <u>Hutsu</u> and <u>Aki</u>. The home government hoped the instructions in this cable would be the final basis of the ratio agreement. Indeed, Tokyo included three variations of this plan for negotiating purposes, with ratios ranging from 10:7.5 to 10:7. This occurred after Kato's press comment about a ratio of "Blightly greater than sixty per cent." 93

Using these early decripts Hughes might have reached two conclusions: first, that the 10:7 ratio counterproposal

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originated with the Japanese delegation and not the home government; and second, that the modification of the 10:7 demand by Baron Kato also originated in Washington. From this Hughes may further have concluded that the Japanese delegation's views would carry a great deal of weight with Tokyo and that pressure brought to bear on the delegation could pay dividends in the long-run. Further decripts from the Chamber would help confirm whether the Japanese were indeed inclined to be flexible and compromise.

In addition to the Black Chamber's decripts, Hughes was also receiving reports from Ambassador Warren in Tokyo. On November 17 Warren talked with Prime Minister Takahashi, who indicated that the Japanese government was satisfied with the naval proportion, with "alight modifications." On the 19th Warren reported that the Japanese Cabinet had no problems with the arms proposals and intended to leave the details to Baron Kato. Summing up the situation as of the 23rd, Warren concluded that there was no reason for making great concessions to Kato. The Japanese government strongly desired an agreement, and Warren did not expect them to support Kato should he take an "extreme" position. 6 Warren's information coincided with that of the Chamber: thus far, Japanese policy had originated in Washington and Hughes should concentrate his attention on the Japanese delegation.

Hughes responded to Warren on November 27. In his view, the Japanese could not justify their 10:7 ratio demand with facts. The American position was both fair and accurate. It reflected the naval balance as it then existed and to tamper with Hughes' opening proposal would only arouse American public opinion against Japan. Thus, Hughes intended to stand by his original proposeal, 97

Two cables, dated 21 and 22 November reported to Tokyo Hughes' response to Japan's desire to raise Hughes' original ratio to 10:7. According to one report, Hughes stated to American and foreign correspondents that his ratio proposal gave fair representation to all three powers and that the United States resisted any change. Other news stories emphasized that Britain supported the American proposal and that Japan would ultimately have to agree to the 10:6 ratio. 98 The delegation also stated that the American press had adopted a generally positive tone about the conference's outcome due to the perception that Japan did not have a strong bargaining position and would yield on disputed points.

On November 28 the Chamber intercepted a cable from Tokyo containing instructions to the delegation for negotiating the naval ratio. The home government made it clear that the delegation must avoid any "clash" with the United States and Great Britain on the issue and that the delegation should adopt a moderate attitude in achieving the Japanese objective of a 10:7 ratio. If necessary, the delegation could fall back upon its proposed 10:6.5 ratio. Should agreement still elude them, the delegation could then move to the third plan of a 10:6 ratio with the Mutan substituted for the Settsu, an older ship, and an agreement which would reduce fortifications or maintain the

status quo of the Pacific defenses. Tokyo desired that plan number four (Hughes' original 10:6 ratio) be avoided if possible. ⁹⁹

A November 28 cable to Tokyo dealt with American public opinion, with the delegates reporting a generally optimistic belief in the United States that a compromise would be reached. In order to maintain the goodwill of the American press and public, the delegation strongly requested that the home government prevent Japanese domestic opinion from running to extremes. 100

The significance of the November 28 cable from Tokyo lay in its outlining of Japanese negotiating plans which Hughes could study. Also, it introduced the possibility of tying the ratio question to the Pacific defenses issue as a way to reach an agreement. The knowledge that the Japanese public opinion might be government directed to a large extent undercut its usefulness to the Japanese negotiating position. Whether Hughes seriously concerned himself over Japanese domestic opinion is unclear, but this information could have led him to discount it even further.

Warren again reported to Hughes on November 30, pointing out that a Japanese newspaper demand for the 10:7 ratio evidently originated in Washington under direction of the Japanese delegation. They had hoped the press coverage would strengthen their bargaining position. Warren then stated that the demand did not seem to have strong support in the government. 101 Coming on the heels of Tokyo's orders to avoid a "clash" with the United States and Britain, the newspaper demand appeared to have been an effort by the delegation to create outside support for their position. This would avoid the appearance of stubborn intransigence on their part. Unfortunately for the delegation, the effectiveness of such a move was undercut by the information Buches received from the Chamber and Ambassador Warren.

The issue of the Japanese 10:7 ratio amendment versus Hughes' 10:6 ratio continued into December. Baron Kato voiced some unease over the deadlock in a cable to Tokyo on December 1. He first pointed out that, in contrast to Japanese public opinion, the American delegation had relegated Far East questions to a secondary position and had concentrated on naval reductions. Despite Japan's continued desire for a 10:7 ratio, the American public still maintained a friendly attitude toward Japan. Kato believed this reflected the conclusion that Japan would ultimately accept the Anglo-American position. Significantly, Kato pointed out that should American and British opinion turn against Japan and "adopt a policy of exerting pressure upon us," the conference would probably fail. Such a failure would then result in a naval race in which the Japanese navy would be reduced below the sixty percent ratio they now opposed. This potential outcome would be worse than any of the possibilities discussed at the conference and the likelihood that there would be no Anglo-Japanese Alliance or a status quo agreement for the Pacific compounded the problem. 102

Baron Kato sent a cable to Tokyo on December 2 in which he recounted his interview with Lord Balfour. At the meeting Kato informed Lord Balfour of the importance of the 10:7 ratio and the

retaining of the <u>Mutsu</u> to Japan and the difficulty of abandoning this position. Lord Balfour evidently feared that the conference might founder on the ratio issue but had little constructive to add. Kato then informed Tokyo of the delegation's difficulty in maintaining its stand and feared that a deadlock on this issue could result in a negative perception of Japan which would spread to other issues under negotiation. He concluded with the comment that Hughes had shown interest in the Pacific defenses question. That the naval ratio and the status of the Pacific would be tied together in order to reach a general agreement now became more likely.

In a second cable that day, Kato relayed to Tokyo that the American press now criticized Japan's 10:7 ratio amendment. The press stories indicated a belief that Japan was stalling on the ratio in order to gain concessions on Far East issues. Significantly, Kato also mentioned that it was conjectured by the press that Japan wished to link the naval ratio to the "abolition of various Pacific island fortifications."

As is often the case, the press speculations were not far from the truth. At a meeting with Lord Balfour on December 1, Baron Kato indicated the importance Japan attached to rumors that America was spending vast sums in the Philippines and Guam. The Japanese people interpreted these reports "as an American menace" which made it difficult for Baron Kato to consider the naval ratio and Pacific fortifications separately. Balfour then asked if an understanding on the Pacific defenses question might serve as an explanation to the Japanese people about the 1016 naval

ratio agreement. Kato replied that such an understanding would help and approved Lord Balfour's informing Secretary Hughes of the conversation. However loosely and informally, the naval ratio and the Pacific defenses had been linked. 104

A meeting between Hughes, Kato, and Balfour on December 2 clearly pointed out the value of SIGINT in conjunction with Warren's reports from Tokyo. At the meeting Kato stated that Japan sincerely desired an agreement to reduce and limit naval armaments. This was evidenced by his statement in March 1921 that Japan might give up part of her 8-8 naval program. He then stated that the 10:6 ratio was not satisfactory, and that he supported his technical experts' views that the 10:7 ratio, originated in Tokyo, was necessary for Japanese security, and that the Japanese Government and Parliament supported this position. 105 While it may have been true that the Japanese government desired the 10:7 ratio, Hughes was well aware that the proposed amendment had not originated in Tokyo, nor was the home government giving Kato carte blanche support, as his comments implied. Hughes' reading of the Chamber's decripts and Warren's reports certainly made it easier for him to evaluate the Japanese negotiating position and to conclude how much stock to place in Kato's comments. Hughes wanted to keep the 10:6 ratio as part of his overall naval limitation program and evidence slowly began to amass that he could achieve his ratio by using the status quo of the Pacific defenses as a bargaining chip. The great advantage in this was that the United States would not build extensive Pacific fortifications at the time, thus maintaining the status

guo of the region would suit Hughes perfectly.

Interest by the powers in using the Pacific defenses issue as a lever to reach a general agreement continued. A few days after the Kato-Ralfour meeting, the Rlack Chamber deciphered a cable from Tokyo with further instructions for reaching an agreement based upon the status quo. In this cable, the Japanese government made clear that the home territories of the signatory powers must not be included. Since none of the three powers wished to open their home territories to claims that might jeepardize their security, it was desirable to specifically exclude home territories. 106

The Japanese delegation received a cable the following day from Tokyo responding to the delegation's concerns of November 28 and December 1 about Japanese public opinion. This cable clearly stated that the national government had attempted to guide the course of public opinion away from extremes as requested. To support the delegation's advocacy of the 10:7 ratio the government believed it necessary that the people favor this position and so "cooperated with the ministry of the navy and guided certain suitable Japanese newspapers and foreign correspondents." Tokyo then stated that it would not be able to control public opinion and the media much longer. Should it continue to appear that Japan would concede on the 10:6 ratio, the government anticipated a rise in the nationalist party and among active and retired military organizations that rejected the ratio. 107

The delegations spent the first week of December slowly

exploring the possibility of combining the naval ratio and the question of the Pacific status quo into one agreement. Warren and Hughes exchanged cables that charted the course of events. According to Warren, the Japanese Government had begun preparations to inform the Japanese public that the naval ratio was but one part of the fundamental agreement on Pacific and Far East issues. Also to be included were the Anglo-Japanese Alliance and Pacific fortifications, 108 Hughes described the general situation in Washington to Warren, elaborating on his view that there were differences between fortifications. The home islands of Japan, Hawaii, Australia, and New Zealand contained defensive fortifications, while the Philippines and . Guam, plus their British and Japanese counterparts were offensive in nature and could be limited. 109 Warren then followed with cables on the 7th and 10th. In these, he stated that Uchida had informed the Privy Council that the United States was fair in its negotiations and that the 10:7 ratio would not be insisted upon. Rather, the ratio was part of a total package to be negotiated. Also, the Japanese government appeared to accept the 10:6 ratio and did not support Kato's demand for a 10:7 ratio. 110

The negotiations had entered a new phase, with the Pacific status quo playing as important a role as the naval ratio. This was particularly significant for Japan. The Japanese government had always been at least equally concerned with the question of stability in the Pacific and Far East. Now, with naval armaments connected to the Pacific status quo, the home government could deal more fully with the latter while presenting the two issues

to the Japanese people as a package that included compromises, such as the 10:6 ratio, in order to reach an overall agreement.

A week of intense activity began on December 12, as the three delegations continued to directly link the naval ratio and Pacific defenses. In the first of three cables exchanged on the 10th, Baron Kato reported the general views of the delegation. He informed Tokyo that Hughes would consider the Pacific defenses question but believed it involved the interests of Great Britain, France, and the Netherlands as well. Kato hoped to avoid complicating the situation and so did not inquire into any details Hughes might have. With respect to the Pacific defenses, Kato believed that to include Hawaii as the army and navy ministries wished would result in another deadlock. He therefore recommended that the delegation concentrate on the non-fortification of the Philippines and Guam. The delegation decided to avoid discussing the Japanese islands if possible but if pinned down, would propose to maintain the status quo in Kirun, Bouko, Ogasawara, and, if necessary, Amami-Oshima. The vital point for Japan was the inclusion of the Philippines and Guam in an agreement. If Hong Kong, Singapore, and any French territory was added, so much the better. 111

The two cables from Tokyo responded to the delegation's earlier messages about the naval ratio and fortifications issue. Due to the resistance of the United States and Greæ Britain, Tokyo dropped the demand for a 10.7 ratio. In order to achieve success at the conference, the 10.6 ratio would have to be accepted. The Japanese government decided that to

counter any unease created by this concession, an agreement on the maintenance of the status quo of the Pacific would be necessary. Tokyo then proposed that the status quo be maintained on "Pacific islands remote from any mainland--outlying insular possessions." In reference to Hawaii, the home government did not object to its exemption should the United States strongly oppose its inclusion. Essentially, these two cables laid out the Japanese bargaining position for the second phase of the negotiations: the reconciling of the 10:6 naval ratio and the maintenance of the status quo in the Pacific. 112

A cable from Washington on the 13th provided an overview of a meeting between Kato, Balfour, and Hughes, as well as the progress of the negotiations. First, Hughes made it clear that, although he approved of a status quo agreement in exchange for the 10:6 ratio, he could not allow Mawaii to be included. Balfour then followed suit, agreeing that Mong Kong would be included in the agreement while Australia and New Zealand would not. 113

In this same meeting, Hughes brought up the one remaining issue of the naval ratio agreement: the status of the Nutsu. The Japanese still claimed it as a completed ship and part of their sixty percent while Hughes supported his naval experts' conclusion that the <u>Mutsu</u> was unfinished. Depending upon the version heard, the <u>Mutsu</u> received her commissioning on November 12, before the conference, or December 1, after it convened. Hughes stated that retention of the <u>Mutsu</u> would upset the ratio and recommended adjourning until the next day while the naval

specialists examined the problem.

To sum up the situation as of December 12, the 10:6 ratio had been agreed to, but it had not been established whether the ratio would be based upon the inclusion of the Mutsu in the Japanese fleet or not. In exchange for the ratio, the United States and Great Britain agreed to maintain the status quo in the Pacific in reference to the Philippines, Guam, and Hong Kong, excluding home territories, Hawali, Australia, and New Zealand. Further than that the delegates had not really considered, and this resulted in further complications.

Over the next three days, Baron Kato, Secretary Hughes, and Lord Balfour continued negotiating the naval ratio. Hughes and Balfour ultimately agreed to include the <u>Mutss</u> in the Japanese fleet. Por compensation the United States would exclude the <u>North Dakota</u> and <u>Delaware</u> and retain instead the <u>Colorado</u> and <u>Washington</u>. The trio wrapped up the naval ratio on the 15th when they agreed that to maintain her proper ratio, Britain would construct two new ships of 35,000 British tons each and then scrap four ships of the <u>King George</u> class. It now remained to hammer out the details of the status quo agreement.

The discussions of the 15th also touched upon the status quo agreement, and Kato cabled his thoughts on the subject to Tokyo. The meeting resulted in a "provisional agreement" between the three powers, but details had not been worked out. In particular, Kato avoided discussing the phrase "islands composing Japan proper," which was included in the agreement. He claimed that it was not necessary to define the term at that time and

feared that a final interpretation might not correspond "to the substance of the negotiations" which he had carried on up to that point.

It is difficult to reach a clear understanding of the Japanese position on the question of "islands composing Japan proper," in that as the negotiations continued, Baron Kato and the home government often seemed at Odds with each other. Kato's secretary at the conference, Ichihashi Yamato, believed that Kato favored Hughes' and Balfour's interpretation that Amani-Oshima and the Bonin Islands should be included within the status quo area but could do little about it except stall the issue. Ichihashi also believed that there were officials in Tokyo that disliked Kato and, on occasion, worked to put him in an awkward position during the negotiations. 114 Whatever the truth, the interpretation of "Japan proper" remained an issue throughout the negotiations of the Pacific status gou careewest.

In his recommendations, Kato argued that maintaining the status quo of the Philippines and Guam was "very advantageous to the national defence of Japan." In return, Japan should allow the inclusion of Formosa and the Rouko Islands in the agreement. Also, Kato argued that the Bonin Islands and Land-Oshima be defined as integral parts of Japan. Although as such they would be exempt from the non-fortifications agreement, continued construction of fortifications should be stopped. 115

Baron Kato recounted the progress of the negotiations in two cables of December 23 and 24. To the Japanese consul in San Francisco Kato again emphasized that the inclusion of the

Philippines and Guam in the status quo agreement achieved "our objects for our national defence."116 In both cables Kato pointed out that Japan's obligated possessions still had not been identified. In the joint statement issued December 15, the three powers agreed to maintain the status quo "in regard to the fortifications and naval bases in the outlying insular possessions in the Pacific region, including Hongkong, but excluding the Hawaiian islands, Australia, New Zealand and the islands composing Japan proper." 117 Kato concluded the cable with Lord Balfour's insistence that Singapore be exempted from the status guo agreement.

The question of just what "Japan proper" consisted and just how wide-ranging the agreement would be surfaced in early January. In a cable to the Chief of Staff in Tokyo, General Tanaka, head of the delegation's army advisors, informed Tokyo that the Americans and British had concluded that specific details were needed concerning Japan's obligations. At the same time, Tokyo also decided that the point needed clarification and instructed the delegation that Amami-Oshima and the Ogasawara Islands would be part of Japan proper as they came under internal administration. Since Sakhalin had not come up and Japan's South Pacific islands were covered by mandate provisions, these would be exempted from the status quo accord. The possessions included would be limited to Formosa and the Pescadores. 18

The specific obligations of maintaining the status quo now captured everyone's attention. With the benefit of the deciphered Japanese cables, Hughes could speculate that Tokyo

wished to give away as little as possible on this issue. At the same time Hughes and Balfour now realized that the December 15 statement encompassed much more than they had expected. Everyone now saw the need to reconsider the scope of the status quo agreement, 119

Tokyo desired that the original statement of December 15 remain the basis of the status quo accord, but this was not to be. At a meeting of the three dignitaries on January 10, Lord Ralfour proposed that status quo territory be restricted to an area between 110 and 180 degrees east longitude and between the equator and 30 degrees north latitude. A cable from General Tanaka informed Tokyo of this development and also that the naval advisors were eager to restrict the fortifications of Guam and the Philippines. Baron Kato therefore believed it would be advantageous to accept Balfour's plan. General Tanaka favored standing on the earlier statement but believed that if concessions must be made then Kato should attempt to change the demarcation lines to 29 degrees north latitude and somewhere east of Ogasawara. This would exclude Yakushima to the north and most of the Pacific mandates in the western Pacific. Since these were covered under League of Nations mandate regulations, Tanaka saw no reason to formally restrict them with respect to the United States, 120

A series of three cables to the home government on January 11 and 12 revealed a division between the delegation and the home government. Tokyo last instructed the delegation to maintain the December 15 statement as the basis for the status quo agreement. After meetings with Hughes and Balfour, Kato no longer believed that they would support the December 15 statement and recommended compromise. In a lengthy message, Baron Kato attempted to explain the events that brought the powers to their present impasse. Essentially, the December 15 statement was issued in haste and without due consideration. British recognition that the statement covered the entire Pacific and all British possessions therein had prompted the new initiative from Balfour.

Conversations continued over the course of several days with the Americans and British advancing Balfour's plan plus the inclusion of Amemi-Oshima and Ogasawara, while the Japanese supported the original statement along with assurances that Japan had no intention of completing any fortifications on Ogasawara or Amemi-Oshima. Hughes and Balfour argued that, since Japan had achieved security with the status quo agreement, which she required as compensation for the 10:6 ratio, then she should allow the hasty and ill-conceived December 15 statement to be replaced by a more specific and detailed written agreement. Kato responded that Japanese public opinion would react unfavorably. Under continued pressure he recommended acceptance to Tokyo. The British proposal would not harm Japanese security, while Japan very much needed the status quo agreement. 121

Hanihara Masanao, filling in for an ill Ambassador Shidehara, sent a similar cable to Tokyo. Hanihara went on to point out that the Americans and British had become suspicious of Japanese intentions and that this suspicion could easily be transmitted to the public at large if care were not taken. Echoing Kato, Hanihara argued that the British initiative did not damage Japanese security and hoped Tokyo would allow the delegation to compromise on it. 122

Finally, Baron Kato sent a follow-up to his cable of the day before. Kato informed Tokyo that since the non-fortification clauses were a condition for the acceptance of the 10:6 ratio, non-agreement on the first would theoretically revoke the second. This would place Japan in a very disadvantageous position. Since Britain and the United States required the written inclusion of Amami-Oshima and Ogasawara in the agreement, Japan had three courses of action open to her: 1) assent to the new revised proposal 2) oppose the new proposal and stand on the published announcement 3) oppose the new proposal and withdraw the sixty percent ratio. Kato then concluded that only the first course was practical, "under the circumstances it is impossible to carry through our contentions and there is nothing to do but accept it."

Hughes' negotiating had been consistent in its course and objectives up to this point. He opened the conference with a proposed naval ratio of 10·10·6 plus a naval holiday and limits on construction, and maintained this position throughout, achieving it over a Japanese desire for a 10·7 ratio. Hughes also remained consistent on the non-fortification question. Hughes knew that the United States would not spend the money necessary for major fortification construction in the Pacific.

From SIGINT decrypts Hughes also knew how important maintaining the status quo in the Pacific, particularly Guam and the

Philippines, was to the Japanese. In addition to this, signals intelligence provided Hughes with information on Baron Kato's problems with Tokyo, a lack of harmony in policy and at times. a lack of support. These pieces of information reinforced Hughes' firm negotiating stance, at least until Balfour proposed to alter the status quo territory. The Balfour initiative reflected a realization of the problems inherent in the original statement. At that point Hughes agreed to support Balfour in the face of Japanese opposition. The information and tone of the three cables to Tokyo illustrated the brittleness of the Japanese opposition. This might have led Hughes to conclude that continued firmness would break down this opposition. The delegation bore the pressure of dealing face to face with Hughes and Balfour and then having to contact Tokyo for instructions. The Japanese delegates were keenly aware of the shifts in both American and world public opinion. The genuine desire for a successful conference bore heavily upon them as well, and a combination of these resulted in the delegation's urgings to Tokyo for compromise. Thus, pressure was transferred to the home government. All in all, the situation was not unfavorable from Secretary Hughes' standpoint.

Tokyo responded negatively to the new developments, considering the situation to be guite unfair. Not only did the Baifour initiative add an enormous obligation to Japan; it exempted American and British territories such as the Aleutian Islands and New Guinea. In addition, should the government agree to replace the December 15 statement with this new plan, it would

cause hard feeling among the Japanese people towards the United States and Great Bitiain, as well as toward the Japanese government. Tokyo stated that it was therefore impossible to change the text of the agreement but, significantly, concluded with the possibility of drafting an annex which would include Ogasawara and Amami-Oshima. By offering to add an annex to the statement, the Japanese government weakened its position; previously it would not formally consider including the two including

To emphasize the role of the media and public opinion on this issue, Tokyo cabled a survey of Japanese news stories to the delegation. All of the papers in the capital now addressed the issue, primarily focussing on Ogasawara. The consensus concluded that it was wrong to include Ogasawara within the restricted zone. The Asshi considered it unfair to restrain Japan from maintaining defenses on territory defined in Japan as "Japan proper." The Yorosu Choho classified the inclusion of Ogasawara as a "blunder" which "voluntarily" resulted in an endangering of the national defense. 125

The desire to settle the status quo question and avoid disrupting the conference influenced General Tanaka as well as the diplomats of the Japanese delegation. Cabling Tokyo on January 16, Tanaka indicated that Baron Kato believed Japan should continue to work for a compromise. In Kato's estimation, refusing to sign an agreement could only damage Japan's position and stature. Tanaka followed with his opinion that the compromises advocated by the Japanese government would probably

not satisfy Great Britain and the United States. Instead, Tanaka proposed that the three powers scrap the December 15 statement and begin again. If the United States, Great Britain, and Japan were to pledge in writing to maintain the status quo of the Philippines, Guam, Hong Kong, Formosa, Ogasawara and Oshima, all would achieve their objectives. Thus, one more voice joined those advocating a Japanese compromise. 126

The succession of cables from the delegation to Tokyo throughout January indicated their concern over the course of the negotiations on the status quo issue. Both the tome and substance of the communications provided information from which Hughes perceived a wavering on the part of the delegation. Certainly their acknowledgement of Tokyo's desires was tempered by their own doubts as to the feasibility of accomplishing the home government's objectives.

In a remarkable cable sent January 17, Kato actually put forward a defense of the American and British position. After acknowledging Tokyo's reasons why Japan must remain firm, Kato responded with two points. First, he commented that originally the status quo agreement aimed at removing an actual menace to Japan. From this basis Kato believed it difficult to justify not signing an agreement on the grounds that the December 15 text had been altered or discarded. The crux of the issue, Japan's security, would be achieved with Balfour's initiative as well as the December 15 statement. In his second point, Kato stated that the term "Japan proper" had been decided upon suddenly and without forethought. Although the Japanese naturally considered

Amani-Oshima and Ogasawara as included within this phrase and therefore exempted from the agreement, Kato had negated this by stating that Japan did not object to limiting fortifications on these islands. Thus, Kato reasoned that whenever Hughes and Balfour used the phrase they naturally did not include the aforeentioned islands. This cable must have made quite interesting reading for Hughes in that Kato was now doing Hughes' job for him by presenting the Anglo-American position. 127

Tokyo once more weakened its position in its instructions of January 21. Again arguing the significance of the published December 15 statement, Tokyo announced it could not permit any "considerable change" in the substance of the agreement. Tokyo then gave the delegation permission to negotiate an agreement to maintain the status quo of Amami-Oshima and Ogasawara as long as it was clear that these islands were included as part of Japan proper. Tokyo wished that the difficult position of the Japanese government be made known to Hughes and Balfour, but this time did not contend that their position was made inflexible by domestic considerations. 128

The negotiations continued doggedly. From a radio intercept it was learned by the Black Chamber that Kato again recommended acceptance of the British proposal. Kato had met with Balfour on the 22nd at which time Balfour sought to put any misapprehensions to rest. Hanihara then sent the first of two cables to Tokyo. In it he pointed out the delegation's difficult and awkward position of continually requesting instructions from the home government. Hanihara hoped the delegation would receive the

necessary latitude in order to settle the issue "by a prompt, decisive stroke." 129

At a meeting the morning of January 22, Baron Kato offered Hughes counter-proposals based upon instructions from Tokyo. The south part of Sakhalin Island would be exempted from the agreement but would remain unfortified as per the Russo-Japanese treaty. The Aleutian Islands would be included in the status quo agreement while the Kurile Islands would be exempted. There were numerous small islands south of Japan proper and these would have no naval bases established on them. Hughes and Kato then decided to meet again after they had separately discussed the situation with Lord Balfour.

At a meeting the evening of the 23rd, Hughes proposed that Alaska and the Panama Canal be excluded from the area of limitation. This reflected both an oversight on Hughes' part and the fact that Japan retained the freedom to fortify the Kurile Islands if she desired. Also, Hughes argued that Okinawa be included within the area of limitation. Since it was closer to the Philippines than Amami-Oshima, he would have difficulty explaining to the Senate the latter's inclusion while the former was excluded. Baron Kato then explained the domestic difficulty arising from the Okinawa proposal but Hughes stood firm and merely restated his propsal. Kato concluded that the United States would make no further concessions. He informed Tokyo of this and recommended that Japan accept Hughes' proposal. 131

Hanihara endorsed Kato's recommendation of acceptance and so informed Tokyo. According to Hanihara, if considered with

composure, Hughes' proposals relative to Alaska, the Panama Canal and Okinawa (the Loochoo or Ryukyu Islands) were not unreasonable. Since the delegation's military experts did not believe the new proposals made any strategic difference, Hanihara advised acceptance of Hughes' proposal. This would settle the issue and avoid damage to Japanese prestige by arguing for the right to fortify an island group south of Amani-Oshima, which Japan had already acreed would not be fortified. 132

By this point the delegates as well as the negociations were nearing the end. Abbassador Shidehara pointed out to Tokyo that the negotiations had lasted two and a half sonths and that the delegates were extremely tired. In order to shorten the conference, Shidehara and Hughes secretly agreed to slide over Japan's occupation of parts of Russian Siberia, a potential source of prolonged debate. Shidehara would explain the Japanese position and Hughes would follow with a history of past negotiations and the American position. At that point, Hughes would close discussion without the adoption of any concrete resolution or debate. As for the status quo issue, Shidehara saw no choice other than acceptance of the American and British proposals which he too considered reasonable. 133

Hughes briefly discussed the situation at a dinmer given by the Dutch minister the evening of the 25th. He pointed out to Kato that American public opinion had taken a negative turn in respect to Japan and that this attitude was being transferred to the Senate. Kato informed the Japanese government of this and argued that as Japan had achieved her original aims, an agreement should be reached immediately. Kato hoped that Tokyo could make a decision without the continued exchange of cables $^{1.34}$

Tokyo responded on January 28 with her final concessions. Although it would cause domestic problems, the inclusion of Okinawa was reluctantly accepted. Since the Kuriles were to be included as well, Tokyo required that in the "spirit of cooperation" the United States allow the inclusion of the Aleutians. On the afternoon of the 30th, Kato and Hughes held a meeting at which time Hughes agreed to the Japanese counter-proposal. The negotiations over the status quo articles ended, and the delegates quickly published the terms of the agreement.

61 Marie Stuart Klooz, <u>Japanese Diplomatic Secrets</u>, 1921-1922, (Washington D.C.: National Archives, Department of Justice Central Files, Record Group 60, File Number 235334), p.4.

62_{Ibid.}, pp.18-19.

⁶³David J. Danielski and Joseph S. Tulchin, <u>The Autobiographical Notes of Charles Evans Hughes</u>, (Cambridge: Harvard University Press, 1973), p.242.

64 Marie Stuart Klooz, <u>Japanese Diplomatic Secrets</u>, 1921-1922, pp.20-21, 37-38.

65_{Ibid., PP.25-26}.

66 Ibid., pp.41-44.

67 Ibid., pp.26-27.

68 Yamato Ichihashi, The Washington Conference and After, (Stanford: Stanford University Press, 1928), p.13.

⁶⁹Marie Stuart Klooz, <u>Japanese Diplomatic Secrets</u>, <u>1921-1922</u>, pp. 44-45.

70 Ibid., p.46.

71 <u>Ibid</u>., p.53.

72<u>Ibid</u>., pp.73-74.

⁷³Yamato Ichihashi, <u>The Washington Conference and After</u>, p.20.

 $^{74}\mathrm{Marie}$ Stuart Klooz, <u>Japanese Diplomatic Secrets, 1921-1922</u>, pp.38-40.

75_{Ibid.}, pp.12, 31-36, 68-69.

⁷⁶Ibid., pp.92-93.

⁷⁷Ibid., pp.58-61.

⁷⁸<u>Ibid</u>., pp.48-49, 63-65.

79 Thid., pp.99-102, 103-105.

⁸⁰Richard D. Challener, ed., <u>United States Military Intelligence</u>, vol.20, pp.8892-93.

81Marie Stuart Klooz, <u>Japanese Diplomatic Secrets</u>, 1921-1922, pp.124-125. 82 David J. Danielski and Joseph S. Tulchin, <u>The</u> Autobiographical Notes of Charles Evans Hughes, p.241.

83 Thomas G. Paterson, American Foreign Policy, (Lexington: D.C. Heath and Company, 1977), pp.339-340.

84Action of the General Board of the Navy in Connection with Conference on Limitation of Armament, 1921-1922, (Washington D.C.: Naval Historical Center, Washington Navy Yard).

85 David J. Danielski and Joseph S. Tulchin, The Autobiographical Notes of Charles Evans Hughes, p.243.

⁸⁶Ibid., p.248.

87 Yamato Ichihashi, The Washington Conference and After, p.38.

88 Thomas G. Paterson, American Foreign Policy, p.340.

89 Yamato Ichihashi, The Washington Conference and After, p.40.

90 Marie Stuart Klooz, Japanese Diplomatic Secrets, 1921-1922, p.130.

⁹¹Ibi<u>d</u>., p.131.

92_{Ibid., p.133.}

93_{Ibid.}, pp.135-36.

94 State Department, Papers Relating to the Foreign Relations of the United States, 1922, vol.1, (Washington D.C.: GPO, 1938), p.61.

95_{Ibid., p.64}.

96 Ibid., p.67.

97 Ibid., pp.67-68.

98 Marie Stuart Klooz, <u>Japanese Diplomatic Secrets</u>, 1921-1922, pp.136-39.

99<u>Tbid</u>., p.140.

100 Ibid., pp.141-42.

101 State Department, Papers Relating to the Foreign Relations of the United States, 1922, vol.I, p.68.

102_{Marie} Stuart Klooz, <u>Japanese Diplomatic Secrets</u>, 1921-1922, pp.144-46.

- 103 Ibid., pp.152-53.
- 104 Ibid., p.176.
- 105_{State} Department, <u>Papers Relating to the Foreign</u> Relations of the United States, 1922, vol.1, pp.76-77.
- 106 Marie Stuart Klooz, <u>Japanese Diplomatic Secrets</u>, <u>1921-1922</u>, p.177.
 - 107 Ibid., pp.154-55.
- 108_{State} Department, <u>Papers Relating to the Foreign</u> Relations of the United States, 1922, vol.1, p.83.
 - 109 Ibid., pp.85-86.
 - 110 Ibid., p.88.
- 111 Marie Stuart Klooz, <u>Japanese Diplomatic Secrets</u>, 1921-1922, pp.181-82.
 - 112 Ibid., pp.177-79, 179-80.
 - 113 Ibid., pp.157-60, 182-83.
- $^{114}\mathrm{Yamato}$ Ichihashi, <u>The Washington Conference and After</u>, pp.85-89.
- 115 Marie Stuart Klooz, <u>Japanese Diplomatic Secrets</u>, 1921-1922, pp.216-17.
 - 116_{Ibid}., p.217.
 - 117 Ibid., p.186.
 - ¹¹⁸Ibid., pp.227, 188-89.
 - 119 Ibid., pp.190-92.
 - 120 Ibid., pp.228-29.
 - 121 Ibid., pp.197-208.
 - 122_{Ibid., pp.233-35.}
 - 123_{Ibid.}, pp.229-30.
 - 124 Ibid., pp.241-44.
 - 125 <u>Ibid</u>., pp.244-46.
 - 126 Ibid., pp.230-32.
 - 127 Ibid., pp.221-23.

128_{Tbid.}, pp.246-47.

129 Ibid., pp.209-11, 235-36.

130_{Ibid.}, pp.247-49.

¹³¹Ibid., pp.212-14.

132 Ibid., pp.236-37.

133_{Ibid., pp.237-40.}

134 Ibid., pp.223-24.

135_{Ibid}., pp.249-50.

Chapter IV. After the Conference: Yardley and the decline of the Black Chamber

The State and War Departments continued sharing support of the Black Chamber for the seven years following the conference. Interdepartmental jealousy persisted with the State Department excluding the Navy from the intelligence set-up. 136 The effort to exclude the Navy from the operation even went as far as an Army denial of the existence of the Chamber and therefore a de facto refusal by the Army of aid to the Navy's new COMINT unit, created in the mid-1920's, 137 As it had prior to the conference, the Chamber concentrated on solving foreign diplomatic codes. The staff made no effort to train people in the methodology of cryptanalysis, since this was not part of their mission, and also there was no one to train. The size of the staff declined in the 1920's, and its only mission involved the solving of specific codes and ciphers. The Chamber's tasks did not include creating new codes and ciphers, ways to transmit or transport them, nor any of the other related activities of the communications security field. The Chamber's lack of work in these affiliated areas played a part in its demise in 1929 and the reorganization of the War Department's signals intelligence service.

In early November 1922, Colonel Stuart Heintzelman, head of Military Intelligence, recommended Yardley for the Distinguished Service Hedal. General John Pershing endorsed the recommendation, citing Yardley's services during World War I.¹³⁸ Yardley received the award in January 1923, for "exceptionally meritorious and distinguished services during the World War." At the time, Yardley believed that the award actually reflected an appreciation for his services during the Washington Conference. This was quite plausible and even repeated as fact in newspaper obituaries at the time of his death.¹³⁹

Fiscal retrenchment and budget cuts throughout the 1920's boded ill for the Chamber's future. The 1921 budget had been cut in half, down to \$50,000 when the War Department reduced its contribution to \$10,000. According to Friedman, the Mar Department operated on the theory that as the information primarily interested the State Department, it should provide the majority of the funding, ¹⁴⁰ Even so, the State Department reduced its share of the budget as well. In July 1923, the State Department's monthly funds fell from \$3333 to \$2083. The State Department again cut its funding in July 1924, down to \$1250 per month. ¹⁴¹ This severe cut in financial support resulted in a reduction of the staff by one half, to twelve. For Yardley and the Chamber the good years were over. Funding remained at this level of \$25,000 per year until the closing of the Chamber in 1939.

The events surrounding the closing of the Black Chamber in 1929 proved to be a major turning point in Yardley's life. The process began when Major O.S. Albright of the Signal Corps became the coordinator of the cryptanalytic and cryptographic services that existed in the War Department. Albright evaluated the

situation and concluded that the Chamber's efforts primarily benefited the State Department. Although the War Department needed an intelligence unit that could immediately train additional personnel in time of war, the Chamber did little if any training. Albright then recommended consolidating all cryptographic and cryptanalytic agencies within the Signal Corps, tather than leaving them dispersed among the Signal Corps, the General Staff, and the Adjutant General's Office. 142

At this time, with the inauguration of Herbert Hoover and a new administration, a new man assumed the position of Secretary of State, Henry L. Stimson. Unsure of Stimson's attitude towards the nature of the Chamber's activities, Yardley decided to wait several months before enlightening Stimson as to the Chamber's existence. After giving the secretary time to settle in, Yardley provided Stimson with some reports from the Chamber. As a believer in international cooperation, Stimson expressed shock at the Chamber's activities. He valued frankness in diplomatic relations and did not believe the Black Chamber had a place in the diplomatic process. As he later stated, "Gentlemen do not read each other's mail. "143 Yardley, in turn, could only have been dismayed at the secretary's decision to shut down the Chamber. The Army Chief of Staff, G-2, persuaded Stimson to delay the closing of the Chamber a few months to allow the employees time to find other jobs and give the army a chance to gather up the files and records of the unit. Friedman assumed the task of transferring all of the Chamber's material to the Signal Corps. 144

According to Friedman, Yardley had been moonlighting to supplement his income, including such activities as commercial code compilation, real estate sales, and acting as consultant to commercial firms on code matters. 145 Friedman hints at a conflict of interest in these activities. In discussions of the reorganization of the signal intelligence services Colonel Hemphill, Chief Signal Officer, suggested that the Chief of the M.I.D. code solving section (Yardley) be offered a position "at a salary considerably below his present." To remain in military intelligence Yardley would have had to accept a reduction from %25 per month to \$300 per month. 146 Thus, the circumstances suggest that the new masters of signals intelligence did not greatly desire Yardley's services. Either way, Yardley refused the offer and found himself out of a job.

Albright's handling of the Chamber's closure had been none too tactful. Essentially, he walked in and told the staff they were soon to be unemployed. As with Yardley, no real effort was made to retain the personnel, and in fact, none joined the reorganized intelligence unit. This could only have embittered the employees to one extent or another. This was particularly true of Yardley, at home at the center of things, whether president of his high school class or in charge of the Black Chamber. The events that followed involving Yardley and his revealations about the Chamber are not especially surprising.

Financial success eluded Yardley after the closing of the Chamber. Yardley, too, felt the effects of the Great Depression and was unable to find steady employment that suited him. With his business ventures failing, Yardley turned to his ex-colleague, John Manly, for a loan in January 1931. Due to the Depression, Manly could not afford to make Yardley the loan. Previously, in the spring of 1930, Yardley had approached a publisher with the idea for a book which the publisher declined after conferring with Colonel Stanley H. Ford of G-2. By the spring 1931, Yardley had resigned his reserve commission and in desperation started writing, a possibility of which Major Albright had become aware in the previous spring. 147 In a letter to Colonel Alfred T. Smith, Army Chief of Staff, G-2, Albright noted that the Chamber's efforts had been of "great interest" to the Department of State, but, at the same time, did involve a technical violation of the law. Concerned at the possibility Yardley might write an expose of the Chamber's activities, Albright suggested that the War Department inform Chief Justice Hughes of the situation, particularly since Yardley possessed a letter of commendation from Hughes for his efforts during the Washington Conference.148

Yardley's book <u>The American Black Chamber</u> went public in the spring of 1931, first partially in serial form for the <u>Saturday Evening Post</u>, then as a book. Its reception depended upon the audience. In April a Captain A.J. McGrail, M.I.(reserve) penned a strong protest against Yardley and his articles to Colonel Smith, Director of Military Intelligence. McGrail claimed that while Yardley knew little about the secret ink section in which McGrail had worked, his articles did manage to give away information known by no more than ten men in the country. He

concluded by urging that any future articles by Yardley be carefully censored. 149

In June Albright sent a review of the book to Colonel Smith. Faced by an embarrassing breach of security, Smith demanded to know exactly what had been disclosed. Up to that point, the State Department had fended off the press with evasive replies while the War Department flatly denied the Chamber's existence. 150 According to Albright, the book contained many exaggerations and distortions but "the basic facts in the book are correct. " Albright's principal concern was the possible effect of the book on America's allies and friendly neutrals. He feared that giving away their intelligence methods and disclosing of American success at breaking their codes would anger and alienate them. The insinuations in chapter twelve that the Entente plotted to assassinate President Wilson while he attended the Paris Peace conference alarmed Albright. He also expected protests from Japan over the Chamber's breaking of her diplomatic codes during the Chamber's existence. Overall, Albright considered the book awkward at the minimum and possibly damaging in the extreme. 15I

The furor building around the book seemed to take Yardley by surprise. In June 1931, he defended his actions and attacked the government's policies on signals intelligence in a letter to Frederick Sullens, editor of the Jackson (tiss.) News and a former counter-intelligence officer. Disturbed by the government's denial of the Chamber's existence, Yardley stated that he could, if necessary, give the archive number of the

official memo signed by the Secretary of War in 1919, authorizing the creation of the Black Chamber. As proof of his patriotism. Yardley claimed to have turned down the offer of one of the great powers to set up a cryptographic unit at a handsome salary. 152 Yardley concluded with a blast at the federal government for relying on antiquated equipment and methods for encipherment. If the government adopted a machine cipher (along the lines of the future Enigma), its communications would be unbreakable. Going a step further, Yardley proved a poor prophet when he asserted that if all nations adopted such machines then the issue of communications espionage would be ended, cryptography as a discipline would become obsolete, as no human could solve the ciphers. 153 Sullens sent a short response to Yardley criticizing him in turn. As one who had served his country with M.I.-4, counter espionage, Sullens held that it was a sacred obligation not to reveal any secrets obtained in government service and thought Yardley should have followed the same principle. 154

By the summer of 1931, the Japanese had reacted to Yardley's book. Essentially the Japanese response ranged from upset to furious. The July 22 edition of the Tokyo Nichi Nichi ran an article covering the spectrum of attitudes to be found in Japan. A great deal of criticism centered on the Foreign Ministry and many blamed Shidehara for the Chamber's success at deciphering Japanese cables. As ambassador to Washington during the conference, critics believed it was his responsibility to secure Japanese communications. Others criticised the United States and

expressed regret that such dishonorable behavior ever occurred. 155

Three Japanese newspapers expressed their differing reactions to the situation. The <u>Japanese Chronicle</u> stated simply that such activities were "like steaming open people"s letters."

On the other hand, the <u>Japan Times</u> assumed a more philosophical attitude. Deciphering one another's codes was part of the game, and the United States should not be criticized for going one up on Japan. Rather, the Poreign Office deserved censure for not anticipating and countering American efforts. Finally, the Osaka <u>Mainichi</u> reported that the War and Navy ministries had instructed attaches to obtain copies of the book for study and that Japan intended to be prepared to counter such signals intelligence at the uccoring Geneva Disarmament Conference. 156

At home Yardley and the federal government both received criticism for the nature of the Chamber's activities as well as for their revelation. In an article in <u>Baltimore Sum</u>, one K.K. Kawakami criticized Yardley for the pride he apparently took in the Chamber's immoral accomplishments and the government's samotioning of such activity. Kawakami argued that such behavior was not only immoral but even detrimental to international relations. He cited Scotland Yard's involvement in the 1922 Lausanne Conference between Great Britain and Turkey. The Yard intercepted Turkish dispatches which were not always complimentary to Lord Curzon. According Kawakami, this ampered Lord Curzon and led to the rupture of the conference. ¹³⁷

Due to the furor surrounding the disclosure of the Chamber's

existence, the Acting Secretary of War sent a letter to Secretary of State Stimson, informing him of the Chamber's history. The letter stated that the Black Chamber had, indeed, been created in 1919 with funds and approval from both departments. But since funding from the War Department did not begin until June 30, 1921, the State Department, which alone supplied the operating expenses for the two years from July 1919, was accorded primary responsibility for the Chamber. In reference to Yardley, the letter noted that the army discharged him in 1919 and that in 1921 he entered the reserves. While with signals intelligence, his status remained that of a civilian; and he had resigned his reserve commission in April 1931. Again, the point of concern came up that Yardley possessed a letter of commendation from former Secretary of State Bughes. 158

The impact of Yardley's disclosures continued for months and fit into the slow deterioration of Japanese-American relations, which included the Japanese invasion of Manchuria in September 1931. In November Major George E. Arneman, a military attaché in Riga, Latvia, reported a conversation with the Japanese Chargé d'Affaires. The Chargé d'Affaires stated that the Japanese had suspected that some of their communications had been deciphered, adding that he could not understand why Yardley had verified their suspicions. ¹⁵⁹ Perhaps if the Japanese Chargé d'Affaires had known of Albright's handling of the Chamber's closure, he would have been less surprised at Yardley's action.

In April 1932 Major Edgar S. Miller of the General Staff received a request from an assistant of a Colonel Stockton (reserve). The colonel intended to write a chapter on various disarmament conferences and wished to know if the material in Yardley's book was accurate and if Yardley was reliable. Colonel Alfred T. Smith directed that "Hiller's response include the following: a) Yardley had not been employed by the government for some time prior to the book, b) he did not clear the book with the War Department, and c) the War Department did not comment on or review publications and therefore could not affirm or deny the accuracy or celtability of works or their arthors. In essence, the War Department avoided giving a full and accurate withough the first own. 150

The controversy surrounding Yardley settled lows until September 1932 when rumors of a gew book surfaced. Stanley K. Hornbeck, a Far East expert at the State Department, became concerned upon hearing such runors. The new book entitled Japanese Diplomatic Secrets evidently went into detail on the activities of the Chamber during the Washington Conference. Considering the general effect of the first book, Hornbeck believed that the government should prevent publication of this work, 161 That same month orders for "Immediate Action" were issued by the War Department. An officer and two witnesses were to contact Yardley and take possession of any government documents he might have dating from the period of his service. 162 The Bobbs-Merrill Publishing Company then received a letter "informing" them of penalties contained in the Espionage Act of 1917 concerning the disclosure of confidential government documents. The War Department pointed out that according to the

Espionage Act, "...whoever lawfully or unlawfully having possession of, access to, control over, or being entrusted with any document...relating to the National Defense wilfully communicates or transmits or attempts to communicate or transmit the same to any person not entitled to receive it, or lawfully retains the same and fails to deliver it on demand to the officer or employee of the United States entitled to receive it...shall be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years or both.* 163 The War Department then strongly recommended that any future books along the lines of The American Black Chamber be cleared before publication. 164

A letter from the Division of Par Rastern Affairs in September 1932 advised the War Department that a literary agent, Viola Irene Cooper, had taken the manuscript to Boths-Merrill which refused it and that she was now considering approaching the Macmillan Company. A note attached, initialed A.T.S. (Smith) stated that Miss Cooper would be visited by the Assistant District Attorney at New York City and be advised mot to publish the book due to the effects of Yardley's previous work. 165

After five to six months, the issue of Yardley's second book came to a head. On February 17, 1933, the Justice Department received a letter from the United States Attorney in New York. He informed them that the Macmillan Company had just received Japanese Diplomatic Secrets and he could arrange a reading, if so desired. A handwritten note added to the letter indicated that it was shown to the Army Chief of Staff, General Douglas

NacArthur, who agreed a copy should be given to the Assistant Secretary of State. It was also suggested that the Justice Department be asked to secure the manuscript for the State and War Departments to examine. 166

Three days later, February 20, 1933, United States Marshalls seized the manuscript at the Macmillan Company's offices. The Justice Department impounded it under Section 20, Title 50 of the United States Code which prohibited agents of the government from appropriating secret documents. George P. Brett of the Macmillan Company and George T. Bye, Yardley's literary agent, were ordered taken to the Federal Building by Assistant District Attorney Thomas E. Dewey, there to testify before a grand jury. Department of Justice agents had been searching for secret documents which Yardley purportedly kept after leaving the Cryptanslytic Bureau. According to friends, Yardley had offered the documents to the government but the offer had been refused. Yardley was questioned, but no charges were brought against him or any other individual. ¹⁶⁷

With the seizure of the manuscript, Yardley's cryptographic revelations came to an end. The War Department concluded the affair with a memo for the Chief, Public Relations Branch, G-2, that personnel should be on the lookout for any other works by Yardley. Book notices and the like should be scrutinized and no discussion of the subject should take place within the branch, 168

Yardley never again worked in signals intelligence for the United States. He went overseas and worked in signals intelligence for Chiang Kai-shek before going to Ganada and setting up a cryptanalytic bureau thera. Reaor had it that he was forced to leave Ganada due to pressure from Secretary of State Stiason or the British. To returned to the United States are idea in 1988.

As for the Black Chamber, its duties remained reassigned to the War Department and the doors never reopened. Still, Eoc a decade the American Black Chamber fulfilled a pecceived need, primarily for the State Department. In a period when both the role and morality of signals intelligence had not been clearly defined, the Chamber provided the State Department with information on the activities of foreign powers. The efforts during the Washington Conference were the most dramatic but not necessarily the most important. The primary task of a signals intelligence unit is to work with the routine, day to day communications of foreign nations. Since we do not know completely what the Chamber deciphered in the years after the conference, we cannot be sure of its influence or impact. In any event, the Black Chamber did occupy a position in the line of continuity in signals intelligence stratching from Room 40 during Yorld War I, to the units working on ULTRA and TAGIC in Yorld War II, and finally to the sophisticated signals intelligence units of today.

- 136_{Herbert} O. Yardley, <u>The American Black Chamber</u>, p.166.
- $^{137}Laurance$ F. Safford, A Brief History of Communications Intelligence in the United States, pp.7-8.
- 138_{National Archives, A Selection of Papers Pertaining} to Herbert O. Yardley, 1917-1950, pp.100-02.
- 139 New York Times, August 8, 1958, New York Tribune, August 9, 1958.
- August 9, 1958.

 140William F. Friedman, A Brief History of the Signal
- Intelligence Service, p.6.
- $\rm ^{141}National$ Archives, A Selection of Papers Pertaining to Herbert O. Yardley, 1917-1950, p.125.
- $142_{
 m William}$ F. Friedman, <u>A Brief History of the Signal Intelligence Service</u>, pp.7-8.
- 143 Henry L. Stimson and McGeorge Bundy, On Active Service in Peace and War, (New York: Harper & Brothers, 1947), p.188.
- $144 {\rm William}$ F. Friedman, $\underline{\rm A}$ Brief History of the Signal Intelligence Service, pp.9-11.
 - ¹⁴⁵Ibid., p.8.
- 146 National Archives, A Selection of Papers Pertaining to Herbert O. Yardley, 1917-1950, p.122, 140.
 - 147 Ibid., p.137, pp.140-41.
 - 148_{Tbid.}, p.141.
 - ¹⁴⁹Ibid., p.149.
 - 150 David Kahn, The Codebreakers, p.361.
- 151 National Archives, A Selection of Papers Pertaining to Herbert O. Yardley, 1917-1950, pp.151-53.
 - 152 <u>Ibid</u>., p.154.
 - 153 Ibid., P.155.
 - 154 Ibid., p.156.
 - 155David Kahn, The Codebreakers, p.363.
 - 156_{Ibid}., pp.363-64.

157 National Archives, A Selection of Papers Pertaining to Herbert O. Yardley, 1917-1950, p.161.

158 Ibid., pp.172-73.

159 Ibid., p.175.

160_{Ibid.}, p.177.

 $$161_{\tt Department}$ of State Decimal Files 894.727/20 in David Kahn, The Codebreakers, p.364.

162_{National} Archives, A <u>Selection of Papers Pertaining</u> to Herbert O. Yardley, 1917-1950, p.179.

163_{Ibid}., p.181.

164 Ibid., p.181.

¹⁶⁵<u>Ibid</u>., p.183.

166_{Ibid}., p.187. 167_{Ibid}., p.130.

168_{Ibid., p.189}.

169 David Kahn, The Codebreakers, p.369.

In assessing the Black Chamber's impact at the Washington Conference three questions need to be addressed. First, what information did the Black Chamber provide Charles Evans Hughes previous to and during the conference? Second, from the existing evidence how does it appear Hughes utilized this information? Did the information fit in as one of many pieces, forming the whole of the American position before the conference and confirming such a position during the negotiations? Or, did the Chamber's efforts provide a breakthrough, resulting in a radical change in Hughes' goals and negotiating strategy once the conference had opened? Finally, if the Chamber's efforts appear to have had a minimal or unspectacular impact at the conference, them why? Did a credibility gap exist or was the material not relevant, or useful only as a confirmation of Hughes' perconference position?

The Black Chamber provided Hughes with an assortment of information prior to the convening of the conference. A number of cables indicated two principal Japanese concerns. First, Tokyo wished to know the scope and context of the agenda before committing Japan to the conference. Both Tokyo and various Japanese ambassadors voiced caution on this subject. Ultimately, Japan agreed to attend the conference, believing her public image and the potential gains of such an endeavor outweighed any potential dangers to foreign policy aims. Japan's second concern revolved around the imminent expiration of the Anglo-Japanese

"Hidnes and the general strategic beloads in the Pacific and Par Mads. Propositioned cables implied accountably over this topic than that of accessed reduction. The Anglo-Japanese illimate had been fasterastic in Japan's class to prominence in the Pac Pack, and she feared a decline in the strategic position if the alliance andmin.

The July 11 cable to Tokyo from Touch I white in Parts again touched upon the status quo in the Partitio. Tabili feared that discussing Anglo-Japanese and Japanese-harican relations at the conference would probably result in changing the status quo, if not the strategic balance in the Pacific and Par East. Ishii also touched upon the possibility of reorienting Japan's foreign policy, a subject favored by other Japanese diplomats. Ishii argued that public support for armaments reduction would make it possible to remove the "militaristic element" in Japanese foreign policy if Tokyo so desired.

The haggling over a preconference meeting and where to hold it indicated to Hughes that Japan and Great Britain were not coordinating their efforts against the United States. Preconference cables and it clear that Japan was essentially engermed over the agenda and somewhat conferend about the issue of a predictinary meeting. Each of the three powers especial the object two of collusion before they finally settled the dispute. The evidence that Japan and Great Schwing even not enviring together before the conference about only have eased any company sughests when helding with last. As it timed only construction of the set of the set of the set of the conference converged it was Hughes and Schwing and Schwi

other and placed pressure on the Japanese delegation.

The preconference efforts of the Black Chamber also provided flughes with strong indications of the overall Japanese attitude towards the conference. The various cables between Japan and her ambassadors made it clear that they favored the conference and hoped very much to achieve tangible results if the conference convened. A successful conference could curtail defense expenditures and reduce taxes while eliminating the possibility of an expensive and dangerous naval race. The preconference cables made it clear that the Japanese public favored attending the conference and that Japanese diplomats were very concerned with Japan's public image, both domestic and foreign. Thus, if Japan accepted her invitation to the conference Hughes could assume that her efforts for success would be serious and sustained.

Finally, the October 20 cable from Tokyo to Washington laid out the framework within which Japan would negotiate throughout the conference. Japan would modify her army and nawy, present and building, provided she maintained her "proper ratio" with the United States and Great Britain and the status quo of the Pacific did not substantially change. A survey of the negotiations illustrates that Hughes, Balfour, and Kato worked within this framework during the conference. In negotiating, Hughes emphasized the naval ratio while Kato remained equally concerned with the Pacific status quo. Lord Balfour generally allowed Hughes and Kato to have the initiative with the exception of his proposal to replace the December 15 statement.

Once the conference opened, the cables deciphered by the Black Chamber generally dealt with one of four subjects: the naval ratio; public opinion and a successful conference; the status quo of the Pacific; and recommendations for compromise and acceptance of Anglo-American terms. Once the conference convened, Hughes focused upon the naval treaty, and much of the Black Chamber's information dealt with this during the first four to five weeks of the conference. From the deciphered cables, Hughes learned that Ambassador Hayashi in London generally approved of the opening proposal, favored the financial savings and embraced the opportunity to change the direction of Japan's foreign policy away from military preparations.

During the month of November the Black Chamber deciphered a number of cables dealing with the naval ratio. On the 11th the delegation informed Tokyo of their proposed "middle plan" of a 10:7 ratio and equality in aircraft carriers. This indicated that the delegation originated the 10:7 ratio demand, a fact confirmed by Baron Kato the following spring. 170 Deciphered cables from Tokyo contained various instructions to the delegation for negotiating the ratio: maintain the 10:7 ratio, allow Japan to keep the Nutsu, avoid a "clash" with the United States and Great Britain and ultimately, accept the 10:6 ratio with the Nutsu and a status quo agreement.

In addition to the Black Chamber's deciphered cables, Hughes received Ambassador Warren's reports from Tokyo. These were less important for any information about the actual Japanese negotiating proposals than for what they told Hughes about the

attitudes of the Japanese government and public towards the conference and also the support, or lack of it, the delegation received from Tokyo. Further, Hughes was able to compare Warren's reports with the Chamber's decripts as a cross-check for accuracy, a confirmation of each other's information. From these sources Hughes generally had a rather complete picture of the Japanese delegation's negotiating position, instructions and support at home.

In reference to public opinion, deciphered cables confirmed that Tokyo in large part directed the press and various organizations, which in turn influenced the attitudes of the Japanese public. It is probable that Hughes was less sympathetic to the delegation's arguments of public pressure knowing that Tokyo in large part manipulated the situation. On the other hand, Hughes knew of the delegation's genuine concern over foreign public opinion and Japan's image, particularly if the conference failed and the responsibility appeared to be Japan's. Throughout the conference Tokyo received cables from diplomatic officers arguing that Japan's security required a successful conference and that her prestige would suffer as well as her security if the conference failed.

The two other subject categories were intertwined: the status quo issue and recommendations of compromise and concession. From cables such as that of December 1, Secretary Hughes learned the high degree of importance Japan placed on the fortifications question. The delegation believed Japan's security required a status quo agreement and clearly said so to

Tokyo. As the conference continued, more and more often Tokyo received cables advocating acceptance of the latest Anglo-American position. From January 11 until the signing of the naval treaty at the end of the month, no fewer than ten cables to Tokyo ured acceptance of the situation.

In order to understand how Hughes utilized the Black Chamber's information, it is necessary to consider his preconference preparations, opening position and the subsequent negotiations. As might be expected, prior to the conference Secretary Hughes received various pieces of information. The State Department, the Navy and its General Board, the Army, other government agencies, and politicians all contributed information of one type or another. Within this context the Black Chamber, too, contributed information for Hughes to evaluate before the conference conversed.

After deliberation, the American delegation decided to concentrate on armament limitation. Hughes' opening speech reflected this by focusing on the limiting of naval construction. For the next two weeks Hughes, Kato and Balfour concentrated almost exclusively on the naval ratio, paying only minimal attention to Pacific or Par Rastern issues. The General Board's preconference armament limitation study had argued strongly against the introduction of Pacific bases and fortifications into the conference, and this coincided with the delegation's desire to deal with the more dramatic and tangible armaments issue.

Once the Japanese delegation introduced the possibility of a status quo agreement to break the deadlock over the naval ratio,

Tights incorporated it into his naval treaty negotiations. Tights renained consistent in his terms throughout the negotiations. He quickly announced that Hawaii would be excluded Scow any agreement and agreed to include two other American possessions: the Philippines and Guam. The knowledge that Congress would not appropriate the necessary funds to fully fortify them undoubtedly influenced Hughes' decision. The deciphered Japanese cables declaring it imperative that Guam and the Philippines be included in any such agreement may also have figured in his considerations. Hughes' one significant change in negotiating tactics occurred when he threw his support behind Balfour's plan to delineate the area covered by the status quo agreement. Upon examination it is clear that this change relected a realization of the problems inherent in the December 15 statement encompassing the whole of the Pacific, and not a response to some new intelligence "bombshell."

To conclude, Rughes' preconference inforestion painted this picture: everyone at the conference was complied to a crassible relation and limitation; the Japanese were very concerned about the target; the UK Congress would not appropriate the necessary femula for the MC Congress would not appropriate the necessary femula for the massive construction of forbifications in the Pacific; added to all of this was Rughes' and intituding to consentrate on accessaries relation and limitation. Therefore, Rughes' spirition and the the outside of the labour that is the inacceptation of the state in a the state of the state.

conference, which dove-tailed with what he wished to accomplish from the outset. Thus, Hughes remained consistent in his aims throughout the negotiations.

After examining Hughes' actions before and during the conference it appears that the Black Chamber functioned as an information provider in two general capacities. First, prior to the conference the Black Chamber provided information that Hughes and the American delegation assimilated with other sources into the general American position. The Black Chamber therefore provided some of the pieces which made up the whole.

Once the conference opened evidence suggests that the Black Chamber acted as a confirmer of the American position and Hughes' objectives. Hughes' negotiating consistency argues that Yardley's unit provided information that supported Hughes preconference aims, and did not prompt any radical change in the American position. If, instead, the Black Chamber had deciphered cables stating that Japan intended a quick occupation of the Philippines and Guam in the near future, then Hughes surely would have considered altering his negotiating strategy to offset such a tangible threat. Again, if deciphered cables had indicated a strong Japanese inclination or plan to accelerate and expand her occupation of China, and strongly fortify her various Pacific possessions, then again Hughes might well have reevaluated American security requirements. For example, he might have advocated increasing the American naval superiority, adjusting the status quo terms, or perhaps considered fostering closer Anglo-American ties in the Pacific. It was the lack of just this type of information that strengthens the probability that the Black Chamber confirmed and reinforced Hughes' position at the Washington Conference. The contents of the cables established their relevancy, and the dissemination of intelligence data to the White House and State Department testified to its credibility.

The Black Chamber also performed one other task for Hughes. It supplied an inside look at the Japanese delegation and the home government in Tokyo. By reading the deciphered cables Hughes was able to piece together a crude profile of the Japanese to compare with his face to face impressions. With this profile Hughes could then gauge more accurately the intent of the Japanese, and their inclinations and determination at the bargaining table. For example, after reading the cables one is struck by the Japanese commitment to making the conference a success and, as time passed, the delegation's growing conviction that an agreement on any of the terms discussed at Washington was preferable to no agreement at all. This revelation of Japanese intentions reached its height during the last two weeks of the negotiations over the status quo agreement, as one cable after another recommended compromise and acceptance of the Anglo-American terms.

The activities of the Black Chamber also fit into a larger context than simply the Washington Conference. Yardley and the Chamber existed during a period of technical and moral transition in the late 1800's and throughout the twentieth century. The application of new forms of communication to military

intelligence lay at the heart of the transition. The developing emphasis on world-wide cable systems for stategic reasons illustrated this. Cable systems provided the means to quickly contact far-flung parts of an empire. This enabled instructions to be given for mobilization, strategic plans to be implimented, and counter moves to enemy activity to be made. Tapping into such communication systems could also provide information on enemy capabilities and intentions. Since knowledge of capabilities and intentions results in advantage, the military evalored various means to intercept enemy messages.

World War I was a wartime laboratory for testing the usefulness of signals intelligence. Whether intercepting German naval orders to the High Seas Fleet, listening to radio messages sent in the clear, or deciphering the Zimmerman diplomatic message, SIGINT proved its value. World War I confirmed that signals intelligence had wartime applications that could produce tangible results.

The Washington Naval Conference demonstrated that SIGINT's uses need not be restricted to the battlefield. Hughes' endorsement of Yardley's and the Chamber's efforts pointed out that SIGINT could produce results in peace as well as war. The reading of Japanese cables containing information such as alternative negotiating plans or the strength of official support for the delegates aided Hughes in achieving his own conference objectives. Hughes and the State Department appreciated such efforts and wished to maintain the flow of information. The State Department continued to support the Chamber's activities for seven years after the conference. Indeed, in the 1920's the War Department had yet to decide what specific role, if any, intelligence and SIGNIT should play during peacetime—to provide information, to train personnel, or advance research? Signals intelligence assumed all of these roles at one time or another and to one degree or another. Not until the reorganization in 1929 did the Army adopt a more systematic approach.

The evolution in technology continued as well. The introduction of machine ciphering in signals intelligence began in the late 1920's and continued into World War II and after. Yardley's belief in the security of such enciphering machines reflected his enthusiasm for this novelty. Although Yardley predicted that the unbreakable enciphering machine would be produced, events proved him wrong. What man created he could also destroy or, as in the case of ciphering machines such as Englism and Purple, break down or circumwent.

There also transpired a shift in attitudes towards SIGINT, as those in contact with its product reappraised its usefulness and place within the bureaucracy. From World War I to World War II the locus of American signals intelligence shifted from the military to the State Department and back again. Although partially funded by the War Department, the Black Chamber was a civilian unit primarily concerned with deciphering diplomatic messages for the State Department. By the 1930's, the Army and Navy had assumed control of SIGINT, and they provided the State Department with SIGINT's product for diplomatic intelligence.

Intertwined with the question of where signals intelligence

belonged bureaucratically was the issue of its appropriateness or morality. Secretary Hughes and the State Department found the Chamber quite useful and, while perhaps illegal, certainly "moral" enough to maintain it throughout the 1920's. In contrast, Henry L. Stimson did not believe signals intelligence had a place in dipolinacy and shut down the Chamber. Friedman and Safford both attributed the shortage of funds for signals intelligence, in part, to Yardley's book and the controversy it engendered. By 1940, as Secretary of War, Stimson had changed his mind and welcomed the efforts of MAGIC. In 1929, the world looked for peace and "Stimson...was dealing as a gentleman with the gentlemen sent as ambassadors." 171 By 1940 there were precious few gentlemen to be found.

Perhaps the controversy surrounding Yardley's book best illustrates the vague status of signals intelligence during the 1920's and 1930's. Many lauded its accomplishments, including some Japanese, while others viewed the activities of the Chamber with distaste or even moral repugnance. Even its role was ambiguous. Many, particularly military men such as Captain McGrail, considered military intelligence efforts useful to the nation and revelations of such activities detrimental to the national defense. Others such as K.K. Kawakami, an editorial writer during the Yardley controversy, viewed the very existence of such an organization as immoral and its secrecy damaging to the moral fiber of the nation, not to mention its eroding effect upon diplomatic relations. Priedman asserted that The American Black Chamber aggravated Japanese-American relations while David

Kahn stated that American naval officers stationed in Japan for language study were treated with a new suspicion.

Surveyed as a whole, the period from World War I until World War II witnessed a change in governmental attitudes towards secrecy and confidentiality. Entering World War I the Army expected the British and French to simply hand over their accumulated intelligence information. In contrast, by 1941 Stimson had purportedly pressured Canada to release Yardley as a cryptanalyst, certainly in no small part due to his knowledge of American techniques plus his own expertise. Secrecy was back in style.

The very origins of the Chamber illustrated changing attitudes in government. Set up in secret with its funding camouflaged to avoid detection, the Chamber could scarcely be tracked down nor the illegal nature of its activities revealed. The interception of communications broke federal law; but then, what was not known could not be prosecuted. The shock of Stimson's reaction to the Chamber's existence added to the desire for secrecy. Information from signals intelligence no longer circulated but went only to the Chief Signal Officer, even G-2 was by-passed.

The role and effectiveness of signals intelligence at the Washington Naval Conference has been examined. State Department officials reading the reports at breakfast were able to verify other information and sources, and support conclusions previously reached. Also, Yardley's receiving the Distinguished Service Medal was and is commonly attributed to his cryptanalytic

efforts. But what about after the conference? Several points argue the effectiveness and usefulness of signals intelligence. First, the letter of commendation from Hughes indicated the State Department's confidence in the Chamber. Second, that the State Department valued the Chamber's efforts is supported by that department's continued funding of the Chamber in the decade after the conference. When the breakup came, it reflected not ineffectiveness or inefficiency on the part of the Chamber but a mixture of perceived immorality in its very purpose and methods combined with a bureaucratic reshuffling of responsibilities. Further, the continued existence of signals intelligence units around the world argued the effectiveness of SIGINT for military and diplomatic purposes. After the Chamber's dissolution, the Army continued cryptanalytic work within the Signal Corps while the Navy consistently maintained support of the unit it set up in the mid=1920's.

Ultimately, the significance of the Black Chamber was twofold. First, as an example of signal intelligence's usefulness. The Chamber provided Hughes with information prior to the conference which he incorporated into the formulating of the American negotiating positon. During the conference the Chamber provided Hughes with decripts that indicated the American objectives were still obtainable, based on the Japanese position and instructions from Tokyo. The Chamber's other significance lay in its position as a link in the continuity in signals intelligence in the twentieth century, from Room 40 to ULTEA. The rise and fall of the Chamber reflected the ambiguous place of

signals intelligence, both morally and bureaucratically. In the decade from 1919 to 1929, domestic and foreign society had not decided on the "rightness" of using signals intelligence, as evidenced by the controversy over Yardley's revelations. At the same time, the multiple sources of funding and the switching of SIGINT from the State to the War Department left unanswered the question of bureaucratic responsibility and jurisdiction for signals intelligence. Although the bureaucratic question is less of an issue today, many still question the morality of such activity, if not its necessity.

Chapter V Notes

170 Thomas H. Buckley, The United States and the Washington Conference, 1921-1922, quote of translation of Baron Kato's speech, March 15, 1922, State Department, 500 Adp/14, (Knoxville: University of Tennessee Press, 1970)

¹⁷¹ David Kahn, The Codebreakers, p.360.

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SIGNALS INTELLIGENCE AND THE WASHINGTON NAVAL CONFERENCE: ONE ELEMENT IN THE DECISION-MAKING PROCESS

bv

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AN ARSTRACT OF A MASTER'S THESIS

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KANSAS STATE UNIVERSITY Manhattan, Kansas This thesis examines the role of signals intelligence both prior to, and during the Washington Naval Conference, 1921-1922. At the same time the paper attempts to place the American cryptographic unit, the American Black Chamber, under the direction of Herbert O. Yardley, within the overall context of signals intelligence in the twentieth century. This involves the questions of morality, bureaucratic responsibility, and also the treatment of signals intelligence in academic literature.

The historiographic literature of signals intelligence reflects the general perception of SIGINT's tole, that of the dramatic breakthrough changing history. Most of the literature appeared after the 1974 publication of The Ultra Secret by F.W. Winterbotham. Signals intelligence is generally pictured as the primary factor in a given dramatic situation, without placing SIGINT in the process of decision-making or examining that process. This is a major shortcoming in the field of signals intelligence study.

Although signals incolligence existed before World War I, as evidenced by Great Stitain's attempt to set up a closed cable system in the 1880's and the Dreyfus Affair at the turn of the century, the First World War more completely realized SIGINT's potential. The British set up Room 40, a precursor of Yardley's Black Chamber, at the beginning of the war and it performed brilliantly throughout the conflict. The US Army responded to the demands of war and created a cryptographic unit under Yardley's direction in 1917. After the war the unit was reorganized as a civilian operation, jointly funded by the State and War Departments and informally tagged the American Black

Chamber by Yardley.

The Chamber provided Secretary of State Charles Evans Hughes with information both prior to and during the conference. This information dove-tailed with other sources which Hughes analyzed and used to formulate the American negotiating position. During the conference Hughes received intelligence from the Chamber and reports from Adabasandor Warren in Tokyo. This information confirmed and reinforced the decisions made before the conference convened and was a part of the decision-making process.

The closing of the Chamber in 1929 by Secretary of State
Henry L. Stimson reflected the bureaucratic and moral uncertainty
about SIGINT's role. The resulting controversy over Yardley's
disclosures further emphasized this uncertainty was signals
intelligence a "legitimate" tool of government? Signals
intelligence continued to be a sensitive subject in government
circles as evidenced by first, the seizure of, and then the
classifying of Yardley's second sanuscript for almost fifty
veats.

In the final analysis, this thesis argues that signals intelligence was and is a part of the decision-making process, not an independent "maker of history" within a vacuum. The Black Chamber provided Tughes with information both prior to and during the conference which Rughes controlled and incorporated into the formulation of American conference policy. At the same time, the history of the Black Chamber reflects both the continuity in signals intelligence, and its ambiguous role, bureaucratically and morally.