DIPLOMATS OR ADMIRALS?

The Fateful Decision That Led to Pearl Harbor, and Its Present Day Implications

American Intelligence had failed. Evidence warning of an attack could have overcome American preconceptions, but intelligence---which relied almost solely on the diplomatic transmissions via PURPLE-has found no such evidence. Japan had sealed all leaks. Knowledge if it was limited in Tokyo to as tight a circle as possible. Plans for it were distributed by hand to ships of the task force...And though war with Japan was expected, that expectation did not---could not----imply knowledge of an attack on Pearl Harbor, for it is impossible in logic to leap from a general belief to a specific prediction...

David Kahn (The Intelligence Failure of Pearl Harbor, Foreign Affairs, vol. 70, no. 5, Winter 1991-1992)

> Patrick D. Weadon Research Seminar Spring 2005

CHAPTER I

Einstein mich

The Decision

...intelligence, whether human or, far more commonly, electronic, rarely yields the smoking-gun proofs that policymakers may wish for. It is an accumulation of indicators, contradictory and unreliable, which intelligence analysts turn into an estimation of a hidden reality—or, even more precariously, use to predict the future. Intelligence is inherently faulty...

From the 17 March 2005 Economist article "Can spies be made better?"

In the best Dicksonian tradition, the year of 1939 was the best of times as well as the worst for times for America's cryptologic community. From the first decades of the 20th Century, William Friedman a first generation Russian immigrant and Captain Laurence Safford of the United States Navy had worked assiduously to hone and develop their organizations, (the Army's Signal Intelligence Service and the Navy's OP-20G respectively) and discern the threat posed by Japan. On the positive side, since the early 1930s, a team handpicked by Friedman had consecutively broken two of Japan's top diplomatic codes. The initial "Red" code (used until 1938) and the next generation "Purple" were the main vehicles that the diplomats of Dai Nippon used to communicate their thoughts back to Tokyo. Once broken, Friedman's "Magicians" as he called them (hence the name "Magic for the program) had dazzled the major policy makers of Washington with the information culled from their work. (1)

However the success of Magic masked some serious problems. For one the community was short of manpower and resources. Purple had been broken with a crew of eight individuals. Safford's OP20G had just over 30 cryptologists. In addition, culturally and politically, the army and the navy codebreaking elements were in many respects more suspicious of each other's motives. As historian John Keegan noted in his book, "Intelligence in War"

...in 1940 the army and the navy agreed on a division of labor, not in any spirit of cooperation but because each lacked the numbers to do much more than concentrate on a single task... (2)

To many the Magic program was proof positive that Friedman and Safford had enough resources to get the job done. This was specious reasoning of the worst kind for it would ultimately lead to a fatal decision that would allow Admiral Yamamoto and the Imperial Navy's to move

undetected half way across the globe to lay waste to Pearl Harbor. The problem was that in 1940, there were a series of Japanese codes that required breaking. Other than the diplomatic codes, this was easier said than done. While the Red and Purple codes had fallen prey to the "Magicians" others, such as the critical operational codes of the Imperial Army and Navy had yet to be cracked. Logically one would think that the two organizations would divide the work. But at the time it was success that counted. The Purple intercepts were the "lowest of cryptologic fruit." and woe to the organization that got stuck trying to crack the unbreakable ciphers of the Japanese Army and Navy. What transpired was a fight between the two elements over the right to work with "Purple" on a regular basis.

The following correspondence from July of 1940 makes it clear that in the area of cryptology, both the army and the navy were perhaps more concerned with fighting one another than Germany or Japan. Entitled *Coordination of the Intercept and Decrypting Activities of the Army and Navy*, (3) the document demonstrates just how far apart the two services were in their efforts to work together to find common solutions to common problems. Authored by Safford himself the memo makes clear that rather than all for one and one for all it is every service organization for itself.



NAVY DEPARTMENT

OFFICE OF THE CHIEF OF NAVAL OPERATIONS WASHINGTON

0p-20-0 Serial 051220

25 July 1940

MEMORANDUM FOR OP-20.

Via: Op-20-A.

Coordination of Intercept and Decrypting Subject: Activities of the Army and Navy.

- Colonel Akin and myself are unable to reach en agreement as to division of cognizence of intercept and decrypting activities. What I have proposed has been unacceptable to Colonel Akin, and vice versa. Detailed comments are appended.
- 2. I believe that the only satisfactory basis of division is nationality. I recommend the following division of diplomatic radio traffic:

Army

Navy

German

Orange

3. I believe the best solution of the matter would be for yourself and General Mauborgne to make such division as may appear equitable to you both and then issue appropriate orders.

Respectfully,

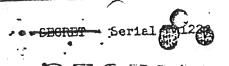
0p-20-G.

Op-20-G <u>SECRES</u> Serial 051220

25 July 1940

COORDINATION OF INTERCEPT AND DECRYPTING ACTIVITIES OF THE ARMY AND HAVY.

- It is mutually accepted by the Army and Navy that all naval redio traffic should be handled by the Navy and all military radio traffic by the Army. The only point of disagreement is on diplomatic traffic. Military traffic is practically impossible to copy at long distances because of the low power used. Therefore, the Army finds very little to work on except diplomatic traffic. Last fall General Mauborgne and Admiral Hoyes made an agreement, in my presence, that diplometic traffic would be divided between the two services on the basis of nationality. Orange was to go to the Navy and German to the Army. Apparently, this agreement was never communicated to Colonel Akin or his subordinates because instead of turning work on the Orange "B" machine over to the Nevy, the Army commenced translating Orange diplomatic systems which the Navy had been previously translating, thereby making a direct duplication of effort. Colonel Akin states that the Signal Corps had received orders from their General Staff to work on Orange, German, diplomatic systems and felt that such orders overruled any agreement which might diplomatic systems, have been made between the Chief Signal Officer and the Director of Naval Communications. /
- 2. There are four ways in which diplomatic traffic may be divided, namely:
 - I. By Nationality. This is the best and, in fact, the only satisfactory basis of division as it automatically eliminates all possibility of duplication. Colonel Akin felt that the General Staff would not authorize such an arrangement.
 - II. By Cryptographic Systems. This is the next best method as it guarantees that the two services will not submit duplicate translations to the President. It was not acceptable to Colonel Akin as it required duplication of indexing.





III. By Office of Origin. This was tentatively agreed to by Colonel Akin and myself and immediately disapproved by General Mauborgne. It would require the services of two people in each office to prevent duplication of translation.

IV. On the basis of radio transmitting stations.

This is favored by General Mauborgne. I
think that the General contemplated a 50-50
split of all diplomatic traffic, but we have
never been offered any of the German,

systems, and I would not
want them on a shared basis. I think such a
division the poorest of all because it is
desirable to consider decryption separately
from interception. Duplication between Army and Navy
interception amounts to only 25% and is
improving monthly.

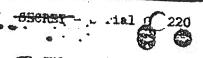
3. Last week, General Mauborgne instructed Colonel Akin to make a joint study of Plan IV. I agreed to assist in the study but not to commit the Navy to anything without the approval of the Director of Naval Communications. A subcommittee of the following members was designated to conduct this study:

Lieut. Comdr. E.R. Gardner, U.S.N. Lieut.(jg) J.A. Greenwald, U.S.N. (Ret.) First Lieut. E.F. Cook, U.S.A. First Lieut. R.E. Schukraft, U.S.A.

At the first meeting of this committee it developed that the Army had changed their mind again and wanted to make an immediate decision on Plan III. There the matter rests.

realize

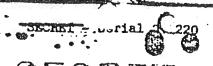
4. From my conversation with you earlier this week, I / that both you and General Mauborgne wish to get an efficient coordination of effort between the Army and Navy and reduce duplication as far as practicable. This is a very different matter from making an impression on the General Staff. The most efficient division of interception or decryption is on a basis of nationality (Plan I).





diplomatic traffic with some degree of success for each nationality. (The Navy is not attempting to solve the diplomatic traffic for these countries and I would prefer not to start it.) The Navy has furnished the Army the cipher keys or codes for all current Orange systems except the "B" machine. All translations made by the Army are being done from this material. There is no longer an "exchange" of recovered values. The Army could eventually dig out a large percentage of this material but it would involve delay and considerable cryptanalytical work. The most important information of the Orange diplomatic service is being enciphered in the Orange "B" machine. It is very important that the attack on this machine be prosecuted more vigorously. I cannot claim that we would have more success then the Army, but we would like to tackle it.

- 6. The following plan is recommended:
- A. The Army will handle all military radio stations and military messages, regardless of nationality.
- B. The Navy will handle all navel radio stations and naval messages, regardless of nationality.
- C. Commercial radio circuits and diplomatic messages will be divided on the basis of nationality, as follows:
 Army: Germany,
 Navy: Japan,
- D. Diplomatic (and military or naval) messages which may be intercepted in connection with regular circuit coverage will be turned over to the service responsible for their decryption.
- E. Each service will supply the other service a copy of the English translations of all decrypted diplomatic messages.
- 7. The following alternative plans should be considered:
- The Army continue with the "B" machine and the Navy take over all other Orange diplomatic systems.





II. The Army take over all Orange diplomatic systems and the Navy will continue to furnish them the complete codes and ciphers involved (when obtainable) provided the Director of Naval Intelligence will approve ONI's continued effort under the circumstances.

L.F. Sarrora, Op-20-Q. 6

6 condination

0p-20-G

27 July 1940

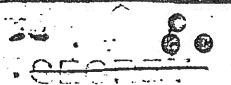
MEMORANDUM FOR ADMIRAL NOYES.

1. It is recommended that Interception and Decryption of foreign traffic be divided between the Army and the Navy as follows:

Interception

Army	RAYY
Jepanese Army	Japanese Nav
German Army	German Havy
Italian Army	Italian Navy
••	

Note: The station and circuit assignments of
the Army and Navy intercept stations
should be maintained as at present. As
soon as a study can be made of more
effective circuit coverages of the
intercept stations of the two services
a decision will be made as to intercept
station assignments.







Decryption

APPY

Japanese Army

German Army

German Diplomatic 65 (all systems)

Italian Army

Navy

Japanese Navy

Japanese Diplomatic (all systems)

German Navy W

Italian Navy W

If General Mauborgne will not agree to the Navy decrypting and translating all Japanese Diplomatic messages, the most efficient arrangement would be to turn them all over to the Army.

3. If the above alternative is not satisfactory, and there is to be a division of Japanese diplomatic systems, the most efficient division is as follows:

Army

"A"- Machine B L Eachine Nevy

Systems Systems

- New 5-letter code and miscelleneous

"secondary" systems

Op-20-6.

10

Safford's lament helps to explain why the ultimate solution as to who would do what was finally solved through a less than effective compromise. Again as Keegan notes,

The arrangement was that the army would work on foreign diplomatic intercepts on even days of the month, the navy on the odd...in 1941.. all spare cryptanalytic manpower had been diverted to...decrypting Japanese Diplomatic traffic. (4)

David Kahn, author of The *Codebreakers*, is fond of saying that signals intelligence or SIGINT, is one of the most effective ways of determining your adversary's intentions because it allows you to "stick your head in the other teams huddle." (5) In 1940 both the army and the navy were listening in on the diplomats because to paraphrase Willie Sutton " that was where the cyrptologic riches were stored.

And in early 1941, the intelligence chiefs of the Army and Navy agreed in principle to provide the information culled from the intercepts to a select group that included the President, the secretaries of State, War and the Navy, the Chief of Staff, the Chief of Naval Operations, the heads of the Army and Navy War plans divisions, and the heads of the Army and Navy intelligence divisions. (6)

Not only was there a general fascination with the product, but the information was perceived as highly credible. David Kahn best describes American policymakers' attitude toward the information-culled from Magic.

"Thus by the fall of 1941, Magic was being demanded at the topmost level of government. It had become a regular and vital factor in the formation of American policy. Hull, (Cordell Hull the Secretary of State) was... at all times intensely interested in the contents of the intercepts. The chief of Army intelligence regarded Magic as the most reliable and authentic information that the War Department was receiving on Japanese intentions and activities...The high officials not only read Magic avidly... they acted upon it.." (7)

Thus it was clear throughout that fateful year, that the Magic decrypts were a driving force behind American policy. It would be Magic that alerted the administration to the fact that despite a host of diplomatic overtures from the ruling junta, Japan's true goal was to grab as much territory as it could and do whatever it took, including, going to war, in order to protect the formation and existence of what the ruling Japanese militarists euphemistically referred to as the Greater East Asia Co-

Prosperity Sphere. It would be Magic that alerted America's intelligence community, in late fall and early wirter of 1941, that Japan's diplomatic moves were likely a smoke screen and that it was only a matter of time before Japan instigated offensive operation against the United States in an effort to solidify its position. The Magic decrypts had made quite an impression. So much so that those who were enamored with them began to believe the information contained in them was a panacea to each and every conundrum that Japan might present. (8) This was a fatal assumption. Because of the focus on Magic, the efforts to crack the equally important operational codes went begging. The result was that American policymakers were getting just enough information from the Magic information to get a broad general view of what Japan was up to. But in their zeal to "keep the Magic decrypts coming" the leaders of America's cryptanalytic effort failed to grasp the simple fact that in 1941, the United States was given via Magic the same operational information that Japan wanted its diplomats to have and that was in a phrase, not very much. In the fall of 1941, to paraphrase Dr. Kahn, American policymakers were indeed sticking their noses in the other team's huddle. The mistake they made was that they assumed that there was only one huddle on the field. In fact there were several and the United States' decision to focus on diplomatic traffic rather than the messages flowing back and forth within the Japanese Imperial Navy would have devastating consequences.

As Frederick Parker, an National Security Agency (NSA) historian noted in his monograph "Pearl Harbor Revisited: United States Navy Communications Intelligence, 1924-1941. (9)

...In 1941, as a result of ... problems compounded by the stresses and exigencies of the time, the effort misplaced its focus from Japanese Navy traffic to Japanese diplomatic messages. Had U.S. Navy cryptanalysts been ordered to concentrate on the Japanese naval messages rather than Japanese diplomatic traffic, the United States would have had a much clearer picture of the Japanese military build-up and, with the warning provided by those messages, might have avoided the disaster of Pearl Harbor.

What was it about the information contained in Magic that was so deceiving? The short answer is that diplomatic messages then and now are, as one might expect, concerned mainly with diplomacy. With this in mind it is imperative to examine the kinds of information American codebreakers and policymakers were basing their decisions. It is to this issue that we know turn.

CHAPTER II

Low Hanging Fruit, The Diplomatic Messages

Listen, "We're reading the codes, how come Pearl Harbor happened?" It's a very simple answer. Pearl Harbor happened because not one of the Japanese ambassadors in the United States or anywhere else was ever told that there was going to be an attack on Pearl Harbor and it's therefore impossible for the code breakers to break a message saying they're going to attack Pearl Harbor...No messages were ever sent saying we're going to attack Pearl Harbor. It is therefore impossible for the code breakers to read any!

David Kahn

The following section contains a sampling of the kind of information contained in the diplomatic traffic. As noted, even before the breaking of Purple, in the mid-1930's U.S. code-breakers had cracked an earlier version of what the SIS referred to as the "Red Code." It was far less complex than Purple, but as the following documents illustrate the information from breaking of both the Red and Purple codes would give America's top leaders a virtual play by play of Dai Nippon's diplomatic plans and intentions. "Red" Message No. 184 (1) decrypted in August of 1936 is eerie in that it clearly portends the future of both nations.

OFFICE OF THE CHIEF BIGNAL OFFICER

WASHINGTON

August 24, 1936

MEMORANDUM TO:

Lieut. Colonel John H. Lindt, G-2, Car Department.

- 1. There is attached hereto translation of a message, serially numbered S.I.S. #184, which may be of interest to you.
- 2. The following is for your information with regard to this message:

No. Date

Sender

Addresses

Signature

184 August 7, 1936 Honolula

Minister of Foreign Affairs, Tokyo

Tenure

a. S. Rumbough.

Major, Signal Corps.

2037

Attached: Translation.

FILE

JIG SANN DATE & pulso.

5年之外外

FILE SIS

TILE SIS

027 received from ---- as 014.

Our naval officers are now visiting the American continent. While their ships are at anchor, they visited me and are going sightsceing about this place. American government officials are keeping strict incognito surveillance over every move they make in (their) eleven automobiles. Moreover, the activities of our might-seeing oraft, making detailed visits about Onhu Island, are crousing suspicions. Our training facet will also soon be there.

On their arrival there, I advise that our service men be careful.

For Tokyo's information.

#184

Eut the breaking of the Red code would only be the beginning. As the decade ended, the information from Purple would continue to provide keen insights into Japan's efforts to keep the United States from thwarting its efforts to dominate Asia. The following Purple decrypts clearly show that Japan's leaders are is willing to fight to protect their nation's interests. What they do not show however is how they specifically intend to do it.

No.40

FROM: Message to Shanghai as # 294. Re your #5750.

Tokyo

12 April 1941

1. We have received a report that the United States is about to exercise a comprehensive petroleum embargo against Japan in the near future. Soon we are going to have Ambassador NOMURA inform the American Government that if they carry out this measure, our Empire cannot but act with determination. We are going to have Ambassador NOMURA advise them not to embargo petroleum. Therefore, although we do not like to hold up the gasoline in question, if you get any definite

proof that the Chungking Commerce Section has purchased it, go ahead and seize it. 2. So far I have received no report from you on the schemes mentioned in my ~ 153" for purchasing petroleum. (Please report on this immediately.) These negotiations are going on and if it is seen that success is imminent and that this seizure will damage the negotiations, you may release the gasoline. I will leave this up to your judgment, which should be guided by developments in your city.

3. If you cannot find the actual proof mentioned in the preceding paragraph 1, take suitable steps to prevent the exports mentioned in your ~ 539g. If we cannot get the results we desire, we will come forth with an out and out charge that the goods are suspected of being sent to assist CHIANG KAI-SHEK and summarily seize them.

Trans. 4—14—41

No. 214

FROM:

Washington

Tokyo

November 28, 1941

#844.

TO: Re your #1189'.

Well, you two Ambassadors have exerted superhuman efforts but, in spite of this, the United States has gone ahead and presented this humiliating proposal. This was quite unexpected and extremely regrettable. The Imperial Government can by no means use it as a basis for negotiations. Therefore, with a report of the view of the Imperial Government on this American proposal which I will send you in two or three days, the negotiations will be de facto ruptured. This is inevitable. However, I do not wish you to give the impression that the negotiations are broken off. Merely say to them that you are awaiting instructions and that, although the opinions of your Government are not yet clear to you, to your own way of thinking the Imperial Government has always made just claims and has borne great sacrifices for the sake of peace in the Pacific. Say that we have always demonstrated a long-suffering and conciliatory attitude, but that, on the other hand, the United States has been unbending, making it impossible for Japan to establish negotiations. Since things have come to this pass, I contacted the man you told me to in your # 1180b and he said that under the present circumstance what you suggest is entirely unsuitable. From now on do the best you can.

Trans. 11—28—41 (3)

Even after the disaster at Pearl Harbor, the diplomatic messages would prove to consistent in the kind of information they imparted. The following document (4) is a dispatch from Baron Oshima Tokyo's ambassador to the Third Reich.

ULTRA

Copy No. RI-3

SECRET

SKS 1562

No. 1040 - 29 January 1945

WAR DEPARTMENT Office of A. C. of S., G-2

C. of S., G-2 By Auth.

January 1945 Date Initials

"MAGIC"—DIPLOMATIC SUMMARY

NOTE: No one, without express permission from the proper authorities, may disseminate the information reported in this Summary or communicate it to any other person.

Those authorized to disseminate such information must employ only the most secure means, must take every precaution to avoid compromising the source, and must limit dissemination to the minimum number of secure and responsible persons who need the information in order to discharge their duties.

No action is to be taken on information herein reported, regardless of temporary advantage, if such action might have the effect of revealing the existence of the source to the enemy.

The enemy knows that we attempt to exploit these sources. He does not know, and must not be permitted to learn, either the degree of our success or the particular sources with which we have been successful.

> DECLASSIFIED per Pert S, E. O. 12858 by Director, NSA/Chief, CSS 2 5 JAN 1993

MILITARY

Gloomy forecast by Vice Chief of Jap-(D-9269 enese Army General Staff: On 27 January the Vice Chief of the Japanese Army General Staff sent to Military Attaches in Europe a "forecast of the situation up to about the middle of 1945." The circular which is headed "Personal" (1.e., intended for the Kilitary Attache only) displays an unrelieved pessimism on

> <TOP SECRE ULTRA

TOP SECRET

all aspects of the war which is entirely without precedent in available traffic out of Tokyo; it contains, among others, the following predictions (a complete text of the message is annexed as TAB A):

- z. The Americans, after obtaining advance bases on the China coast and on islands near Japan, will very probably attempt a landing on Japan proper about the middle of the year, and "the possibility of an even earlier landing must not be discounted."
- b. The Allies will very probably land in the Helay Peninsula during the spring or summer, and operations will probably also be undertaken against French Indo-China.
- c. As China increases her war strength, she will probably carry out counter-offensives against the Japanese, coordinated with American operations.
- d. War developments and Allied "political maneuvers" will probably engender in all the countries of Greater East Asia, except Manchukuo, an increasingly uncooperative attitude toward Japan.

-2-TOP SECRET ULTRA It is worth noting that even though the messages of Japan's diplomats failed to warn us about Pearl Harbor they continued to provide critical information to Allied leaders throughout the war. The aforementioned Barron Oshima would become a member of Hitler's inner circle, and his reports, sent back to Tokyo in the Purple Code, would prove to be invaluable particularly in the weeks and months before D-Day in 1944. (5) Even so, the job of intelligence is to prevent events such as Pearl Harbor and the fact that Magic would in the end prove to be valuable in the long run was of little consolation to the officers and men of the Pacific Fleet on the morning of December 7th. Perhaps the key point however is this. Despite the thousands of pieces of information obtained from Magic, not one gave any hint of the planned attack on Pearl Harbor.

CHAPTER III

A Cryptologic Change of Heart

The morning of December 8th 1941 was a sobering one not only for all Americans but particularly for those who had been tasked with preventing just such a disaster. It became all too apparent that the SIS and OP-20G had succeeded beyond their wildest dreams on one level but failed miserably on another. In some respects, the operation had been a success but the patient had died.

Almost immediately those whose responsibility it was to predict the future through the art and science of cryptology understood that the bickering, infighting and a general lack of manpower, resources and coordination had led them to "bet on the wrong horse. It became clear that to succeed it would be required to focus not just on the Japan's Diplomats but on her Admiral's as well.

This realization occurred almost immediately after the attacks on Oahu but strong evidence of this cryptologic change of heart can be found in the enclosed memo from June of 1942 from Commander John Redmond. (1) Redman was the director of radio intelligence for OP20G and the brother of Rear Admiral Joseph Redman, the assistant director of naval communications. In the fist two paragraphs he lays out the problems of coordination and states

" a satisfactory division of work on a continuous basis could not be arrived at so a suggestion by General Mauborgne that the army and navy alternate daily on certain functions mostly decryption and translation was adopted. (Redman then states what in hindsight, appeared obvious) This procedure has been followed since that time and is not conducive to efficiency. (2)

He then goes further in paragraph three to shed perhaps even more light on the causes that led to Pearl Harbor

In peacetime it was the desire of each agency to produce as much of this material as possible because success were used as a means of obtaining appropriations. (3)

The second document of note from 25 June 1942, Report of Conference Appointed to Study Allocation of Cryptanlysis (4) is further proof of the effort to address the missteps and lack of coordination so prevalent in the days prior to the attack on Oahu. The Document concludes noting that

[&]quot;This committee is to meet at frequent intervals for an exchange of information and for the purpose of eliminating any duplication and for the purposes of passing upon any questions of allocation for pooling of efforts which might arise from time to time. (5)

The conclusion while apt is not as impressive as the names on the distribution list which was a veritable who's who in American Cryptologic history to include William Friedman, the father of American cryptology, the aforementioned John Redman, Joseph Wenger his deputy and Carter Clarke a major player in the signal intelligence activities of the War Department.

Together these documents show the efforts by the major players in America's cryptologic realm to get it right. Their efforts would bear fruit, first at Midway and at countless other crucial times during the Pacific war. But it is crucial to understand that had the parties involved not clearly understood that the previous process was as Redmond noted, not conducive to efficiency it might have taken far more time and more importantly, far more lives to win WWII

0p-20-6/ir

The Director of Naval Communications

Subject:

Cryptanalytical and Decryption Operations on Diplomatic Traffic.

The Army and Havy have for some time shared responsibility for handling diplomatic traffices Theresis now close daily collaboration between the two brganizations for this purpose. Daily folders in the War and Navy Departments are now identical. Externally, the Army serves the State Department; the Navy serves the President.

The question of division of this work came up when General Hauborgne was the Chief Signal Officer, and when Rear Admiral Moyes was the Director of Naval Communications. The services were at that time on a competitive basis and were exploiting material produced by themselves. A satisfactory division of the work on a continuous basis. could not be arrived at so a suggestion by General Mauborgne that the Army and Navy alternate daily in certain functions, mostly decryption and translation, was adopted. This procedure has been followed since that time and is not conducive to efficiency.

- In peace time it was the desire of each war agency to produce as much of this material as possible because successes were used as a scans of obtaining appropriations when times were poor.
- The following considerat: no impel me to recommend that the Army be permitted to take over all of the diplomatic work:
 - The Army Signal Intelligence Service is planning on moving to a location remote from the city, understood to be near Frederick, Maryland. will make daily collaboration difficult.
 - The present arrangement is inefficient and is not desired by either unit, and we would like to allocate the work more efficiently.

X Diplomatic

SECRET

- (c) The Army has practically no Orange military systems of immediate importance to occupy their efforts.
- (d) The Kavy has more Orange Naval than it can handle with present available personnel.
- (e) In addition to Orange Naval the Navy is now going into air systems and weather systems, (We recently made arrangements with Buker to borrow an officer and a man experienced in aerology who are assisting us in attacking Orange weather systems,) and we are having some success and plan to train additional personnel in this work and send the system and personnel to field units as soon as possible.
- (f) The Navy is assisting and exercising guidance over the Coast Guard clandestine operations.
- (g) The Navy employs the following personnel for diplomatic operations: in decryption 5 officers, 20 yeomen, and 3 women clerks; in translation 1 language officer, 4 civilian translators, and 1 yeoman; in machine operations 4 men a total of 35 people. Also, one tabulator of our three machines is occupied. Nost of the above personnel are experienced and could be readily used and are needed in our primary problem of Orange Naval.

5. I have discussed this with the Army, and they are willing to take over the diplomatic work but will still give us material as heretofore for delivery in the Navy Department and to the President.

6. If my proposal is approved, it is requested that the following methods of arrangement be considered and I be advised of your desires in the metter:

B (a) A purely verbel arrangement between myself and the Officer-in-Charge of the SIS Section in the War Department.

(b) A written agreement between myself and the Officer-in-Charge of the SIS Section which would incorporate that Navy may return to present arrangements at any time and particularly upon

the cessation of hostilities. Also, that the May, will, in the event that the Army becomes more occupied with enemy military systems, take up this work again.

- An arrangement, either verbal or written, on a higher level than the Officer-in-Charge of the SIS Section and myself.
- I hesitate to make these arrangements without your knowledge of the background and because of the possible political aspects involved.
- Although the arrangements will not affect the final intelligence as prepared daily in the Navy Department, I suggest the possibility that the Director of Naval Intelligence might also be interested in these proposed arrangements.

Respectfully,

/S/ John R. Redman, . Op-20-0.

adm. Wilkinson has seen and agrees. He thinks it should be incorporated in " allocation Committee " (FBI - NAVY - WAR) This committee meets tommor and we women like to be able to say that in order to arose duplication nany her grown of diplomatic and turned it over to Naw Sept. 148.R.R. July concur. 181 Joseph R. Bernen -

Subject: Report of Conference Appointed to Study Allocation of Cryptanalysis.

In accordance with your directive, a conference of representatives of the War Department, the Navy Department, and the Federal Bureau of Investigation was held on June 30, 1942, at which time the conference was advised of your directive which was as follows:

> "That a committee be designated composed of one representative from each service to consider the entire field of cryptanalysis to assure themselves that the three services can cover the entire field, and having assured themselves that they could cover the entire field, to avoid duplication of effort by allocation of the cryptanelysis, among the services, of those types which the respective services ere best qualified to undertake. Provision should be made for pooling of effort aside from this allocation whenever circumstances require. Consideration should be given to the formation of a standing committee to pass upon any questions of allocation or pooling of efforts which may arise from time to time."

A study was made of the entire field of cryptanalytical work for the purpose of determining whether the three designated 1.e., the Army, the Navy, and the FBI, were able to handle all such work.

The survey of this field reflected that this work fell generally into the following classes:

- Diplomatic
- Enemy Naval Operations Enemy Military Operations
 - (a) Western Hemispher-Clandestine
 - (b) International Clandestine other than Western Hemisphere
- Trade Codes
- (a) Army Weather (b) Ravy Weather

(Continued on next page)

See FBI file in G-1





- Domestic Criminal
- 8. Voice Broadcast
- 9. Cover Text Communications
- 10. Miscellaneous

After surveying this field, it was the unanimous opin-ion of this conference that all of this work could be adequately handled by the cryptanalytical sections of the three interested agencies.

A study was made by the conference with reference to the question of the allocation of this work, and the conference agreed on the following allocation:

Diplomatic: Army.

Enemy Maval Operations: Navy. Enemy Military Operations: Army.

- (a) Western Hemisphere Clandestine: FBI-Navy. (b) International Clandestine other than Western Hemisphere: Navy.
- Trade Codes: To be assigned by committee.

(a) Army Weather: Army.

- (b) Nevy Weather: Nevy. Domestic Criminal: FBI.
- 8. Voice Broadcast: FBI.
- 9. Cover Text Communications: FBI.
- Miscellaneous: To be assigned by committee. 10.

*The conference felt that there was sufficient material to occupy both FBI and Navy with reference to the handling of Western Hemisphere Clandestine work inasmuch as both are presently engaged in it and have a vital interest in the results. It was suggested that the duplication in this field be eliminated by agreement among the members of the committee to be appointed.

**Inasmuch as this work involves the question of which agency possesses the proper library material applicable to the particular code, it was believed that these cases should be assigned by a standing committee, which committee should have in its possession the complete list of the code book material possessed by all three agencies.

The conference recommended that a standing committee composed of one representative from each of the three agencies (Army, Navy, FEI) be appointed, and it was recommended that the committee should be made up as follows:

Officer in Charge, Signal Intelligence Service of the Army.

 Officer in Charge of the Radio Intelligence,
 Section, Office of Vice Chief of Naval Operations
 Officer in Charge of the Technical Laboratory, Federal Bureau of Investigation.

This committee is to meet at frequent intervals for an exchange of information and for the purpose of eliminating any duplication and for the purpose of passing upon any questions of allocation or pooling of efforts which might arise from time to time.

FOR THE WAR DEPARTMENT

Col. Carter Clarke

Col. Frank W. Bullock

Mr. William Friedman

FOR THE NAVY DEPT.

Comdr. John R. Redman

Comdr. J. N. Wenger

Lt. Cdr. A. D. Kramer

Lt. Cdr. L. T. Jones

FOR THE FBI

Mr. E. P. Coffey

Mr. D. M. Ladd

CHAPTER IV

Redemption The Naval Messages

You who have participated in the Battle of Midway today have written a glorious page in our history. I am proud to be associated with you. I estimate that another day of all out effort on your part will complete the defeat of the enemy.

5 June 1942 CINPAC message from Admiral Nimitz

American history is rife with examples where groups of dedicated individuals were able to turn tragedy into triumph at critical times. The Battle of Long Island led to Saratoga and Yorktown. Bull Run and the Peninsula Campaign led to Gettysburg and Appomattox and the horrible trench warfare of WWI gave way to victory in the Argonne and the surrender of the Kaiser.

With this tradition in mind, one of the keys to victory in the Pacific was the simple fact that the changes that America's codebreaking elements made in their procedures after Pearl Harbor produced almost a mirror image of the failed process that had led to disaster in the waning days of 1941. As was noted in the referenced 25 June document, (1) the realization that they had "bet on the wrong horse" and failed to work together, allowed both the Army and the Navy to begin to made the appropriate adjustments required to get the operational information they needed to prevail over Japan.

But while this realization would ultimately reap huge benefits it was little consolation in the early spring of 1942. After the attack on Oahu, the armed forces of Japan would move from victory to victory and in a span of a few months conquer a tenth of the earth's surface. (2) In May of 1942 the United States was down to 3 carriers in the Pacific. The *Yorktown*, which has sustained major damage at the Battle of the Coral Sea, The *Hornet* whose pilots had never been in combat, and the *Enterprise*, which was the only one of the three that was truly primed for battle. Other than the carriers the United States Navy had only about 50 ships to meet Japan's next move. Admiral Yamamoto sensing an opportunity for the kill moved from the home islands of Japan in May with over 200 ships and 8 aircraft carriers, 4 of which had led the attack at Pearl Harbor. If Admiral Nimitz, the leader of the American effort guessed wrong as to Japan's next move he risked losing the remnants of his fleet and leaving Hawaii and the West Coast of the United States wide open to invasion. (3) But Nimitz would

not have to guess, as part of the revamping of their efforts OP20-G and the Navy codebreaking organization at Pearl Harbor had cracked JN-25, the Japanese Navy's main operational code. Unlike before Pearl Harbor, at the time of the battle, Nimitz's commanders would know as much about Japan's plans as anyone on Yamamoto's general staff. (4) On the fourth of June at 10:20, in a surprise attack, dive bombers from the Enterprise appeared over the main body of Japan's massive task force (5) and, in less time than it takes to watch the evening news, sank 3 of Japan's front line carriers; Later that day they would destroy the fourth putting an end to Japan's march across the Pacific. The Rising Sun was finally beginning to set.

At Midway, the United States was horribly out manned and outgunned, yet the U.S. Navy won because unlike the "analysis" of the diplomatic traffic before December 7th, America's codebreakers were able to focus on " the secrets worth knowing." (6) The following summaries of the intercepted JN-25 messages paint a picture of specificity unseen in the diplomatic traffic. Information such as dates, times, and critical navigational bearings are plentiful. As is referenced in the first document (7), as early as 16 May, Admiral Nimitz was fully aware of his adversary's intentions. The summaries (8) from mid-May not only indicate that Midway is Japan's main objective they also expose the fact that Yamamoto had hoped to send a force to attack the Aleutians in an attempt to fool Nimitz into thinking that area was his main objective. As May comes to a close, detailed information on the Japanese task force itself is revealed in such detail as to leave Nimitz with little doubt as to what he could expect. (9) As the battle draws closer the messages become more and more finite and detailed.

The 4 June message which advises to "attack immediately" (10) is proof of the fact that at the time of the battle of Midway, the U.S. Navy was like a sniper perched in a tall building just waiting for word from his spotter on the ground as to when to fire the first shot. Sir John Keegan has called Midway, the complete intelligence victory, (11) and indeed it was, but only because of the realization that the information obtained from the cracking of JN-25 was more critical to winning battles than anything that Magic might reveal.

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CHAPTER V

CONCLUSIONS

When one considers the actions of both the army and navy codebreaking efforts prior to December 7th as well as the vast disparity in the types of information contained in the diplomatic and naval messages one can make 3 definitive conclusions.

- 1. FDR could not possibly have known of the attack on Pearl Harbor
- 2. The failure to predict the attack was not as some have claimed a failure of analysis but rather one of collection.
- 3. Those who seek to prevent the Pearl Harbors of the future must work harder to obtain the "secrets worth knowing," and understand that for the most part, analysis, is just another word for "educated guessing."

In December of 1941, the educated guess was that Japan would strike at the Philippines or Singapore. Because we had no direct pipeline to the secrets of the Imperial Navy people such as General Marshall were truly convinced that the Japanese did not have the capability or the nerve to carry out such an operation against Hawaii. The Chief of Staff's statement in April of 1941 speaks volumes about the assumptions the American leadership had towards Japan at the time.

'The island of Oahu, due to its fortifications, its garrison and its physical characteristics is believed to be the strongest fortress in the world... With our heavy bombers and our fine new pursuit planes, the land forces could put up such a defense that the Japanese wouldn't dare attack Hawaii." (1)

As we have seen unless a clear, lucid and unbridled Japanese diplomatic message had been grabbed indicating that " *The Japanese Imperial Navy intends to attack Pearl Harbor at dawn on 7 December* it is unlikely that anyone would have predicted the attack.

Still even with the aforementioned information readily at hand many modern day scholars continue to jump to the unfortunate conclusion that December 7, 1941, like September 11, 2002 occurred because of a lack of proper coordination and analysis within the US intelligence realm.

Thus it was not surprising to see a bevy of press stories after the attacks on the Pentagon and

the World Trade Center that trumpeted the analysis of the eminent historian Roberta Wohlstetter. Her highly regarded 1962 treatise, "Pearl Harbor: Warning and Decision," is regarded by many as a "classic" analysis of the events that lead to the intelligence failure of the Century. In sum, Wohstetter held that the disaster at Pearl was due not to an inability to collect intelligence, but rather to a failure to separate :ritical intelligence from what she described as "the noise" (noise being defined as the huge amounts of information that are scooped up by technologically adept intelligence organizations). (2) Prominert journalists such as Tim Weiner, one of a host of New York Times reporters who cover the US intelligence and defense community, concluded that

"Well before dawn on Dec. 7, 1941, the American military, having intercepted and broken Japan's codes, knew at the highest levels that an attack was coming. If it failed to produce an accurate image of Japanese intentions and capabilities, it was not for want of the relevant materials," (3)

Weiner quotes Wohlstetter as noting that "Never before have we had so complete an intelligence picture of the enemy." ... No one saw the big picture (4) The result was a surprise attack." Weiner was not alone; Professor John Q. Wilson in his June 2002 article in the Wall Street Journal also paid homage to the conclusions of the book and went to great lengths to show how history had repeated itself. (5) Only time will reveal whether Weiner and his fellow journalists are correct in applying Wohlstetter's insights to explain the failures of September 11, but one thing is certain: they are wrong to sign on to her conclusions regarding Pearl Harbor. On one level it is easy to understand why those who make it their business to understand the inner workings of the intelligence community revere Wohlstetter's book. The book is well researched and paints a detailed portrait of the kinds of thing that can happen when too much information and too much bureaucracy get in the way of finding the truth. However, where Wohlstetter falls short is not in her attempts to present a scholarly work on the attack, but rather in her conclusions regarding the reasons that the American intelligence community was caught napping.

Wohlstetter's argument was based on the thought-provoking but inaccurate premise that prior

to the attack, elements of the United States intelligence apparatus had been successful in collecting the intelligence required to ascertain the Japanese Imperial Navy's intentions on the Pacific Fleet. She notes, however, that despite their success in collecting the critical material they sought, the powers that be on the American side failed to properly analyze the material. This was due, she noted to the sheer volume of traffic. To her mind the lack of a cogent system to make sure that all the pieces of the puzzle could not only be put on the table but also fully assembled, was the true cause of America's failure to see the big picture. (6)

However, as we have seen from our examination of the diplomatic intercepts, the information collected, while valuable in many respects was devoid of any solid clues as to Japan's intentions in the Pacific. (7)

The previous documents however provide solid evidence that the failure to predict the attack was not due to a failure of analysis but rather to the infamous decision by the American cryptologic community to concentrate almost exclusively on the diplomatic codes. (8)

In short, American code breakers in the time before Pearl Harbor were very much like a lab animal that has two buttons in its cage. If it pushes the button on the right 2 or 3 food pellets are dispensed: if it pushes the one on the left, 10 to 20 pellets are released. In time, the animal will understandably forget that the right button even exists. Such was the case with Pearl Harbor and the Magic decrypts.

Had we been able to read the Naval codes and still missed the attack, Wohlstetter's theory regarding the difficulty in separating the actionable information from the "noise" might have some validity, but as noted, JN-25, the code that would have most likely revealed the plot, was not broken until the spring of 1942, shortly before the Battle of Midway. (9)

But if the intelligence failure at Pearl Harbor was not due to faulty analysis what was the cause? Maureen Baginski, a former chief of operations at the National Security Agency and currently head of intelligence section of the FBI has noted that it is not enough " to snatch secrets out of the

ether, rather one needs to be sure that they capture "the secrets worth knowing. (10) " When a cryptologic organization latches onto the mother load in terms of information, (a perfect example being the success of Navy code breakers prior to the Battle of Midway) it has the effect of eliminating the need to juess or in more formal terms analyze a situation. The need for analysis is a constant in intelligence work but no matter how bright one may be when we analyze anything we run the risk of falling prey to our own assumptions. If we had chosen from the beginning to go after the Naval traffic the need for analysis would have been greatly reduced. The sad fact was that going after information that provided broad general answers made it easy to underestimate the Japanese? By focusing on the words of the diplomats the United States had keenly looked into a cryptologic mirror, but in the end had seen only the reflection of their own intentions. (11)

Professor Beth Fisher, of the University of Toronto, writing in the recent book, Intelligence and the Cuban Missile Crisis, notes in chapter 6 that policy analysis as well as intelligence analysis is characterized by two types of approaches. She identifies the first as "theory driven" and the second as "data driven." In short, "theory driven" analysis is based on certain assertions and assumptions. These assumptions provide a high level of comfort to the person conducting the analysis. In addition, they often prompt individuals to try to meld information that clashes with their preconceived notions onto a previously constructed framework of ideas and theories that may very well have little or no relevance to the present situation. (12)

"The opposite of "theory driven" analysis is "data driven" thinking, in which predictions concerning the future actions of an adversary are based not on wishful thinking but on cold hard facts. In short, Magic told us that Japan did not like us and was likely to start a war. JN-25 told us that a massive fleet of 200 ships was headed to attack Midway. The failure to focus on the former rather than the later led to disaster.

So what lessons does the failure to predict the attack on Hawaii hold for us in the present day? Are there parallels between that dark day and the horrific events of 11 September 2002?

Most emphatically, yes, In a 21 September 2002 Washington Post editorial entitled the Real Failure noted that

"There is a temptation, in reading the first interim report by the House-Senate inquiry into intelligence failures preceding the Sept. 11 attacks, to focus on the tidbits of information the intelligence agencies had gathered before the attacks that offered hints of what was coming. The intelligence agencies for example, had received a series of indications that terrorists were interested in airplanes as weapons, and there were signs as well that Osama bin Laden was plotting a major, catastrophic attack on the U.S. mainland. Yet the possibility of airplanes being used as weapons was never seriously studied, the report contends, and despite the signs of interest in a domestic attack, intelligence officials continued to focus chiefly on the possibility of attacks overseas... The major failure the report hints at is not the specific inability to stop the attacks given what was known at the time. It is, rather, a lack of seriousness and intensity about responding to the problem of al Qaeda as it developed.... It also, however, documents the agencies' failure to shift resources in response. (13)

In conclusion, there can be no doubt that proper analysis is crucial to effective intelligence work; however, the critical point is that analysis that is conducted without the aid of a clear view of real conditions and a realistic appreciation of the capabilities of the adversary is no analysis all, no matter how well it is collected and collated. One must always keep in mind that if your initial assumptions are wrong, it is unlikely that you will ever get to the truth of any situation, no matter how smart or efficient you may be.

"The unexpected can happen and often does"

Gordon Prange, from at "Dawn We Slept" (14)

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