

SCAMP IV
 Thursday 30 June 1958

(This begins a new tape)

Guthman: It's a nice thing to have a code, or cipher, or
 for enciphered code, and to have as a result some information right out of the

horse's mouth, but if you can't use it, what good is it? Except perhaps
 for historical purposes. In other words it is one ~~thing~~ thing to have COMINT
 and another thing to use it properly, that is, so as not to dry up the source
 of COMINT and to continue to receive it.

This afternoon we are going to observe a case which illustrates some of
 these points. During the first part of last Friday's talk, you saw and
 heard Walter Cronkhite's film, "You Are There", an account of the Zimmermann
 Telegram Episode. It depicted in a rather sensational but historically
 accurate manner, except for one thing, the profound impression that the
 publication of the text of that telegram created in Congress. When the film
 ended, I said I would leave for today's session a discussion of the cryptologic
 background of this astounding important episode of World War I, for it
 certainly charged the atmosphere with great tension and had a most serious
 influence upon the course of World War I and in that way upon the course of
 history.

The Cronkhite film hardly needs comment to indicate the importance which
 the publication of the Zimmermann Telegram exercised upon history for it
 inevitably must be considered in any study of the causes which led to the
 entry of the United States of America into World War I. Incidentally, because
 the United States is the leading power in the Western Hemisphere, I hope, the
 publication of the text of the Zimmermann Telegram helped bring Argentina,
 Bolivia, Brazil, Cuba and Panama into the arms of the allies. So important
 an incident in cryptologic history therefore warrants careful study by

historians as well as by cryptologists. It is a story complete with lessons on the disastrous consequences of weakness in C-power and with lessons on the great opportunities which attend much strength in C-power--C-power as defined in the first book. And in passing I may add, that the story as it now appears in history books and popular accounts has many errors and some of them will be pointed out today.

I think it is correct to say that history attributes the U S. entry on 6 April 1917 in World War I as a belligerent on the side of the Allies to the disclosure of the contents of the Zimmermann Telegram. Note that the statement is qualified by a date, namely, 6 April 1917. Perhaps that would have come about without the Zimmermann Telegram sooner or later for one reason or another but most probably as a result of German ruthlessness in the conduct of submarine warfare. But later might have been too late because after 1 February 1917, when unrestricted submarine warfare started, there wasn't much time left to help. England was being starved for food and for munitions and if America had waited until England had been starved into submission and capitulation, it is possible that America would never have entered into the war ~~or~~ or if it had would have been forced to enter as a result of German arrogance and might have been left to fight the powerful and jubilant Germany all alone, who knows. The fact is, however, that the Zimmermann Telegram was published on March 1, 1917 and within a little over one month, on April 6, we declared war on Germany. There seems to be little doubt therefore that America entered the war when she did because of the

Zimmermann Telegram, or shall we say rather as a consequence on the one hand of obtuseness in the affairs diplomatic and naivete in the affairs cryptologic and on the other hand the proof of British astuteness in affairs diplomatic and brilliance in the affairs cryptologic It was only to be expected that question and doubt ~~would~~ ^{should} be raised as to the authenticity of the Zimmermann Telegram The newspapers were full of ~~denunciations and discussions~~ denunciations and discussions of what many people regarded a complete hoax In the Congressional Record the debate on March 1 takes up 22 whole pages-- all devoted to the question of the authenticity of the Zimmermann Telegram which had so far nothing to back it except the word of the Washington correspondent of the Associated Press The publication had not been made on the authority of the State Department at all It had strangely appeared merely as a dispatch from the Associated Press sent broadcast apparently upon its own responsibility You will recall that stirring scene in the Cronkhite film showing the way in which ~~Rep~~ Senator _____ reacted and some of the other senators and the picture wound up with a rather interesting accounting for the delay of some weeks--six weeks about--between the time the British had the Zimmermann Telegram and the communication of its contents to the U S

Now let's lift the secrecy veil a bit and it will be of interest to start in with a brief story about how the British cryptologic organization got started ~~XXX~~ For this, I am going to read from a lecture given at Edinburgh at the Philosophical Institution on December 13, 1927 by Sir Alfred Ewing, who was the first head of the organization known as Room 40-OB

designation
 It was a cover/for the organization and became known by that designation
 from the very start and it seemed useful to keep it until the very end of the
 war Here is the first detailed statement of what Room 40 did and there is
 something here about the Zimmermann Telegram, how it was intercepted and so on.
 However there were hints even before that Ewing's son in 1939, published
 a book, a copy of which I have here, "The Man of Room 40" and I am going to
 read just a little from here and there of this account

Sir Alfred had been Professor of Mechanical Engineering at Cambridge, I
 think it was, when he was tapped on the shoulder by the Admiralty and selected
 to become Director of Naval Education This was a year or two before the
 war broke out

On the fateful 4 August 1914, Ewing's routine work as Director of Naval
 Education was in consequence brought to a sudden standstill but fortunately
 his friend, Admiral Oliver, then Director of Intelligence Division of the
 Admiralty War Staff, now Admiral of the Fleet, Sir Henry Oliver, showed him
 the same day a number of enemy cipher telegrams, intercepted wireless messages
 which had been taken in ~~the~~ by our naval listening stations Such messages
 were called intercepts but they were intercepted only in the sense of being
 over heard They had no doubt reached their destination to which they were
 addressed in their callsigns Each ship or other wireless station had its
 callsign, an arbitrary group of letters which serves as a signature when both
 sending and receiving Now Ewing had had an amateur's experience with
 cryptography and in fact he devised one or two ciphering mechanisms as he
 called them The Admiral, that is Admiral Oliver, referred to a talk that

he had had with Ewing as an indication that Ewing had once taken some interest in the subject, asked him to tackle the messages and see what he could do. Ewing replied that he would willingly try but at the time he thought the chance of success was small. Accordingly, he took the bundle of messages away and Admiral Oliver ordered all the listening stations to send the material direct to Ewing's office. In consequence a stream of telegraph intercepts began to pour in. A stream which swelled and swelled as additional listening stations were opened up and the business of intercepting became more systematized until the number of telegrams, all addressed to Ewing, Admiralty, often exceeded 2,000 a day.

There goes on a point there wanting to make sure the reader understood quite clearly that this was a new activity that Britain had not engaged in eavesdropping before this. It is right to make this clear for long after the war was over and the enemy had become aware that their ciphers had been read, it was claimed in the Foreign Press that Britain's pre-war perfidy was demonstrated by the preparation that she had made for cryptography before hostilities commenced. I told you the other day that this activity had been closed down in the year 1844 and was not resumed until the outbreak of World War I. There was a little bit of studying, it is true, before that, a couple of years before that, but no actual work on messages.

Now we go next to a book which was published in 1955, comparatively recently, "The Eyes of the Navy" by Admiral Sir William James, which is a biographical study of Sir Reginald William Hall who was Director of Naval

Intelligence during World War I and who was largely responsible for the astute manner in which the Zimmermann Telegram was handled. Though the work of Ewing's small band had been kept so secret, all of the great powers, except for the exception of ourselves, maintained a department for the decipherment of foreign codes in their peacetime organizations -- The Russian and French departments being especially efficient. He should have excepted the United States Government because we didn't have anything. I know the Russians and the French did have. Then he goes on to say. With the exception of Ewing, who had at one time been interested in ciphers, not one of the pioneers or for that matter, not one of the men and women who joined them later had any previous knowledge of codes, ciphers or wireless procedure. The Admiralty Staff first worked on messages from ~~the high~~ a high-powered German station to stations in the German colonies and though with the help of Mr. Bradfield of the Marconi Company, code signals were identified and code books of German commercial firms were collected and studied, no real progress was made for several weeks. This was quite understandable. What Ewing did at the beginning was to go over to the British museum and pore among the old commercial codes ~~xxx~~ that were on file there, thousands of them I suppose, and see if he could find out how a code was constructed. They had, of course, this one intercept station to begin with but they began to expand. The first station was eventually expanded into 14 stations in the British Isles, all with direct landlines to the Admiralty and all manned by Government Post Office operators. Hipsley was also responsible for bringing into service later in the war three stations overseas -----, Malta and ¹Gonna. The

stream of messages on the lower naval wave length was now arriving in Ewing's room and the research workers had their first stroke of fortune when a German mercantile signal book arrived ~~xx~~ from Australia. It had been taken from a German merchant vessel at the outbreak of the war and had been sent by the quickest route to the Admiralty. It was the book used by German outpost vessels and warships. In the middle of October, they had another stroke of fortune. On August 20, the German light cruiser Magdeburg, had been destroyed by Russian ships in the Gulf of Finland. A few days later the body of a German signalman was washed ~~ashore~~ ashore and clasped in his arms was a copy of the German Naval signal book. The Russians, realizing the value of this book to the British Naval authorities, sent it to England where it arrived on October the 13th. In those early days they also began direction finding. It was very important to the success of which was attributed for a good many years the British success in naval warfare and in submarine warfare. In April, this is April 1915, something of even greater importance happened. There came into Hall's hands a copy of ^{the} ~~mx~~ German diplomatic codebook, treasure trove from Persia. How this book reached Hall is one of the strangest stories of the war. A naval officer in from the Persian Gulf came to Hall one day and told him about a raid on the Abadan pipeline that had been planned by a German Vice Consul, named News of the impending raid was received in time to attack the raiding party in their camp and the German Vice Consul got away in his pajamas on horseback, leaving his baggage behind. Hall

was quick to see that the baggage might contain useful information and as a result of his inquiries, it was found in the cellars of the office

He sent over Mr Cousins Hardy, who was then working with him, to examine the baggage and he returned with the codebook The codebook was the one used for messages between Berlin and Madrid, and Berlin and Constantinople and it was via Madrid that the German Foreign Office sent their messages to diplomatic representatives in North and South and Central America and ever since the special stations have been intercepting wireless traffic, a continual flow of ~~traffic~~ messages which from their construction are obviously not naval messages had been arriving in Room 40, and have been stowed away in cupboards

The time had come to retrieve these piles of messages, sort them and begin work on them You'd be surprised how many messages get stowed away in cupboards nowadays too Now the first hint at to the cryptographic or cryptanalytic work done in Room 40 was by Churchill, in a talk which was recorded in the "Scotsman", an Edinburgh paper, on July 14, 1923 and also he mentioned it more specifically in his book, "The World Crisis" published the same year But even as early as 1921, the "Scotsman" in an issue 19 July had a remark by a Sir Maurice Hankey, "that among those who had worked in obscurity as opposed to those who were all the time in the limelight, there was no name which deserved greater honor than that of Ewing and no man who had done greater service to his country "

Now Ewing remained head of Room 40 until July 1917, when Admiral Hall was made the Director of Naval Intelligence and also the Head of Room 40

Several months later came the episode involving the infamous Zimmermann Telegram and the first lifting of the secrecy veil that had been thrown about this episode came in ~~1926~~ 1925, when the November issue of "World's Work" magazine brought the final installment of Hendrick's Life and Letters of Walter H. Page. Page was the United States Ambassador to the Court of St. James during World War I. I will read from "World's Work" and from time to time, I will make comments. In order to preserve this precious thing, I will read from the photostat.

We shall not concern ourselves now with the steps taken by President Wilson and Secretary Lansing, culminating in the publication ~~of the~~ by the Associated Press of the text of the Zimmermann Telegram. Our attention will be concentrated upon the minute details of the manner in which the message was intercepted and solved. One day, in the latter part of February 1917, Mr. Page was requested to call on Mr. Balfour at the Foreign Office. The first sentence contains a mis-statement of fact. He was not requested, it was all arranged. He was there because the arrangements were made that he be there for purposes which will become clear in a moment or two. Mr. Balfour, quietly handed the Ambassador a sheet of paper, a document that in its influence upon American policy proved to be the most sensational that the European war had so far brought forth. This paper contained a message that will be immortal as the Zimmermann Telegram. It disclosed the preparation Germany was making for war with the United States. It was a message from the German Foreign Office in Berlin to the German minister in the

city of Mexico As Germany had no satisfactory method of communicating with Mexico, this telegram had been sent to Count Bernstoff in Washington with instructions to forward it by cable to the German Minister in the Mexican Republic This latter diplomat was directed to enter at once into negotiations with ^{Carranza}~~Kerensky~~, President of Mexico and to make an alliance with Mexico for a joint German and Mexican invasion of the United States In case this invasion succeeded, Mexico was to obtain Texas, New Mexico and Arizona, territory which she had lost to the United States as a result of the war of 1846 and which was now to be treated as a kind of Mexican Alsace-Lorraine and to be "redeemed" Remember I mentioned that to the people in the Middlewest, Southwest and the Far West, the European war was 3,000 miles away and it might just as well have been on a different planet but when the Zimmermann Telegram began talking about returning New Mexico, Texas and Arizona, this was a horse of a different color The German plan also contemplated an attempt to detach Japan from her European Allies and persuade her to join the German-Mexican alliance Carranza who President ~~Kerensky~~, as subsequent events disclosed, looked not unfavorably upon this ambitious proposal was the same ^{Carranza}~~Kerensky~~ who President Wilson had supported for the Mexican presidency among the multitude of revolutionary candidates Carranza ~~Kerensky~~ was President of Mexico, ^{indeed}~~indeed~~ as a result of the succession of events that amounted almost to American intervention Now Page at once transmitted this information to the State Department, London, February 24, 1917 and the message was received in the State Department at 9 00 a m addressed to the Secretary of State In about three hours I shall send a telegram of great

importance to the President and Secretary of State Signed Page

London, 8 30 p m , same date Secretary of State Confidential for
 the President and Secretary of State This confidential is rather amusing
 these days Confidential was the highest classification there was in those
 days Balfour has handed me the text of a German telegram from Zimmermann,
 German Secretary of State for Foreign Affairs, to the German Minister to
 Mexico which was sent via Washington and relayed by Bernstorff on January 19th
 You can probably, that's a good one--I mean the word probably--you will
 see why, you can probably obtain a copy of the text relayed by Bernstorff
 from the cable office in Washington The first group is the number of the
 telegram, 130 and the second is 13042, indicating the number of the code
 used, the last group of two is 97556 which is Zimmermann's signature I
 shall send you by mail a copy of the cipher text and the decode into German
 and meanwhile I will give you the English translation as follows (and I
 think it worth reading) We intend to begin on the 1st of February unrestricted
 submarine warfare This means sink without notification without a chance
 for any survivors to escape drowning We shall endeavor in spite of this
 to keep the United States of America neutral In the event of this not
 succeeding, we make Mexico a proposal of alliance on the following basis
 Make war together, make peace together, generous financial support and an
 understanding on our part that Mexico is to reconquer the lost territory in
 Texas, New Mexico and Arizona The settlement and detail is left to you.
 You will inform the President, that is President Carranza, of the above most

most secretly as soon as the outbreak of war with the United States of America is certain and add the suggestion that he should on his own initiative invite Japan to immediate adherence and at the same time mediate between Japan and ourselves. Please call the President's attention to the fact that the ruthless employment of our submarines now offers the prospect of compelling England in a few months to make peace. That last sentence was the sentence that Zimmermann had in mind when he said, in extenuation of the fact that he used the American State Department's own channels to send this message, he said "that message had to do with peace" because before that the arrangement had been that the German Government could use the American facilities to further proposals concerning peace. The page goes on. The receipt of this information had so greatly exercised the British government that they had lost no time in communicating it to me to transmit to you, (I don't know what no time means) in order that our government may be able without delay to make such disposition as may be necessary in view of the threatened invasion of our territory. The following paragraph is strictly confidential. Early in the war, the British Government obtained possession of a copy of the German cipher code used in the above message, (That's not true.) and have made it their business to obtain copies of Bernstorff's cipher telegrams to Mexico, amongst others which are sent back to London and deciphered here. This accounts for their being able to decipher this telegram from the German representative to the representative in Mexico and also for the delay from January 19th until now in their receiving the information. You see the idea is that the

message had to be obtained in Mexico and sent across the ocean by packet boat

I suppose and this would take some time. This system has hitherto been a

jealously guarded secret and is only divulged now to you by the British

Government in view of the extraordinary circumstances and their friendly

feeling toward the United States (This I think is rather dis-ingenuine.)

They earnestly request that you will keep the source of your information and

the British Government's method of obtaining it profoundly secret but they

put no prohibition on the publication of the Zimmermann Telegram itself. Now

this was a marvelous sentence--they had worked it out so that you could

publish the text and still not give away the real secret

The copies of this and other telegrams were not obtained in Washington

but were bought in Mexico. This sentence is important. It wouldn't have been

have to
nice to/say "we stole the copies out of your telegraph office of Western Union

in Washington". I have thanked Balfour for the service his Government has

rendered us and suggest that a private official message of thanks from our

Government to him would be beneficial I am informed that this information has

not yet been given to the Japanese Government but I think it not unlikely that

when it reaches them, they may make a public statement on it in order to clear

up their position regarding the United States, ~~to improve~~ and prove their good

faith to their allies. Now when that telegram was sent the British already

had the copy of the message from Washington to Mexico in their hands so they

knew that the text of the message must be in the Washington office. That's

why I was a little bit amused by Page saying ^{"you can"} probably find that message in

the Washington office." The manner in which the British had acquired this

message is disclosed in Page's telegram. It was "bought in Mexico", that is, the British secret service had obtained it evidently from some approachable person in the Mexican capitol, a practice which it appears from Page's communication had been going on for some time. An interesting additional fact is that this is not the only way in which the British obtained this priceless treasure. The German Government was so determined to make this Mexican alliance that it did not depend upon a single route for transmitting the Zimmermann message to von Eckhart. It dispatched it in several other ways and then it goes on to talk about the different ways

For one it used the wireless route from Nauen, Germany to Sayville, Long Island. In the British Admiralty this Nauen-Saville thoroughfare was known as the ~~max~~ mainline. It was the most direct and consequently the one most used for sending German dispatches to the United States. Hendrick cites no authority whatever for the statement that the Zimmermann Telegram was transmitted by radio from Nauen to Saville. There is very good reason to doubt that it was as we shall soon see. A few hours after the outbreak of the war, the British, who always recognized the importance of controlling communications channels, sea as well as air, took immediate steps to isolate Germany from the rest of the world that lay beyond the oceans by cutting and diverting to her own service the two German cables across the Atlantic, leaving only indirect channels of communication with her Ambassador at Washington. These were four in number. First was that radio channel, Nauen to Saville, Long Island, Nauen to Tuckerton, New Jersey. Both of these were supervised by the United States

Government and they were well supervised. Hendrick says "it was scandalous how the Germans sent messages by this Nauens-Saville route" but it is not true. I went through all the records and every time there was a message sent there was a censorship. The Germans deposited two copies of the code that was used for transmission of messages via that route. These copies are now in our Archives. I wish I had brought one

Then there was the cable from Germany, via Berlin, Stockholm to Buenos Aires and Washington but this route was secret from the U.S. although there is positive evidence that it was known to the British from the first days of its use for the cable from Stockholm to Buenos Aires passed through England. I think the British would have been crazy to have failed to copy everything that went over that cable.

The third route via Berlin, Copenhagen, Washington and this cable also touched English soil. This was a very unusual channel for the Germans because it could only be used with the knowledge and cooperation of the United States.

The fourth involved insertion of secret text in ordinary ~~newspaper~~ news dispatches and was disclosed only after the war by Bernstorff himself. I know that the United States Government didn't know this route and I don't know whether the British knew it. I have never seen any references to it except in Bernstorff's own book.

Now as to the first method, the use of the radio, I told you it was prohibited except under the supervision of the government authorities and this was exercised through Navy officers and it was very detailed. Hendrick is absolutely wrong when he says "how little this prohibition interfered with the Germans is shown by the use they made of the Long Island station for this the most fateful message sent to America during the war " I have very carefully searched every available record and have found not the slightest shred of evidence that this channel was actually used. The German accounts have been examined as well as American. I think the Germans would have been more silly than they actually were to have tried to send it that way because they would have had to use this code that was known ~~to~~ 9972 and it would be no point to it. No, the Zimmermann Telegram wasn't sent that route although Hendrick's account makes it plausible by saying: "On the 16 January 1917, the ever watchful ears of the British wireless operators detected the characteristics fluttering which informed them that another German message was speeding through the air. When decoded the British found that they possessed this somewhat disjointed but still extremely valuable document. Zimmermann to Bernstorff for Eckhart, 16 January 1917. Most secret. For your Excellency's personal information and to be handed on to the Imperial Minister in ? Mexico with telegram #1 ----- by safe route (There are blanks all through here) The message is only partially decoded and there is not one word in it about giving back to Mexico Texas, New Mexico and Arizona--not one word.

Hendrick really calls attention to the fact that there isn't any mention

of New Mexico, Texas and Arizona and he seems to imply that he wants you to believe that Bernstorff added this little touch to the message himself. This would be preposterous. Hendrick's explanation is quite flat and disingenuous. We shall soon learn the real explanation of the gaps and the doubtful points and the text of this first intercept.

We come now to the second communication channel used by the German Government. I wish somebody would put this story together once and for all so that you wouldn't have to jump back and forth. This comes from a brochure which, in collaboration with a late comrade of mine, wrote in 1935 I think it was, 1937, on the Zimmermann Telegram. We come now to the second communication channel that was used by the German Government to communicate with Bernstorff, the route via Berlin, Stockholm, Buenos Aires, Washington. This channel was made available by the good offices of the Swedish Foreign Office and its representatives abroad. Hints ^{as to} of the use of this channel may be found in Bernstorff for example, on page 65, "we had to fall back exclusively on the wireless stations when, as frequently happens, we were unable to make use of the circuitous routes via neutral countries." Again on page 149, "telegraphic communication between the German Government and the Embassy at Washington was carried out by circuitous route which made it extremely slow. This was a very bad thing to do to use a neutral country. Sweden knew better but was too sympathetic to the German ~~cause~~ cause. There is plenty of evidence that the British knew of this circuitous route from the very beginning. It happens to be that decodes of messages that passed over this route and later appeared

among the hundreds in the affidavits by Admiral Sir William Hall in the case of the Lakawanna railroad against the German Government in the Black Tom and Kingsman disasters. Many messages passed over the Berlin, Stockholm, Buenos Aires, Washington route and these were all in the Hall affidavit. What the Germans did was to hand their coded telegrams ~~on~~ over to their Swedish friends in Washington and in Berlin. The Swedish Ambassador or Minister embodied the German code groups in a message apparently all their own using the disguise that consisted of a simple shifting about of the German code groups by a process which still left plenty of tell-tale marks and the Germans hoped that the difference between the Swedish and German code groups would not be noted even it occurred to either to the Swedes or to the Germans that the cables touched England and of course it didn't dawn on the Germans that their codes could be unravelled and read by anybody not possessing a copy of the codebook, certainly not by the stupid Englishmen. Their codes were invulnerable.

The Hendrick account would make it appear as if the Zimmermann telegram was the only one that received special treatment of this kind but it is clear from the German records alone that the transmission of important messages by more than one route was a routine procedure with Bernstorff but Hendrick's says. "The facts seem to be that the Swedish court was openly pro-German, that popular opinion in Sweden similarly inclined to the German side and by January 1917, the Swedish Foreign Office had almost become an integral part of the German organization. In many capitals, German messages were frequently put in Swedish ciphers and sent to Swedish Ministers in other countries and

by them delivered to their German colleagues Herr Zimmermann, in his desire to make certain that his Mexican telegram should reach Washington, again fell back upon the assistance of his Swedish confers. He handed his message to the Swedish Minister to Berlin. This functionary sent it to Stockholm, Sweden. From this point it was cabled to Buenos Aires, Argentina and from that city in turn cabled to Washington. The journey was a round-about one covering about 10,000 miles, yet nothing was sent through the air or under the sea ^{seemed} ~~seeming~~ to escape to watchful attention of British Naval Intelligence and the Swedish message was captured almost at the same moment as the one that was going and went by the mainline, that is, by that radio. Now I've talked for fifty minutes and I think we will have a break and we will resume and God help ~~me~~ if I don't finish this this afternoon.

With regard to the German use of the American State Department facilities, Burton Hendrick tries to make it appear that obtaining permission to use those facilities was a rather simple matter. It is not so. Careful study of available records shows that while this ~~same~~ channel was used on more than one occasion, it was not used nearly so frequently as Hendrick implies and its employment was confined to periods of strained relations. The first was on June 2, 1915, shortly after the sinking of the Luisitana which occurred on May 7, 1915. Of this period, Bernstorff says, "it is certain that if I had not at this stage of the Lusitana crisis had my interview with the President, relations would have been broken off and war between United States and Germany must have inevitably have followed. During our conversations, however, the President offered for the first time to permit me to dispatch a cipher telegram through the State Department to be sent on to the American Embassy in Berlin." The reason why Bernstorff asked that was quite clear. The British had all facilities for communicating with whomever they wanted. They controlled the cables everywhere in the world but the Germans couldn't do anything except by direct communications via the State Department or by radio which they were not permitted to use without the American Government knowing everything that went in that cipher that was used on that Naen Saville route, so ~~Bernstorff~~ Bernstorff said, "please give me a chance to talk privately with my government." And, President Wilson says, "that's reasonable, you shall have that chance."

The initial instance apparently paved the way for several more during the same crisis as is evidenced by Bernstorff. "From this time onwards, that is,

about 21 July 1915, Mr. Lansing agreed with me that as a regular thing I should be permitted whenever negotiations were going on to send cipher dispatches to my government through the channels of the State Department and the American Embassy in Berlin. It will be remembered that similar ~~security~~ ^{privilege} had been granted me at the time of the Lusitania incident " But lest one jump to the conclusion that the State Department was careless in placing the facilities at the disposal of the Germans and regarded the matter as being without ^{the possibility of} serious repercussions, let it be noted that Mr Lansing not only realized the full implications of the unusual procedure but also refused to transmit a message on at least one occasion on the ground that there appeared to be no particular urgency for the transmission of the message on account of either of the subjects mentioned Those are his words

It must also be noted that the State Department transmitted messages not only for the German Government but also for the Austrian Government as is proved by a telegram dated February 14 from Lansing to Ambassador Penfield at Vienna The State Department was indeed careful in placing its communications facilities at the disposal of the Germans

Now we come to a study of the code used for the Zimmermann Telegram and first in its passage from Berlin to Washington. There can be no question that the message was the one which had been appended to the Berlin-Washington message No 157, which had been sent via State Department channels Indeed the Zimmermann Telegram in its first form bore the number 158 As I ~~xxx~~ have already said, the British Government has officially never published any account of the interception and solution of the Zimmermann Telegram by its

cryptologic agency, commonly referred to as Room 40 OB Not one word officially from that day to this and 42 years have gone by but when we study very intently the telegrams that passed between the British and American Governments dealing with the Zimmermann Telegram, as related in the Hendrick account, and more especially ^{now} the account contained in the book which I just referred, the James' book, we get some information from which we can make certain deductions.

Admiral James, in his foreword says: "When, through the publication of a letter in the press, it became known that I was collecting material for a biography of Sir Admiral Sir Reginald Hall, I received letters from his old friends and colleagues expressing their pleasure that his great services were to be placed on record and their willingness to help with personal recollections of a ~~persons~~ man's leadership they had so much admired and whose friendship they had so greatly valued. Nearly all of my correspondence asked the same two questions. Had the Admiral left any papers useful to a ~~biography~~ ^{biographer?} And was it now even after 40 years possible to give a full account of his achievements without having access to official papers still under lock and key? Hall did not, as is generally believed, destroy all the records of his stewardship as Director of Naval Intelligence " As a matter of fact, I don't know how he got away with it, but he took all the messages with him when he left the Directorship. In 1932 he began work on his autobiography but abandoned the project after 5 of the 35 chapters had been completed and I think what happened was that he found out that if he published it he would be running afoul of the official secrets act and this he didn't want to do I found some useful

material in those first five chapters and it is evident from the chapter headings of the thirty unwritten chapters that his autobiography would have been a book of historical importance. It is unlikely that there are now any papers in the official archives which would throw any light on his activities I told you about that, didn't I? His was not the type of work that could be recorded in reports and letters of proceedings. He had a very large correspondence with senior officers afloat, attaches and agents but this correspondence never reached the official files. On the other hand, all official histories and nearly all biographies and autobiographies embracing the 1914-18 war throw light on his remarkable contributions to the war effort of the powers ranged against Germany and he goes on to tell how the books of the World War period, World War I period, are now gathering dust on the library shelves and everybody is studying World War II. But he says, "As I had no access to unreleased official papers, in the framework of this book is a distillation of a mass of materials gathered through standard works which were best sellers twenty years ago, it was not necessary for me to obtain official approval or support for publication." I don't believe that is quite an accurate statement because when I bought the book, immediately after it was published, I wrote a letter to our Liaison Officer at GCHQ and asked a few questions about the book and this I will read now from a memorandum to me from the Deputy Senior Liaison Officer. "John Cooper, speaking informally, says that the book was submitted to the Admiralty for review and then passed to GCHQ. Cooper received it and made suggestions that certain material be deleted and names of living persons associated with Room 40 not be included. He also offered, as his opinion,

that the book contained no previously unpublished material but it would have been better if it had not been published. He is not sure that all the recommended deletions were made but he is confident that most were. In addition to a weak substantive case, it would have been very hard to recommend against publishing in view of Admiral James' status as former Chief of Naval Intelligence and in view of his national prominence. It appears that the U.K. like the U.S. has a mechanism for reviewing manuscripts but is faced with similar frustration--nothing can be done to prevent publication except a threat of prosecution and prosecution is undertaken only when the material is such that after warning not to publish and it is published and the contents is considered substantial enough to support this prosecution and then the prosecution is underway. Cooper believes that certainly no one would hold that the contents of this book is of such a nature. Apparently Cooper knew that Admiral James in the Navy and ~~mentions~~ mentions/two members of Room 40 are employed here--they are Mr. Burch in Historical Section and Miss Wendy White who since your retirement has the transatlantic title for continuous regular service. (Your retirement gave me kind of a ~~high~~ laugh). Mr. Burch, I regret to say, died about a year after ~~this~~ this memorandum was written. I take it Miss White is still alive. Anyhow this book was no matter what Admiral James says

He goes on to say: "I was indeed in a better position to judge what could and what should not be published than anyone to whom the first World War is only a boyhood's memory, if a memory at all, because I knew how much of Hall's work was known to our enemies during the war and how much has been

published to the world since then." He was a member of Room 40 as a matter of fact--he was one of Admiral Hall's assistants. "I also had the advantage ~~of having taken some part~~ of having taken some part, when at the Admiralty, in passing for publication books and articles covering various aspects of the 1914-18 war and informing authors what for security reasons could not be published and more important the advantage of personal knowledge of the men and events I will be describing which would enable me to distinguish fact from fiction and to judge when references to the shortcomings of individuals should be omitted. In recalling the work of Hall's Naval Section, I was also on well worn ground, the text of intercepted and deciphered signals is given in American, British and German official histories "

Now, let's begin by quoting from Admiral James' account, of the Zimmermann Telegram "Early in the new year came the Zimmermann Telegram and although the first knowledge of this surprising communication was derived from European sources, (I wonder if he knew what information I derived from just that phrase) Hall's friends in Mexico City were soon playing an important part in the complicated business ~~of~~ that followed. On Wednesday morning, January 17, Hall was at work at the usual dockets and papers and at about half past ten, a member of the political section came in and told him that he and one of his colleagues had partly deciphered a message from the German Foreign Office to Bernorstoff which, if made known to the American Government, would probably bring America into the war. The two men, who by solving this cipher altered the course of history, died several years ago and their names have already

been published so in their case, it is justifiable to ignore the canon that the names of those engaged on secret work should not be disclosed. They were Nigel N DeGray, a publisher and after the war a Director of the Medical Society and the Rev W. Montgomery of Westminster Presbyterian College, Cambridge. I remember Mr DeGray. He was a picture out of Dickens, really, a very strange looking man and a very nice man and very sharp, very shrewd and made a name for himself in the organization.

There is reason to believe that the version that we have just seen came from the British copy of the State Department message containing Berlin No 157 and 158 to Washington but I don't think it would have been very polite at the time or even now to say or even to intimate that the British were also intercepting and studying messages of the United States Government. Hall at once realized that Zimmermann's message to Mexico was by far the most important message that had so far come into his hands. He also realized that it would require the most careful handling. He gave orders that all copies except the original message and one enciphered copy were to be destroyed, locked them away in his desk and sat down by himself to evolve a plan of campaign. What was the position? Within a fortnight's time, the fact that Germany was proposing to declare immediate unrestricted warfare would be communicated by Bernstorff to the United States Government. Would this be sufficient to convince President Wilson that the Germans would stop at nothing. His recent note had shown something in the way which his mind was working. It seemed that he drew little ~~distinction~~ distinction between the behavior of the Allies and

between
 that of the Germans or indeed/the justice of our cause and of theirs. If this
 new declaration was sufficient, well and good, we need not run risks and the
 Zimmermann Telegram need never be used at all. On the other hand, the new
 submarine warfare might not in itself be sufficient to convince the President
 and in that case this information of the Mexican plot must be made use of if
 we would safeguard ourselves. Publication of the telegram in the United States
 was almost certain to arouse the whole of the United States and might force the
 President to declare war but it would be at the cost of hazarding the most vital
 part of our intelligence service--a hazard that he would not take. Beyond the
 fact that the message gave the date on which unrestricted submarine warfare would
 begin, it was of no immediate naval interest and the proper procedure would have
 been for Hall to pass the message to the Foreign Office. He deliberately with-
 held all information from those best entitled to receive it and assumed a
 responsibility which ought never to have been his because he would not run the
 smallest risk of the message becoming known to somebody who not being familiar
 with every branch of his activity might all unwittingly compromise some part or
 all of the work in Room 40. Yet some plan had to be evolved and while mentally
 following the route that the Zimmermann Telegram would take, Hall saw that the
 Bernstorff-Eckhardt messages which H had secured (I'll tell you about H) might
 solve his problem because the Zimmermann Telegram when forwarded on as it must
 be from Washington to Mexico would be only another message in that ~~service~~ service. If he
 could secure a copy, it could be made to appear that the message when passing
 from Washington to Mexico had been copied and deciphered by the American
 Intelligence Service and that we had nothing to do with it. He was certain that

even if somebody whom President Wilson implicitly trusted, like Mr Balfour gave^{7.} his personal assurance that the telegram deciphered by Mr. DeGray was genuine the President would demand a most definite proof that the message bore the meaning ascribed to it and it would not be easy to convince the President and the Americans that the Zimmermann Telegram was not a hoax. There was no need for an immediate decision as he could not take any active steps until after the declaration on February 1 of the unrestricted German warfare. Meanwhile it was essential to keep the closest possible watch on Bernstorff and the American situation in order to be ready at any given moment with alternative plans. Bernstorff tried desperately to have Berlin change the decision about unrestricted warfare to no avail. On the 1st of February Bernstorff presented the declaration with regard to unrestricted submarine warfare which began that day. President Wilson immediately broke off relations. To Hall's dismay but not altogether to his surprise, matters went no further. Cables from Washington and New York ~~and~~ warned him that there would be delays and that perhaps no more positive action than a proclamation of armed neutrality by the President. The time had come to take action and on February 5th, Hall saw Lord Harding, the permanent Secretary of the Foreign Office and showed him an amplified decipher of the Zimmermann Telegram which deGrey had now been able to produce. The reason for the gaps in the first message that I showed you and talked about and the reason for this amplified ~~xxx~~ decipher that he talks about here is this. The message from Berlin to Washington via that circuitous route was in a new code, 7500. It had been put into effect only several months before. Bernstorff got a copy of it on the second trip of the Deutschland, remember that submarine that made the trip across the ocean twice

coming to Baltimore--now on the second trip it brought this new code There had not been very much traffic in that code therefore when this message 158 in that code was intercepted and tackled by Room 40, they could only make bits and pieces out of it--it wasn't enough of it It was a two-part code, 10,000 groups Well, Hall, in talking with Harding, put forth several suggestions. In the first place, it would be necessary to obtain a copy of the message from Mexico City H was no longer there but his place had been taken by T who was fully aware of what was afoot in the telegraph office and Hall did not anticipate much trouble there. I think it is an amusing incident to talk about in connection with this H and T H was a secret agent of the British Government in Mexico City One day an Englishman who was a printer in Mexico City got into difficulties You see there were many changes in the Presidency and many revolutions in Mexico at the time and when the new President came in he declared all money, all previous money, to be null and void, and he printed new money and pretty soon it became the practice to print fake money, counterfeit. This money consisted of little things that looked like the railway tickets which you get in Europe in this country and they were called cartonís and President Caraza put in an edict that anyone caught making cartonís would be tried by court martial and sentenced to death. Well, this Englishman was a printer and he operated this printing plant and on a Saturday afternoon he came back suddenly and when his workmen were out and on the desk or table in the room was a bunch of cartonís and the plates from which they had been printed. Well, he took fright, he grabbed the plates and the cartonís and he put them in the safe and he went to consult a friend of his, what to do? what to do?

The Mexican workmen who did the job returned when the Englishman was out and realizing his predicament decided that he would get the jump on his employer and he reported his employer to the authorities whereupon the authorities came and took the Englishman, put him into jail, he was tried that afternoon and sentenced to be shot the next morning. Well, the friend whom he had consulted knew H and told H what had happened. H interceded and pointed out that obviously an Englishman wouldn't go into any such picaunious business. If he were going in for any counterfeiting, he would do it in a big way. It mustn't have been this fellow so he got him off and the Englishman was released and H then had two very good friends. It happened that the friend who interceded for the Englishman worked in the Mexican Telegraph Office and that is how Admiral Hall got copies of the messages that he wanted. Hall then took steps to obtain the additional evidence that would be required in the circumstances and telegraphed to his secret agent in Mexico to get all copies of Bernstorff's to Eckhardt since 18 January. These were sent to Washington by mail and forwarded by cable to London without delay. James goes on. "So much progress on the reconstruction of the code had been made that by February 19th, Hall had in his hand an almost perfect transcript" and then he goes on and gives the text of the Zimmermann Telegram as I read it to you--the complete text. But James is throwing a little dust in our eyes, the version of the Zimmermann Telegram as was finally ~~published~~ published was not the version that was in the telegram from Zimmermann to Bernstorff which was in Code 7500 but the equivalent version which was in the telegram from Bernstorff to Eckhardt and that was in a much older and much simpler code, 13040

Now, Hall was still in a quandary, what to do, how to manipulate this thing. For the past week or so, Hall had been visiting the Foreign Office every day to discuss methods of handling the telegram but no satisfactory solution had been found. Lord Harding was adverse from any step that could possibly ~~the~~ convey the impression in Washington that there was a black chamber in the Foreign Office or that the British Government was endeavoring to influence a neutral state in its favor. Now, by this time, Hall had information that the German-Americans in the U.S. were extremely active in their endeavors to stay the President's hand. He felt that the time had come for immediate action and formally pressed for a decision. On 20 February he received Mr. Balfour's authority to handle the whole matter as he saw fit. This was a very very important decision, a great responsibility which Admiral Hall undertook without any shilly shallying. Now prolonged discussion with Mr. Page and Mr. Bell followed. He called them in. He called in Bell and he showed him the telegram and he said, don't use this --you can tell the Ambassador but don't say anything until I tell you to. The Ambassador was in no doubt about the best method to adopt with regard to the ~~handing~~ handing over of the telegram itself--he was sure that the effect of the telegram on the President's mind would be infinitely greater if the documents were to be given him officially by the Foreign Secretary and this Mr. Balfour agreed to do. That's why, in opening my talk, I said he wasn't requested to appear, it was laid on that way. This was to give a solemn undertaking, this was a solemn package of information from one government to another. The next question was an absolute cover for Room 40, the necessity for ^{over}doing nothing on

on American soil for which the American people could object. The possible refusal to accept the genuineness of the message and the steps which would have to be taken in the event of Zimmermann himself denouncing the telegram as forgery were not so easily resolved

The advantages that were to flow from having obtained a copy of the telegram in Mexico and not in the United States were now evidenced. There was nothing to prevent the American authorities from obtaining their own copy from the Washington Cable Office and the fact that the British Government had officially provided a decoded transcript would satisfy them of its genuineness but there was still a possibility that the American Government would demand absolute proof and that would mean handing over to them deGrey's reconstructed code which Hall would never do. Then all of a sudden, a possible solution suggested itself which was so simple that Hall, the Ambassador and Mr Bell wondered why it had not occurred to any of them before. If President Wilson, when he exposed the telegram, was in a position to state that it had been obtained and deciphered by Americans on American soil, all would be well and this could be achieved if Mr. Bell deciphered the message sent from Washington to Mexico under deGrey's tuition ~~xxx~~ in the American Embassy which technically speaking was American ground. As for Zimmermann's possible denial, it seemed better to wait until after the exposure before making any decision. After that things happened speedily enough On Saturday, February 24, while the newspapers in Washington were certain that in official circles there was still hopes of averting trouble, Dr Page called at the Foreign Office and was officially handed the message. He lost no time and within a few hours the cable was on its way to the State

Department and I read you that (Balfour handed me a translation of a message)

Now, you remember that in the message that Page sent, he was told that early in the war the British Government obtained possession of a copy of a German cipher code used in the above message and had made it their business to obtain copies of Bernstorff's cipher messages to Mexico amongst others which were sent back to London and deciphered here. This accounts for their being able to decipher this message from the German Government to the representative in Mexico and also for the delay from January 19th until now in their receiving the information and James goes on and says: "It was not the case that the British Government had obtained a copy of the German cipher code but it was the explanation Hall decided to give the American Government. Risk of the loss of codebooks was being taken throughout the war by ~~any~~ everyone of the belligerents and it would be much better for the President to suppose that a copy of the codebook had come into our hands than that without such assistance we had been able to read the message. Hall afterwards described the next few days as the most anxious time of the whole war for him personally He had assumed a great responsibility. Would it be justified? Had he done all that was possible to safeguard Room 40? Was there a chance that the Zimmermann Telegram would misfire?

Now, no one can blame Hall for trying to put everyone including Page, the President and the Secretary of State off on the wrong trail and to cover the tracks of Room 40 OB. At the time this was written, we didn't know all the facts, we were making inferences and deductions. We said as to this claim of having been done by means of a codebook that had been captured, it seems

unlikely that a German consul engaged in an expedition to cut a pipeline should carry a diplomatic codebook in his baggage. Moreover, the copy of the British 13040 is fragmentary and has every evidence of having been gradually reconstructed in the cryptographic bureau doing the decipherment of messages. In the preceding part of this brochure, we tell how after we got into the war the British Government was very generous and gave us everything that they had that was needed to work on the German codes and ciphers including copies of 7500, 13040 and that is why we could state categorically that that was not a captured code. It showed many gaps in the code where there hadn't been usage sufficient to establish the meaning of groups. You who have ^{will} worked on code reconstruction ~~can~~ easily see that that was a point of great importance. A glance at the copy given by the British to the United States after American entrance into the war will demonstrate this fact. This copy contains about half of the vocabulary and is not a transcript of part of the codebook since it comprises some words and phrases from all of the pages. Some of the identifications too are marked doubtful. An actual copy of the codebook would certainly not exhibit missing and doubtful sections.

On the other hand, there is now fairly good evidence that some code was captured and it was a version of 13040. By this I mean the German basic code 13040 was made by taking sections of a basic code and shuffling the pages and sometimes only part of the pages so that they remain, whole series of words and phrases in alphabetical order and they had several versions of this--this kind of rearrangement and each one bore a different number related to 13040.

For example, this message to Mexico was 13042 and there were others 13044

and 6 and etc

Question:

Yes, that's right. He did the unforgiveable cryptologic error. He had the message in 7500, he practically word for word put it out in 13040 That's why the British had to wait until they got the copy from Mexico City Cable Office in order to give a complete version--it wouldn't have done for Balfour to have handed Page a message partially decoded with gaps and so on, you see. Very important to get that Mexican copy

Now there is some element of truth to what Hall told Page about the code because here Ewing says: "During the summer months codebooks which had been captured in the German consulate at Bushear, which I now through the courtesy of Dr Swift have ascertained definitely is on the Persian border of Persia, were made use of That was this Moshmos fellow. Soon it was found that much of the enemy's diplomatic correspondence could be read, thus providing a starting point from which to penetrate one after another the German Foreign Office ciphers. You see this is what happens when you are working on the communications of a government, you don't work on just one code and it's just silly for people to talk about the Japanese code, the German code, there are hundreds of them in simultaneous use

On the other hand, James gives us much more specific and valuable information on this point and I think it is accurate Here is what he says. "In April something of even greater importance happened There came into Hall's hands a copy of the German diplomatic codebook, a treasure-trove from Persia " Nothing

could be a more categorical statement than that. How this book reached Hall is one of the strangest histories of the war. A Navy officer invalided from the Persian Gulf came to Hall one day and told him about a raid on the Abadaan pipeline, etc. I read you that. This is how they began their work. Now, if I had had more time to prepare for these talks I would have brought with me that 13040 code, 7500, and the --they are interesting things. Unfortunately they are stored away in a vault which is not at NSA and it would have taken too much time to get

But now to get back to the Zimmermann Telegram itself, you will recall that I said it was published in all the important newspapers of the world on March 1, 1917. After acrimonious debate, a resolution was passed by the Congress that the President be asked to state the source of the information. He replied the same evening through his Secretary of State as follows: "The Government is in possession of evidence which established the fact that the note referred to is authentic and that it is in the possession of the United States and that the evidence was procured by this government during the past week but that it is in my opinion incompatible with public interest to send ~~it~~ to the Senate at the present time any further information in possession of the Government of the United States relative to the note mentioned in the resolution of the Senate"

Now Zimmermann, in a statement ~~made~~ before the Reichstag, made a long involved and foolish apology for his inept conduct. What he did was, when the newspaper fellows came to him on March 1 in Berlin and said, "how about this", he said, "Yes, I sent it". Why didn't he say "no, I didn't send such a foolish thing"? He would have forced the British ~~to have disclosed~~ exactly how they

got the information Here is what Zimmermann tried to tell the Reichstag--it's a long thing, I will only read you part of this. "Anticipating these possibilities it was not only the right but the duty of our government to take precautions in time in the event of a warlike conflict with the United States in order to balance if possible the adhesions of our enemy to a new enemy The German Minister in Mexico is therefore in the middle of January instructed, should the United States declare war, to offer the Mexican Government an alliance and arrange further details. These instructions, by the way, expressly enjoined the Minister to make no advances to the Mexican Government unless he knew for a certainty that America was going to declare war How the American Government received information of instructions sent by a secret way to Mexico is not known but it appears that ~~there was~~ treachery and this can only be the case had been committed on American territory." How naive

Now we are going to wind up by reading a little bit more from James If Zimmermann had been really smart he would have denounced the telegram as forgery, a fraud, a product of British duplicity, chicanery, even if only to smoke the British out and make them prove the authenticity of the telegram by disclosing exactly how the message and the information contained was obtained. That is ~~what~~ what Hall greatly feared would happen but his fears turned out to be groundless. Zimmermann was too dumb, too slow, too inept and he soon lost his job

Now, when during the subsequent debate in the Senate on the Armed Neutrality Bill, only 13 opponents could be found, Hall felt fairly confident This little willful group of men, as the President called them, were able to talk out the

measure but the feelings of the American Nation had been shown in no uncertain

manner War was inevitable but Hall was still ~~xxx~~ afraid that ~~xx~~ his anxiety to

~~xx~~ would prove
~~enlist~~ enlist all his efforts to safeguard Room 40 ~~proved~~ to be inadequate.

He knew the Germans would make strenuous efforts to discover the truth. It was

important to prevent publication of the German text of the message in its

entirety and this Hall was able to do Dr. Page wrote to Lansing. "The authorities

directly concerned would prefer that the German text should not be published as

its publication in entirety would indicate that our Government or some other

parties are able to decipher the German code used in its transmission from

Washington to Mexico and the Germans would then cease using it elsewhere This

information, which judging by Zimmerman's reported statements, they may suspect

would be of great value to them. At present the Germans cannot know exactly

where or how the leak occurred For all they know a copy of the message may

have been lost or removed from the German Embassy in Washington or the leak

might have occurred between Berlin and Washington Were
~~There are~~ serious doubts

being cast in America on the genuineness of the instructions to the German

Minister in Mexico, the authorities here might reconsider their position but as

Zimmermann has admitted their genuineness in the Reichstag, this can hardly be

the case " Now the curious part of it is --well a large crop of tall stories

followed the publication of the telegram, secret codes it was hinted had been

stolen in the unlikeliest places and bought by the Americans for colossal sums;

heroic backwoods men from Arizona, searching for excitement, in France had

broken through the enemy lines disguised as church Army padres, obtained jobs

in Brussels, discovered the German cipher books in the Governor General's own