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Speaker: William F. Friedman
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Introduction: Dr. Abraham Sinkov

Note: Friedman's Lecture on the Zimmermann Telegram at the Semiannual Meeting of Crypto-Mathematics Institute, September 1958.

Sinkov: Ladies and gentlemen the Crypto-Mathematics Institute is now a half year old. As you will have seen from your program notices, we have planned a special semiannual meeting. As the main item of this meeting we have especially good fortune to have a talk by Mr. Friedman. Mr. Friedman certainly needs no introduction to this audience. He has been a highly important part of the U.S. cryptologic effort for over 40 years. In fact, during a good portion of that period, he personally was the U.S. cryptologic effort. ((Audience chuckles.)) He retired from full time association with the National Security Agency about two years ago, but has continued quite active. In particular, he and Mrs. Friedman recently published a scholarly study of the various attempts made to prove, by cipher methods, that the Shakespearean plays had been written by other people than William Shakespeare. The book has gained for the Friedmans world wide acclaim. The subject that Mr. Friedman has chosen for today's talk was announced as the "Zimmermann Telegram." When I saw Mr. Friedman last, a few days ago, he expressed to me some regret that we had made any announcement of a subject title. The reason, I gathered, was that he has a rather interesting turn to the manner in which he is going to announce the subject of his talk. With that sort of interesting turn, to begin, you can look forward to a great deal of additional interest throughout the rest of the paper. It is with especially great pleasure that I present Mr. Friedman. ((Audience applauds.))

Friedman: Dr. Sinkov, ladies and gentlemen, my talk today is one of a series with the overall title, "The Influence of 'C' Power on History." Now before my many Navy friends here jump up to yell, "Yeah man!" I hasten to explain that the "C" power I'm going to talk about is not the same sort of power Admiral Mahan wrote about in his famous book, "The Influence of Sea Power On History." The "C" in my title stands for the word cryptologic. So then, the real title of the series I'm preparing is, "The Influence of Cryptologic Power on History." I have in mind a subtitle too; it is, "Or on the One Hand, How to Win Campaigns and Go Down in History as a Great Strategist and Leader of Men, or on the Other Hand How to Lose Campaigns and Go Down in History as a Numbskull and Incompetent Commander."

For my talk this morning, I've chosen for my series one entitled, "How to Make the Most of a Cryptologic Opportunity." (It's a nice thing to solve an

enemy's cryptosystem and, as a result, glean information which in pretty nearly all cases is indubitably authentic, because it comes right out of the horse's mouth. But if you can't use the information without arousing the enemy's suspicion as to its origin, what good is it? In other words, it's one thing to have COMINT, and another to use it properly, that is, so as to continue to receive the blessings which flow from your cryptanalytic astuteness and good security. Another way of putting the matter I'm going to discuss at some length today is that in the COMINT business we try our best to eat our cake and have it too. And we try this neat trick pretty nearly every day. Our score thus far hasn't been too bad. We're going to observe an excellent case today. One that is a nearly perfect example of combining both phenomena which are so hard to join in an enduring cryptologic marriage, namely, using COMINT to its utmost advantage, and at the same time protecting it so as not to dry it up at the source. I imagine that the name Alfred Zimmermann for many of you is not one that arouses much interest these days. In fact, I doubt that the name means anything to a great many of you. Yet, this gentleman, of whom I find it difficult to say, "May his soul rest in peace," was the German Secretary of State in Berlin in the years 1914 to 1917. A diplomat, whose unimaginative conduct of foreign affairs in those three critical years I've mentioned, constituted a fine example of how not to make friends and influence people. In fact, it can and has been said by many historians that Herr Zimmermann's climactic and crowning culminating caper in a career of consistently clownish, cryptologically clumsy conduct brought the United States of America into World War I as an act of belligerence on the side that was wrong for his country, that is, on the side of the Allies. And this came to pass within one month after what he did became known to the Americans. The military might of the United States could have easily been thrown to the other side during the critical months of year 1916 had the Germans and particularly Zimmermann been more astute. I lived through that period, and I know from first hand experience that there were several occasions when it wouldn't have taken much to tip the balance in favor of our joining Germany. The consequences of such an event can hardly be gaged. It would be an understatement to say that the course of history could have been changed in the most spectacular manner. What did Herr Zimmermann do and/or fail to do to merit so strong a statement as the one I've just made? What did he do and/or fail to do that tipped the balance suddenly in favor of Britain? What he did was to send a telegram to the German Ambassador in Washington with instructions to forward its contents to the German Minister in Mexico. The telegram was in a German Foreign Office code, and it was intercepted by a small group of people in a Black Chamber operation that was carefully guarded in Room 40 OB in the precincts of British Naval Intelligence in Whitehall, London. What Herr Zimmermann failed to do was, first, to anticipate how violent the American reaction might be if they learned the content of his message before what he proposed in it could be brought to pass, and secondly, to

see to it that the cryptosystem that he had used to encrypt his message was technically sound enough to protect its contents against cryptanalysis and premature disclosure. In the aftermath of the discovery of his secretarial stupidity, he did and failed to do something else in connection with his now famous message, but of that, more later. In order to prepare a proper background for the Zimmermann Telegram of 16 January 1917—that's what it's called in our history, or the Mexico Dispatch as it is called in German history—I will give a brief picture of the situation from the outbreak of the war on 1 August 1914 up to about the time the telegram was sent.

By 1914, England had become so dependent on seaborne imports that her people couldn't live, let alone wage war, for more than four or five weeks after her sea routes were broken. Keeping these routes open was therefore the principle task of the British Navy. On the other hand, her principle enemy, Germany, was not dependent upon seaborne imports, so that the British Navy's historic function of arresting an enemy's seaborne trade lapsed right after German shipping had found refuge in neutral ports. There were then the British Grand Fleet and her hardly much inferior protagonist, the German High Seas Fleet, both glaring at each other at a distance, and although the Grand Fleet was becoming impatient and spoiling for a fight, the Germans didn't dare risk their fleet, not in a major battle. They combined their attacks to sporadic forays by fast units and to mine laying. German hopes of quick victory were shattered when the heroic resistance of Englishmen and Frenchmen in trench warfare brought the war to a stalemate. With each passing month it became clear that there could be no German victory unless British overseas trade was cut off. Even in 1915, in certain German circles, there were those who had what appeared to be a very good idea, namely, to give highest priority to building submarines, and to use them to starve England into submission by destroying all British, and if necessary, all other shipping to the British Isles. In short, these people thought that the successes of the German Small Submarine Flotilla of 1914 pointed the way out of the German dilemma without risking their German High Seas Fleet, but the world was not yet prepared to accept with equanimity such ruthlessness as this would have entailed, because civilized rules of maritime warfare required that no merchant ship be sunk without warning. Time was to be given for the crew to take to life boats. These rules at first were respected by both belligerents, but for the Germans, they severely reduced the destructive power of their submarines, and from time to time their commanders, either on their own initiative, ignored or they were ordered to ignore them. That this was true especially in the case of the British merchantman goes almost without saying, but there were bound to be mistakes and sometimes ships of neutrals were also sunk, with the result that German unrestricted submarine warfare, as it came to be called, brought a wave of resentment against the German Government. Many bitter and acrimonious notes were sent to that government especially by ours when

our ships were sunk, and specious excuses were given for such sinkings. Germany decided that it could not pay the price of unrestricted submarine warfare in the form of a universal wave of horror and condemnation, and soon gave up the practice. But as regards American ships, there continued to be trouble, and American antagonism was heightened by the discovery of plots and sabotage activities of German agents in America. The powerful German submarine offensive in 1916, even though unrestricted, soon began to take a dreadful turn for the British. The daily toll of shipping losses became so heavy that it began to be obvious that unless some new tide set in, or unless the United States of America could be drawn into the war on the Allied side, there could be only one end to the war, and that end would come soon. Britain's problem was therefore twofold: first to labor prodigiously to gain mastery over the German submarines, but this, it was recognized, would be a slow, slow process; second, to try not to irritate or antagonize neutral powers, and certainly not to exasperate America as the Germans were. The hope was, of course, that the Germans would sooner or later—the sooner the better—goad the United States into joining the war against her. The British were fortunate in both respects. It turned out that thanks to the tremendous exertions of their ship builders, scientists, and sailors, mastery over the submarines was obtained, but that didn't come until nearly...early in 1918. With this phase of the British problem as I've just stated it, we shall not concern ourselves today. It is with the other phase of it that my talk will deal. Now, let's see how the Germans behaved so as to outrage nearly all Americans, and practically force President Wilson to ask Congress to declare war on them. We know from autobiographies of certain people—such as Hindenberg and Ludendorf—that an important question began to be discussed within the German High Command in August, 1916. The question was whether or not to resume unrestricted submarine warfare. In December, Ludendorf made a tour of the entire front and returned profoundly pessimistic. Radical steps would have to be taken, and on January 9th 1917, Emperor Wilhelm held a council of war at Plesse. The Navy practically guaranteed the success of unrestricted submarine warfare. The Military High Command joined in urging its adoption, and the German Chancellor yielded. Notes were sent out on 31 January 1917 to all neutrals that beginning on 1 February, 1917, German submarines would sink, at sight, all ships met on the high seas. In short, the German Government officially proclaimed that unrestricted submarine warfare was being resumed. What did President Wilson do on receipt of the German proclamation? Why, two days later on February 3rd he informed German Ambassador Von Bernstorff that the United States didn't like the Germans, and was cutting diplomatic relations with his government. Von Bernstorff's career in the United States was over. He wasn't given much time to pack his belongings and go home, and of course, American Ambassador Gerard in Berlin was called home. But note that severing diplomatic relations doesn't mean war, and it didn't in this case. It was only natural

for Britain to feel some chagrin, for she had hoped that we would now join her in the war against Germany. To many Americans, our situation was quite humiliating, because it was clear that we were unable to give our own merchantmen any protection whatsoever, that is, without going to war. And that was something President Wilson had promised not to do! He said he was going to keep us out of the war! But there was one thing he hadn't, as yet, thought out, namely: how to protect our merchantmen who wanted to sail on the high seas where they had every right to be. Hence, after the German declaration of unrestricted submarine warfare, there was nothing our ships could do except keep within American harbors. They were afraid to leave, because they would certainly become helpless victims of submarine torpedoes with large losses in life to be expected. This situation was unbearable, but as I've said, President Wilson was determined to keep us out of war just as the Scandinavian and certain other countries in Europe were keeping out of it. On the whole, our sympathies were with Britain and with France but with certain additional factors involved in the situation. For a large part of the United States, especially the middle and far West, the war in Europe was thousands of miles across the Atlantic. It might as well have been on another planet so far as they were concerned. Moreover, the feelings of a large German-American population had to be taken into account, especially when British highhanded action every once in a while severely prejudiced their case. Still, the President held back. One writer, commenting on Wilson's conduct, said that he was hesitating on the brink of war, reluctant to plunge into it, clinging painfully to the idea of strict neutrality which seemed to be almost a part of his religion. But, maybe a bit of politics got mixed up with that religion because, as some of you may remember, the Democratic slogan for President Wilson's campaign for a second term was, "He kept us out of war!" And let's not forget the other famous explanation he gave for keeping out of the war, his statement that, "There is such a thing as being too proud to fight." I won't try to defend that. After severing diplomatic relations with Germany, something had to be done, of course, to try to give our merchant ships some protection, and the question of arming them to protect themselves was discussed. The idea was to let the Navy provide guns and trained gunners to handle them, and on 26 February, President Wilson addressed Congress in joint session to advocate just that course of action. A bill known as the Armed Ship Bill was introduced in both houses of Congress, and on 1 March it passed the House by a vote of 403 ((Spoken as: four hundred and three)) to 13. In the Senate, it was less fortunate. It became the subject of acrimonious debate which finally developed into a filibuster led by Senator LaFollette of Wisconsin. The filibuster was successful and succeeded in preventing passage of the bill Wilson wanted, but the President still had a way open to him to do what he thought was necessary. This was to use his constitutional powers to direct the Navy to furnish the guns and gunners for the American ships that had to pass through the German declared war

zones. In his War Memoirs-1935, Secretary of State Lansing wrote, "While the Armed Ship Bill was under discussion in Congress, another event occurred which caused the greatest excitement throughout the country and aroused the people of the United States even more than the announced policy of submarine ruthlessness." What was this event? It was one which involved a cryptologic opportunity. That's what forms the title of my talk today. An event which almost overnight, it seems, changed the picture entirely. It was the disclosure of the interception and solution by the British of the Zimmermann Telegram. Now, historians may disagree as to why the United States became a belligerent in World War I. Some rabid anglophiles [sic] even still believe we went in on the wrong side, but I think that most historians agree that it was the interception and solution of the Zimmermann Telegram and the brilliant way in which the British used it, that brought us into the war just in the nick of time, and on the right side—the side of the Allies. And because the United States was, and still is, I hope, the leading power in the Western hemisphere, the Zimmermann Telegram helped to bring in Argentina, Bolivia, Brazil, Cuba, and Panama into the Allied camp. There could now be no doubt whatever as to the outcome of the war.

The whole episode, replete with drama, forms one of the most dramatic of the historical episodes recounted by television on Walter Cronkite's "You Are There" programs. Some of you may have seen it when the program was presented live on WTOP TV. Some of you may have seen it as recorded on a motion picture film, a copy of which is owned by NSA, and which I borrowed from the Office of Training. That soundtrack film we are now about to see and hear. I'd like to add that the Zimmermann Telegram of 16 January, 1917 was the subject of a radio broadcast by the BBC as recently as 26 May, 1958. I'm trying to get a transcript of that broadcast. I mention it to show you that the subject is still quite a live one today, more than 42 years later. Now, let's have Walter Cronkite's film. After that I'll take up the background and the detailed account of this spectacular and fateful cryptologic episode of World War I. I must at this moment, make an apology for the first part, first two, three minutes of the film, because something has gone wrong. It's been used a good deal perhaps, and so there won't be any picture for the first two or three minutes. The picture will take up later, but you will hear the sound and the preliminary to the main part of the story. Now, ladies and gentlemen, let us have Walter Cronkite.

Cronkite: ((Music, Unintelligible)) 1917 AD. The secret message that plunged America into World War I. **YOU ARE THERE!** Reporting March 1st 1917, today America is angry. The fury rolled like a tidal wave across the United States, across the East, the Midwest, and South, and finally across the Far West as Americans opened their newspapers this morning and read the headline. Some are saying, "It's about time!" Twenty two months ago, a German submarine sank the Lusitania. Three days ago another German submarine sank the Laconia. In 22 months, total American lives

lost to German submarine warfare: one hundred and sixty six. Today's headlines make no mention of more lives lost or the Armed Ship's Bill; they are even more ominous. Today every newspaper in the country has printed the arrogant and shocking Zimmermann Telegram. The Zimmermann Telegram, what is it? All we know for sure, in the midst of the confusion and the anger, is what it appears to be: an intercepted message from the German Foreign Minister Zimmermann to German Ambassador in Mexico, dated January 19th, less than two months ago. The telegram confided Germany's intention to begin unrestricted submarine warfare on February 1st, the first of last month; then the telegram proposes a German-Mexican alliance if the United States enters the war promising Mexico a chance to re-conquer, as it says, the lost territory of New Mexico, Texas, and Arizona. In less than an hour, the House of Representatives will convene; their most pressing subject: President Wilson's request for permission to arm American merchant vessels. We take you now to the Capitol Building. All things are as they were then, except, **YOU ARE THERE!**

Dick Joy: ((Low tones of visitors talking to each other and milling about.)) This is Dick Joy. We're standing in a corridor in the Capitol Building in Washington. The people you see are on their way to the visitor's gallery of the House. Today's session is certain to be explosive, but exactly what Congress can and will do about the Zimmermann Telegram remains to be seen. Perhaps this gentleman has an opinion? ((Dick Joy stops a passer-by,))

U/I male: Oh, I have an opinion alright. I'm from California. Most of us out there wanted to ignore this whole European mess, wanted to mind our own business. But that telegram proves one thing to me. The Germans won't let us mind our own business. They're asking for it. Now they're going to get it.

U/I female: Well, if that silly Kaiser thinks he's giving Texas to Mexico, he's got another think coming.

Dick Joy: You're from the South, Madame. What part of the South?

U/I female: I'm from Dallas Texas, and I want to tell you something what's the truth. That Kaiser never did see trouble like he's got right now. There's four million people in Texas and all of 'em mad. ((Another man jumps in.))

Johnson: Tell you how I see it. I'm Johnson from Chicago. This Zimmermann plans to attack us on three sides: first the Germans will hit the East coast; then Mexico moves in through New Mexico, Texas, and Arizona; then they want Japan in on the plot so Japan can hit California from the West.

Dick Joy: Excuse me sir, the telegram didn't mention giving California to Japan.

Johnson: Zimmermann told Mexico to bring Japan in on the plot; didn't he?

Dick Joy: Well the telegram suggested that Mexico communicate with Japan, but there was no mention of any Japanese territorial gain.

Johnson: It's good enough for me, and I hope it's good enough for Wilson. Something's got to wake him up. All he does is encourage England and appease Germany.

U/I female: Oh, England is no better than the rest over there, stopping our boats and fiddling with our mail. England's almost as bad as Germany.

U/I male: We've got to go along with England. England's fighting Germany and Germany wants to fight us, so we've got to go in on England's side whether we like it or not.

U/I male: We better get in there now; there won't be any seats left.

U/I male: And that's right.

Dick Joy: Thank you. Thank you, gentlemen.

U/I female: I want to say just one thing more. Congress better make Wilson do something beside sit there in the White House and send notes. Wilson's too soft and shilly shally. We'd have another Alamo if they let him, only this time, Mexico's going to find out the shoe's on the other foot.

Dick Joy: Thank you, Madame. Well, that's probably typical of the thinking throughout American this morning: shocked, confused and angry. Todd Hunter is in the White House here in Washington. We take you now to Todd Hunter in the White House.

Hunter: This is the White House. The gentleman checking the papers in his briefcase is the Secretary of State, Robert Lansing. The other gentleman is the President's Secretary, Joseph Tumulty. While Secretary of State Lansing is waiting to see the President, he has consented to a brief interview. Mr. Secretary, Sir.

Lansing: Yes?

Hunter: Can you tell us, sir, how the Zimmermann Telegram came to our attention?

Lansing: Why, yes. The President instructed me to release it to the press, which I did last night. I gave it to Mr. E.M. Hood of the Associated Press.

Hunter: How long have we known about this telegram?

Lansing: I'm sorry. I can't answer that.

Hunter: Oh, but Mr. Secretary, the telegram was dated January 19th...

Lansing: No comment!

Hunter: Dated January 19th and this is March the first!

Lansing: No comment!

Hunter: Well, this date discrepancy, sir, has already prompted questions about the telegram's authenticity!

Lansing: There is no question in my mind about the genuineness of the telegram, if that's what you're asking.

Hunter: It was, thank you, sir. Mr. Secretary, in terms of diplomacy at this time of world tension, how can you explain such a telegram?

Lansing: You can't explain it in diplomatic or any other terms. It would seem to me to be a cardinal blunder on the part of the German Foreign Minister. As you know, the President has for several months been appealing to all belligerent governments proposing conditions to which they could all agree, changing these conditions to meet their objections, hoping to arrive at peace. ((A door opens.)) And now, for the German government, at a time like this... ((Door opens and Secretary Lansing is called.))

Wilson: (B% Secretary) Lansing!

Lansing: Yes sir.

Wilson: You'll excuse us, please?

Hunter: ((Lowers his voice.)) When can we get confirmation on the telegram?

Lansing: I wanted (B% to get into) ((XG/unintelligible))

Hunter: I must have (B% confirmation on it). The President is referring to the Zimmermann Telegram; there's a question in his mind about it! Mr. President, excuse me. One minute for a question or two?

Wilson: One minute doesn't sound too unreasonable. Go ahead.

Hunter: Thank you sir. Mr. President, in your opinion was this an especially advantageous time to release the Zimmermann Telegram?

Wilson: You mean advantageous to anybody? I'd say no, not to the Central Powers, not to the Allied Powers, and certainly not to us.

Hunter: But Mr. President, you have been trying to awaken various parts of our country to a very real danger.

Wilson: I believe the telegram has certainly taken care of that.

Hunter: And there's your Armed Ships Bill in Congress.

Wilson: Hmm, I...I imagine that Congress will now give its immediate attention to that.

Hunter: And you did instruct Mr. Lansing to release the telegram to the press.

Wilson: Well, in my opinion, I had no right to withhold this information from the people.

Hunter: You do not consider the release to be advantageous to us?

Wilson: Definitely not! This country is seeking peace not war, and any peace seeking country swept by a sudden war fever is considerably less likely to achieve peace than the same country lying in apathy.

Hunter: And you do not believe the release is particularly timely for the cause of Britain either?

Wilson: I do not! I have every reason to believe that Britain would certainly prefer to see all belligerents accepting my proposals for arriving at an immediate

peace rather than prolonging the war indefinitely by our entering into it.

Hunter: Mr. President, is the Zimmermann Telegram authentic?

Wilson: The telegram is genuine. I'll have irrefutable proof to release to you before the end of the day. If you will excuse us?

Hunter: A last question, sir: how long have we known about this telegram?

Wilson: Three days.

Hunter: That's all from the White House for the moment. We hope to bring you more later, but now we return you to Dick Joy in the Capitol.

Dick Joy: This is an anteroom off the hall leading to the floor of the House. ((Male voice in the background.)) These men are Congressmen, both very active in behalf of the President's Armed Ships Bill. The man listening is Representative Jouett Shouse of Kansas. The man speaking is Henry D. Flood of Virginia, Chairman of the House Foreign Relations Committee.

Flood: So you see I know that I'm right. I've seen over a hundred Congressmen and Senators this morning, Jouett, and each and every one of them are just as enraged as you and I are. Now, why don't you speak to Senator Norris yourself.

Shouse: Alright, Henry, I will.

Flood: Good.

Dick Joy: Congressman Flood.

Flood: Yes?

Dick Joy: You yourself introduced the President's Armed Ships Bill in the House; did you not, sir?

Flood: I'm proud to say that I did, sir.

Dick Joy: In your opinion will the bill be considered today?

Flood: The bill will not only be considered, it will be passed by both Houses today, sir. That infamous German telegram has shocked some of my sleeping colleagues into an awareness of a very real danger.

LaFollette: ((A Senator comes up to Flood.)) Henry, I've been looking for you.

Dick Joy: The Senator is Robert LaFollette, Republican of Wisconsin, a leading isolationist.

Flood: Yes, Senator?

LaFollette: You can't do this, Henry. You can't let the House be stampeded.

Flood: Are you out of your mind?

LaFollette: I'm trying to keep my head; I'm asking you to do the same.

Flood: You mean that in the face of an obvious act of war by the Germans...

LaFollette: There's been no act of war!

Flood: American ships were sunk, were they not? And this is not all. On top of

this, this alliance to cut up our country.

LaFollette: We have no reason to believe there is any truth in this telegram.

Flood: Lansing himself released it.

LaFollette: That doesn't verify it. Secretaries of State have been outwitted by foreign statesmen before this. Henry, I'm not sure that there is...

Flood: And there's something I'm not sure of about you, Bob. I'm not sure that you are a good American!

LaFollette: Will you listen to me? ((LaFollette raises his voice.))

Flood: Not to a coward, I won't.

LaFollette: Senator Lodge has introduced a resolution in the Senate requesting White House confirmation of this so-called telegram.

Flood: Let go of my coat, Bob.

LaFollette: Henry, you've got to keep your head.

Flood: Let go of my coat! ((Flood speaks angrily.))

LaFollette: I'm asking you for the last time.

Flood: And I'm telling you for the last time. The honor of our country has been (B% besmirched), and any man who hesitates at a time like this isn't fit to have a seat in the Senate.

Hunter: Senator LaFollette.

LaFollette: America doesn't want war! We have no business in Europe!

Hunter: Well, American ships have been sunk.

LaFollette: Of course they were sunk. If I walk deliberately into a street brawl, I can expect to be knocked on the head! Our ships wouldn't be sunk if they stayed out of the war zones.

Hunter: But isn't it true, Senator, that most American lives were lost on British vessels?

LaFollette: Britain is at war. If Americans sail on British ships, they should do so at their risk, not at the risk of their country.

Hunter: Senator, we heard you question the authenticity of the Zimmermann Telegram.

LaFollette: I'm not sure that the telegram is authentic.

Hunter: Would you express an opinion as to who might be responsible for it?

LaFollette: No, I would not.

Hunter: Do you believe, sir, that Britain would profit by the release of such a telegram at this moment?

LaFollette: That is exactly my opinion.

Hunter: Word has reached us that Harlow Wilcox in London is standing by. We

take you now to London.

((Reporter Harlow Wilcox heard arguing in the background with Ambassador's Secretary and another reporter called Barry.))

Wilcox: Now look, I've got to get a story...((Blocked by reporter talking.))

Reporter: This is the American Embassy in London where in the next few minutes, if luck is with us, we expect to settle once and for all the question of what, if anything, Britain knows about the origin and authenticity of the Zimmermann Telegram. The American Ambassador Walter Hines Page had consented to answer several questions.

Wilcox: Now look, I didn't come here to ask Page any questions. I'm here because I heard that Mr. Hall is in there.

Barry: He's in there, has been in there alone with the Ambassador for more than two hours.

Wilcox: Well, if he is then we really have something.

Reporter: Excuse me gentlemen, who is Mr. Hall?

Wilcox: Well, to put it bluntly: Mr. Hall is England's man of mystery. Nobody knows who he is or what he does. Nobody has ever seen him.

Barry: I've seen him.

Wilcox: What's that?

Barry: If Mr. Hall's the man I think he is, I've seen him.

Wilcox: Really, what do you mean?

Barry: There was a brilliant Naval officer by the...

Wilcox: What's his rank, Barry?

Barry: Admiral.

Wilcox: Oh, go on.

Barry: By the name of Sir Reginald Hall.

Wilcox: Yes?

Barry: Disappeared quite suddenly just about the time the Admiralty established their Office of British Naval Intelligence.

U/I male: Did you get the year on that, Barry?

Wilcox: Now look, Barry, do you think that you could recognize him?

Barry: Yes, I'd recognize him.

U/I male: We may need that.

Page: Come in, gentlemen. ((Ambassador Page opens door and reporters go inside.)) Sit down.

Barry: Thanks, sir.

Wilcox: Thank you.

Page: This will be a very brief interview. My guest must be excused from any questions. I will answer several of a general nature only.

Barry: Mr. Ambassador, could you give us any idea of the official British position and reaction to the Zimmermann Telegram?

Page: Official reaction, no; man on the street reaction, yes.

Barry: Good.

Page: The average Britain hopes that this proof of Germany's hostility will wake up the United States to the fact that the Hun cannot be appeased.

Barry: Is that your reaction too, sir?

Page: I believe I'm reporting the feelings of these people accurately.

Barry: You know, there's some Americans who think that this telegram is a British forgery.

Page: That sounds like another LaFollette fiction. The telegram is genuine.

Wilcox: Are you sure of that, sir?

Page: I assure you, it is genuine.

Wilcox: It's authentic?

Barry: Well, do you have any proof of this, sir?

Page: Yes, I have proof, but I am not at liberty to give you that proof at this time.

Hall: If you don't mind, Walter, I'd like to put in a word or two for at least one Englishman.

Page: Well, I'm not sure that you should.

Wilcox: Well, I think we should hear from him, at least something.

Page: Alright!

Barry: Thank you, sir, very much.

Wilcox: Good, thank you.

Hall: Hello, nice to see you again.

Barry: Nice to see you sir. Mr. Hall, would you care to comment on the Zimmermann Telegram?

Hall: An incredible document isn't it? You know, it's as much a shock to us as it is to you.

U/I male: Here you are, sir.

Wilcox: Excuse me, sir, but there's a great deal of question in the United States as to the genuineness of the telegram.

Hall: Oh really? I'd have thought that would be a very good reason why no friendly nation would dare to forge it.

Barry: How do you explain that, sir?

Hall: Simple enough—nothing to gain, everything to lose.

Barry: Well, there is a certain amount of gain, sir, such as an American declaration of war on Germany.

Hall: No. No, um, no country would act on such a document until it had been absolutely authenticated. No forgery large or small can ever be actually authenticated. One of this, uh, this size would be detected very easily.

Wilcox: That's obvious. Right.

Hall: Tell me, if you were forging a document of this size, would you permit the dates to be so openly confused, so...so...so questionable, so...so...so very obviously, uh, jumbled so as to, uh, suggest forgery?

Barry: No, I wouldn't.

Wilcox: No, to tell you the truth, I wouldn't either.

Hall: Well, of course you wouldn't.

Wilcox: I think you're right there, sir.

Hall: Neither would I. No, gentlemen; the telegram is authentic.

Wilcox: Mm hmm.

Hall: Now I suppose you would like to know where the telegram has been for the last six weeks?

Barry: Yes, we have been wondering that, sir.

Hall: Well, there are several explanations; the most logical one, it seems to me, is that the nation which intercepted the telegram didn't dare to release it.

Barry: Why not, sir?

Hall: My friend, no nation can afford to admit that it has broken down the enemy's secret code.

Wilcox: That's true.

Barry: But sir, the telegram was released. How do you explain that?

Hall: I think that explains itself. I think it's a very strong possibility that the Germans have a new code.

Barry: Oh, I see. ((Murmuring in background.))

Wilcox: I see.

Hall: Well now, gentlemen, if you'll excuse me, I have a very important appointment.

Barry: Oh, thank you very much.

Wilcox: Thank you very much.

U/I male: Thank you very much, sir.

Hall: Alright, Walter we have to...

Page: Yes, yes. Thank you. Goodbye, sir.

Barry: Thank you.

Hall: Good bye gentlemen.

Wilcox: Well, at least we've got a story. ((Reporters go off chattering.))

Reporter: We switch you now to Berlin.

Holcombe: This is Grant Holcombe reporting from Berlin. I'm speaking to you from the narrow checkered lobby in the Reichstag Building just outside the offices of the German Foreign Minister Zimmermann. The American sitting there on the table is William Baird Hale of the Hearst Newspapers. Like others here, he is waiting to talk to Doctor Zimmermann who I am told has just entered the building. ((U/I male says in German:)) "Herr Major, Haben Sie von Doktor Zimmermann schon gehört?" ((U/I male replies:)) "Doktor Zimmermann. Ja, ein paar Minuten." "Danke." "Danke schön." "Wiedersehen."

Hale: Dr. Zimmermann.

Zimmermann: Yes? "Ja, mein lieber."

Hale: This morning the American newspapers carried...or published a telegram allegedly to have been sent by you to your Mexican Ambassador.

Zimmermann: I know, I know, I know! "Ja, ich werde gleich tun. Seine..." Excuse me, I have to go this way.

Hale: Then you did send a telegram?

Zimmermann: Yes, I sent it. Of course I sent it. The lost territories of Arizona, New Mexico, and Texas belong to Mexico just as rightfully as Alsace Lorraine belongs to the German Empire. It is a shame that Mexico will not declare war and therefore justice cannot be done.

Hale: Well, uh, have you received an answer from the President of Mexico?

Zimmermann: I did not. You Americans, you never think. My note proposed alliance only if the United States declared war on us. This, of course, will never happen.

Hale: Well, then you think the United States will not enter the war?

Zimmermann: Our submarines are choking England; she must surrender in one month maybe two, and that is all; then peace on our terms. Thank you. "Ja, mein leiber?"

U/I German: "(1-2G) Heern sind (B% verstört)."

Zimmermann: "Ja, ich danke. Ich komme sofort (2-3G)"

Holcombe: And that's the story in Berlin. I return you to Dick Joy in Washington.

Dick Joy: Back in an anteroom in the Capitol again. The House has been in session for more than two hours, patriotic speeches assailing the historic walls. Senator LaFollette has been spending most of the time in this room. From time to time, members of his party have been coming in to tell him what has been happening on the floor. If ever a man searched his heart and his conscience, it was this Republican Senator from Wisconsin, Bob

LaFollette during these last two hours.

Shouse: Well, Bob, there it is. The House has passed the President's Armed Ships Bill, four hundred and three to thirteen. It's the will of the people, Bob. Now it's right in your lap. What are you going to do with it?

LaFollette: You know what you've done, I suppose?

Shouse: We've done exactly what the people expected us to do; represent them, and cry out in righteous indignation.

LaFollette: You've led them a step closer to involvement in the most destructive war of all time.

Shouse: Bob, if you continue to stand on this flimsy scaffold of isolationism, you stand there practically alone, and very, very close to pre-treason.

LaFollette: I won't betray my country, Henry, and if I can help it I won't let my country betray itself.

Dick Joy: We take you now to the White House and Todd Hunter.

Hunter: Joseph Tumulty, the President's Private Secretary, has just informed us that the meeting between the President and Secretary of State Lansing has concluded. And we do hope in view of the rapid developments during the past few hours that we'll have a chance... Oh Mr. President, any comment, sir?

Wilson: Comment? Yes. I want you to know that even as these talks of peace were going on, the German Government was using our telegraphic communications facilities—which we loaned them as a gesture of friendship—to send the Zimmermann Telegram to Mexico. I regard this as a violation of a friend's trust. We were made the innocent agents to advance a conspiracy against ourselves.

Hunter: Oh, Mr. President, you know the House has passed your Armed Ships Bill, but the Senate is doubtful.

Wilson: We will arm the ships ourselves.

Hunter: But there is opposition, sir! Senator LaFollette has said that he will...

Wilson: A little band of willful men representing no opinion but their own trying to render the great government of the United States helpless (B% and) contemptible.

Hunter: May I interpret that to mean, sir, that you're adopting a stiffer policy toward Germany?

Wilson: No, it only means that a tired man is fighting mad. Strange isn't it that the President of the United States is our only citizen denied the right to be just a tired man who's fighting mad. No, our policy toward all belligerents has not changed—peace with honor.

Hunter: Mr. President, may I interpose a question for the Secretary of State?

Wilson: Well, of course, of course.

Hunter: Mr. Secretary, as a diplomat were you surprised that Dr. Zimmermann admitted sending the telegram?

Lansing: I was amazed. If I had been in Zimmermann's place, I would have challenged this government to prove its charge. That would have forced us to make public our sources of information.

Hunter: Thank you, sir. Mr. President, if Senator LaFollette does filibuster and prevent the passage of your Armed Ships Bill...

Wilson: If LaFollette should do this...

Hunter: Do you have the constitutional authority, sir?

Wilson: I have the constitutional authority to arm the ships myself.

Hunter: War fever is running high, sir. Wouldn't the arming of our ships be an invitation to overt acts?

Wilson: I repeat what I have said before: I still have hopes for peace. Today I have received thousands of telegrams demanding a declaration of war upon the Central Powers. I still have hopes for peace. I will not be panicked into war, nor will I be frightened into peace. The interview is over.

Cronkite: The month of March 1917 has been called Wilson's "Valley of Decision," Wilson's "Gethsemane." LaFollette's filibuster did block the Armed Ships Bill, and the President on March the 11th instructed the Navy Department to arm American private ships. On March 18th three more American freighters, the City of Memphis, the Illinois and the (B% Vigilancia) were reported sunk. March 20th the President's Cabinet met and unanimously recommended a declaration of war. The President convened Congress on April 2nd two weeks early and delivered his famous speech which concludes: "We have no selfish ends to serve. We desire no conquest, no dominion. America is privileged to spend her blood and her might for the principles that gave her birth and happiness, and the peace which she has treasured. God help her; she can do no other." The Zimmermann Telegram: how did he get hold of it, and how much did it really contribute to Wilson's historic decision? Where did we get the Zimmermann Telegram? Admiral Hall, himself, intercepted and broke the German code. What did this strange document contribute to the history of our nation? As Secretary of State Lansing said, "It unified public sentiment throughout the United States against Germany." From the time the telegram was published and its authenticity admitted by its author, the United States entry into the war was inevitable; desired by the American people from Maine to California and from Michigan to Texas. What sort of a day was it? A day like all days filled with those events that alter and illuminate our time, and **YOU WERE THERE!** ((Theme music.))

Sinkov: We'll resume in about 10 minutes. ((Audience leaves))

Sinkov: They're about all in now. ((Audience has returned.))

Friedman: ((Said aside to Sinkov)) Say, Abe. What did you do about recording this on film? They're supposed to record this on magnetic tape. Are they doing it now?

Sinkov: (XG) ((very faint))

Friedman: (2-3G) ((very faint))

Sinkov: Recorder (2G).

Friedman: Yes.

Sinkov: What kind of (XG)?

Friedman: No no. I mean on magnetic tape.

Sinkov: (XG).

Friedman: Ladies and gentlemen, just before the film started I said I'd go into the background of this episode and give you a detailed account of this, the most spectacular and fateful single cryptanalytic episode of World War I, or of World War II for that matter. I think that an episode of such importance in cryptologic history warrants careful study by cryptologists as well as historians. It is the story replete with lessons on the disastrous consequences of weaknesses in "C" power as well as on the opportunities attendant upon strength in "C" power. The Zimmermann Telegram was sent on 16 January, 1917. A careful paraphrase of its decrypted plain text was published on March 1st, and within a little over one month after publication on April 6th, President Wilson signed the declaration of war on Germany. Perhaps we in the cryptologic field should be a bit more specific and say that we entered when we did because of German obtuseness in affairs diplomatic and naiveté in affairs cryptologic, or because of British astuteness in affairs diplomatic and brilliance in affairs cryptologic; or should these two reasons be interchanged in their order? I'll let you be the judges.

The Cronkite film dramatically portrayed the impact that disclosing the contents of the telegram had on Congress. It was only to be expected that the question in doubt...that question in doubt should be raised as to its authenticity. You saw that very well depicted in the film. The newspapers were full of denunciations and discussions ((TR Note: blip in tape here)) ...record the...March 1st, 1917, the day the Associated Press story appeared, 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, despite what the picture showed; that was not quite accurate. For, mark you, the disclosure had not been made on the authority of the State Department at all. Strange as it may seem, it had appeared merely as an Associated Press dispatch which was widely distributed apparently upon its own responsibility. You will recall this point in the Cronkite film, and I'll add that the principle idea of my talk is to explain the delay between the date the telegram was sent—16 January

1917—and the date its contents were communicated to the American Ambassador—24 February—a period of almost six weeks. Why did it take so long? This is a question many people asked. Wasn't that lengthy delay a bit suspicious? What kind of British skullduggery was being covered up? Walter Cronkite tried to give an explanation. Admiral Hall, in the picture, tried to give an explanation. He said that the story was held back until the Germans changed their code! Then the Zimmermann Telegram could be published without harm to British Intelligence. Well, let's see. Let's lift the curtain that for so many years shrouded the Zimmermann Telegram in a tight veil of secrecy. Let's begin with a brief story about how the British cryptologic organization got started. I should tell you that according to historical accounts—and I know they're true—the British Government had no cryptanalytic organization in being when World War I broke out. Oh yes, I know there had previously been a long, long tradition of code and cipher solving by British authorities, and this, too, is true, but that's another story, and I don't wish to go into it at this time. All I want to say at this moment is that there was no cryptanalytic organization in being in the British Government when war came in 1914, just as there was no official cryptologic agency in being in Washington. When we entered World War I as a belligerent in April, 1917, in both cases there had to be improvisation, with amateurs taking the leading roles—not professionals. Let me read from a letter dated—mark this well—August 23rd 1958 written to me by Commander A. G. Denniston who was for a number of years before World War II, and for a couple of years during that war, the head of the British cryptanalytic organization and with whom I've discussed the Zimmermann Telegram only three months ago when I was in England. "But do remember," he writes, "Do remember also the origin of 40 OB: a collection of amateurs with a good knowledge of German and no experience of ciphers, collected by Sir Alfred Ewing in August 1914 to study the vast amount of WT material which was coming into the Admiralty. Within a few weeks, Naval material was sorted out and the First Lord, Churchill, instructed us to make a profound study of the mind and methods of the German Admiralty!" Exclamation point. "We carried this out successfully, and the staff grew, and by the middle of 1915, we began to seek fresh fields where we could tackle the Germans, but we all had to learn the technical side of our job. It was no work even for enthusiastic amateurs. Out of that small body, in a similar party in the War Office studying the German Army, you know as well, or better than I, what has grown up from these seedlings." Commander Denniston's mention of Sir Alfred Ewing requires a bit of explanation. You'll find a good deal of information about him in a book by his son, published in 1939 after some clearance bouts with the authorities. The book is entitled, "The Man of Room 40: The Life of Sir Alfred Ewing," published in London 1939 by Hutchinson's. He's also mentioned very prominently in a book published in 1955 by Admiral Sir William James entitled, "Eyes of the Navy." This is a book devoted to eulogizing the World War I Director of British Naval

Intelligence, Admiral Sir William Reginald Hall, but the book also devotes a good deal of space to the part played by Ewing and his gifted, university educated, cryptologically amateur helpers in Room 40. I think it would be nice to see a picture of each of these two gentlemen. Let's have slides one and two, please. Can you turn...? That's it. Turn them all on. Let's...Let's have a good look at the man. That's Sir Alfred Ewing taken in the latter part of his life when he was the Vice Chancellor and the Principal of Edinburgh University. Now let's have the next slide, please. And this is Admiral Hall. Alright, lights please. Let's have the lights please.

I'll now quote liberally from Admiral James' book, "When Hall became Director of Intelligence in November 1914 he found to his surprise that a small body of picked men under the direction of Sir Alfred Ewing were at work on intercepted German Naval wireless signals, and having discovered the method of ciphering, were supplying the Operations Division with information about the movements of the German fleet. This work had been kept so secret that only a few officers in the Admiralty, and no officers outside the Admiralty, knew that signals were being intercepted, let alone that they were being read. 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."

After a few paragraphs on codes and ciphers, there follow these: quote, "Though the work of Ewing's small band had been kept so secret, all the great powers with the exception of ourselves, maintained a department for the deciphering of foreign codes in their peacetime organization, the Russian and French departments being especially efficient. The outbreak of war found our Navy fully mobilized, and its war bases at a peak of battle efficiency, but our Naval Intelligence Service, on which so much would depend, was not so well prepared. Our Intelligence Department had amassed very useful information about Germany's war potential, but the problem of how to keep watch on the German fleet had not even been studied! Ever since the advent of large mine fields and the submarine, it had been obvious that the centuries old method of keeping watch on the enemy's fleet by lookout vessels cruising off the enemy's ports was no longer possible. That some of the senior officers had not imbibed this evident fact and were still living in the past, was apparent when the cruisers Hogue, Cressy, and Aboukir, cruising slowly up and down a patrol line by Admiralty orders, were all sunk by one submarine!" I'll add, at this point, that a radio receiving station specifically for intercepting enemy radio signals was set up by amateurs too, but we won't go into that. This first station was eventually expanded into 14 stations in the British Isles. Later three overseas stations were established.

When Hall became Director of Intelligence in November, the small band of pioneers were [sic] supplying the Operations Division with some

Intelligence of the German fleet, but it had, so far, been entirely a private enterprise effort, and the small organization did not come under any director or sea lord. Mark you what Admiral James said, "Ewing's work for a number of months was entirely a private enterprise effort." It is not clear whether he and his small bands of amateurs in Room 40 were paid. I must assume they were somehow or other. But Ewing's small organization did not come under any director or sea lord as mentioned by Admiral James. This situation changed when Ewing's group became a section of Naval Intelligence under the overall direction of Admiral Hall. Ewing continued to be the technical head until he became Chancellor of Edinburgh two years later. On 31 May 1916, that is, shortly after the Zimmermann Telegram episode, Ewing left Room 40 as active Technical Director, but he maintained contact with the work until October of that year. Now Ewing and his small team were university men, not naval officers. As a result, their translations of German Naval signals were strange things in the eyes of the very few men in the Naval Operations staff to whom the translations went, and, of course, the gifted amateur cryptanalysts became the butt of jokes, and it was a long time before Admiral Hall was able to break down the prejudice against their work. The amusing thing to note is that Hall had assigned a Navy Captain to put the translations into proper naval language, but that officer wasn't permitted to have access to the room where the cryptanalysts worked or to have any personal contact with them until 6 November 1914 when he not only was allowed into Room 40, but also became Hall's representative in charge of the staff of cryptographers. This is reminiscent of certain early days in the history of our own cryptanalytic organization, and is reminiscent, too, to learn that for a good many months, one and only one person was permitted to receive the translations—the Chief of Staff to whom they were personally handed in a locked box.

But now it's high time I got down to the real cryptologic details in the Zimmermann Telegram, details which had been completely shrouded in mystery during the whole war, and for almost 10 years after it. Actually, the first lifting of the curtain of secrecy was very gentle. It was only a veiled hint, in fact. So far as I've been able to learn from careful research, it occurred in a lecture on 19 July 1921, four years after the events we are considering, happened. The lecture was delivered on the occasion of the granting of an honorary degree to Sir (B% Maurice Henke), Secretary of the Committee of Imperial Defence by Edinburgh University on 19 July 1921. I quote from his address on this occasion as reported in the *Scotsman of Edinburgh* on that date. Quote: "There was one other name to which he wished to refer," Sir Maurice said. "There were some in the war who at all times were in the limelight. There were others who worked in obscurity. There was no name which deserved greater honor and no man did greater service in that category to his country than their Vice Chancellor and Principal, Sir Alfred Ewing." This was just a little lifting of the veil. The next lifting, so far as I've been able to find, was in a similar

sort of lecture about two years later when Lloyd George, on the occasion of his address as Lord Rector of Edinburgh University, made the following remarks in responding to a toast, and these I quote from the *Edinburgh Morning Post* of 2 March, 1923. "Mr. Lloyd George in responding to the toast to his...of his health, spoke of the great part the University had played in the war, not only by the contribution of her sons, but in the realms of science. In the end the brains of Britain's universities beat those of the Germans. Their principle discoveries, the organization which he set up, what he discovered by means of that organization brought to their knowledge things without which the fleet could not have operated successfully, without which it would have been difficult for the anti-submarine campaign to be carried out. I say more than that," continued the speaker. "It is his work that gave us the information which ultimately brought America into the war. Cheers! That story will one day be told." Unquote. And about four months later, Mr. Churchill, one of those upon whom Edinburgh University was conferring honorary degrees, said the following, as reported in the *Scotsman* of 12 July 1923: "Concluding, Mr. Churchill paid a tribute to the Chairman, Professor Ewing, for his services in the Admiralty. The Vice Chancellor, he said, made a contribution to the affairs of the Admiralty and to the fortunes of the state, which might almost be called inestimable, if only from the fact that it had never been recognized. During the war, no one did his bit more thoroughly in the whole of the vast building in Whitehall than Sir Alfred Ewing."

There followed a much more revealing story in the third volume of Burton J. Hendrick's, "Life and Letters of Walter H. Page," a section of which was first published in the November 1925 issue of "World's Work", a magazine long now defunct. Then about 13 or 14 years later, the son of Alfred Ewing published his book entitled, "The Man in Room 40," as I've mentioned, and finally 40 years after the event came Admiral James' book. I think Walter Cronkite's story used a lot of the information that appeared first in the Hendrick account because the film was prepared before the much later, and better, account in Admiral James' book. But I'll take advantage of the various accounts in much of which will be said here, because each of them has something of interest. A few hours after outbreak of war, the British, who've always recognized the importance of control of communication channels as well as sea lanes, 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 that crossed the Atlantic, leaving only indirect channels of communication with their ambassador at Washington. These were four in number: first, by radio from Nauen, Germany to Sayville, Long Island, New York and to Tuckerton, New Jersey. Both routes were supervised by the United States Government and were well supervised to protect our neutrality; second, by cable from Germany via Berlin-Stockholm-Buenos Aires-Washington. But this route was secret from the United States Government, although there is positive evidence that it was quite

known...well known to the British from the very first days of its use. You see, the cable from Stockholm to Buenos Aires passed through England, ((Audience chuckles.)) and the route was jocularly called by Room 40 people—so Denniston told me—as the “Swedish Roundabout.” You know, the British name for a “traffic circle” is “roundabout.” ((TR NOTE: It is more likely that in 1914 when the British said roundabout, they were referring to a carousel.)) Third, another cable route via Berlin and Copenhagen to Washington; this cable also touched English soil. This was a very unusual channel for the Germans because it could be used only with the knowledge and cooperation of the United States Government; more about that channel later. Fourth, the last route involved inserting secret text in ordinary news dispatches. We learned about this route and method only after the war was all over when it was disclosed by Bernstorff himself. Hendrick’s story of the Zimmermann Telegram says that it was sent via the radio route, and he makes it plausible by saying, quote: “On the 16th of January 1917, the ever watchful ears of the British wireless operators detected the characteristic spluttering 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. Now I’m going to show you what they got, uh, translated into English. May we have that slide number three, please?”

Now, I call your attention to the lacunae, the doubtful points, indecipherable sentences, and so on. You’ll notice no mention of Texas, Arizona, New Mexico. Alright, now let’s have the lights, please. Hendrick continues, “This somewhat confused message gives an idea of the difficulty of picking up wireless signals sent across the Atlantic at that time in midwinter, but there is a curious discrepancy between this telegram and the more complete and finished one sent to Bernstorff by way of the Washington cable office, and by him relayed to the city of Mexico. The plan for dismembering the United States and making President Carranza a free gift of Texas, New Mexico, and Arizona does not appear in it. Whether this omission was the result of defective wireless work or has another explanation, is not yet clear. Does Hendrick want us to believe that Bernstorff himself added this precious bit of enticement, this lure which the Mexican President was to swallow? Perhaps so, but Hendrick’s explanation is quite wrong. It is, in fact, misleading, and perhaps intentionally disingenuous. We shall soon learn the real explanation for the gaps and doubtful points in the text of the message as first intercepted, as well as the reason for the six weeks delay which made people suspicious. The use of the radio channel from Nauen to Sayville or Tuckerton was prohibited except under American supervision, and I can tell you most emphatically that that supervision was very detailed and effective. I have very carefully searched every available record, German as well as American, and found not the slightest evidence that this channel was actually used for the Zimmermann Telegram. If you’re

interested in learning just how the supervision was exercised, I suggest you study this brochure on the Zimmermann Telegram which was written a good many years ago in collaboration with a late, departed friend of mine, colleague Dr. Charles J. Mendelsohn. I think you will agree that great care was taken by the authorities who had the responsibility of seeing to it that we lived up to our international obligations under strict neutrality. Let's continue with our Hendrick's story. Quote: "We come now to the second communication channel 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 the use of this channel may be found in Bernstorff—that's Bernstorff's memoirs. For example on page 65, subquote: "We had to fall back exclusively on the wireless stations when, as frequently happened, we were unable to make use of the circuitous routes by a neutral country." Again, on page 149: "Telegraphic communication between the German Government and the embassy at Washington was carried out by a circuitous route which made it extremely slow." Hendrick stated that in many capitals German messages were frequently put in Swedish cipher and sent to Swedish ministries. If true, the statement implies that the British read Swedish codes too. Now it would be easy to believe that the British obtained messages in Swedish code, for their intercept service pretty well covered the earth, but reading those messages is a different matter. It is intrinsically unlikely that the Germans would give the Swedes the text of a message to be put into Swedish code for transmission. Why reveal their secrets to the Swedish Government? It was so much easier merely to ask Stockholm to forward a message in German code precisely as they asked the Americans to do, as we shall soon see. Not only, however, do probabilities point away from any idea the Swedish code was used, but we have two pieces of evidence on this matter, the authenticity of which cannot be questioned. The first is a direct statement by the people in Room 40 that they couldn't read Swedish code messages when some of them were sent by accident by Secretary of State Lansing, the time of the Zimmermann episode. The second piece of evidence is also in the form of a categorical statement from Room 40, a technical statement, this time, made to us after we ended World War I. The statement was that German messages, if sent by Swedish officials, were ciphered in German code but in a manner intended to disguise the fact that they were in a German code. You might be interested in the procedure. What they did in Berlin, for instance, was to hand their coded telegrams over to the Swedish Minister to Germany. He embodied the German code groups in a message to Stockholm addressed to his home office. From Stockholm it went to the Swedish Ambassador in Buenos Aires who turned it over to his German colleague in that city. The German Minister in Buenos Aires then forwarded the message to Bernstorff in Washington, but before doing so he applied a process of systematic

alteration to the code groups. It was hoped, of course, that the differences between the code groups in what appeared to be Swedish messages, and the code groups in what appeared to be German messages, would not be noted. The same process would be applied in Buenos Aires to messages from Bernstorff to Berlin via the Swedish roundabout. The...The German and the Swedish hope was a vain one, because the British were getting copies of Swedish messages into and out of Buenos Aires and could compare these messages with those going into and out of London. Remember that cable from Stockholm to Buenos Aires touched England, don't you? It wasn't long before they discovered and uncovered the disguise, which, by the way, was pretty thin. Only the three center letters of a five-digit code group were changed (B% and) systematically. It didn't dawn on the Germans that their code could be unraveled and read by anybody not possessing a copy of the code book, certainly not by stupid Englishmen! ((Audience chuckles.)) And also, by the way, I found that the disguise procedure began as early as in the summer of 1915. The fact that the practice was not stopped for two years or more, though the British were fully aware of it, speaks for itself. British authorities must have realized soon after the first protest, which was, no doubt, made early in the cryptologic war, that the information they were gleaning from the study of these messages was too valuable to lose; even taking into account the fact that the messages were of considerable use to their enemies. It is more than likely that the information was at least as useful to the British as it was to the Germans themselves, and in some cases, there is no doubt that it was even more useful.

We come now to the third and most interesting of the Zimmermann Telegram routings. The one that the Cronkite story reported so dramatically as that used with the cooperation of the State Department. I quote from the Hendrick narrative: "The German Government forwarded this dispatch to Washington in still another way. Indeed the most remarkable incident in this remarkable transaction remains to be told. Evidently, the German Foreign Office feared that transmission by wireless and cable transmission to Buenos Aires by grace of the Swedish Government might fail them. Their prohibition the American Government had placed upon the use of wireless from Nauen to Sayville, Long Island might naturally cause apprehension as to the delivery of messages sent by this route. The cable line from Stockholm to Buenos Aires and thence to Washington and Mexico was a roundabout one, and a message transmitted that way might conceivably fail to reach its destination. The dispatch of this telegram, however, was at that moment the most important business before the German Foreign Office, and its safe arrival in the city of Mexico must be assured at any cost. There was one method that was absolutely sure, though the fact that this should have occurred to Zimmermann must be regarded as one of the most audacious and even reckless strokes of the war. Humor of any kind the Germans seldom displayed at crises of this sort, yet the mechanism adopted to make

certain that this plot against the American people would safely land on Bernstorff's desk advances an unmistakable gift, even though an unconscious one for the sardonic. The transaction reflects so seriously upon the methods of the State Department that it would probably never have seen the light had the Germans not made it public themselves. In 1919, the German Constituent Assembly held an elaborate investigation into the responsibility for the war; in this the Zimmermann Telegram played a very important part. Among its published documents is a note which reveals one route by which this document found its way across the Atlantic. It says, quote: Instructions to Minister von Eckardt were to be taken by letter by way of Washington by U-boat on the 15th of January. Since the U-Boat, *Deutschland*, did not start on her outward trip, these instructions were attached on January 16th to telegram number 157 and through the offices of the American Embassy in Berlin, telegraphed to Count Bernstorff by way of the State Department in Washington." What this means is that the German Foreign Office used the American Government as an errand boy for their transmission of a document that contained a plot against its own territorial integrity. The German Government, many times in the course of the war—says Hendrick—used the good offices of the American State Department for transmitting messages to Ambassador Bernstorff. Germany had no cable communication with the United States. The wireless was unreliable and not always available. Occasionally, therefore, the Germans would request Washington to serve in this capacity. All such messages touched England before starting across the Atlantic. The consent of the British Government was necessary before the favor could be performed. That the British graciously permitted the Germans to use their cable facilities may possibly have seemed, at the time, an act savoring on the magnanimous. ((Audience laughs.)) The fact, however, that the British possessed the German cipher and read all these messages as they sped through England, creates the suspicion that they may have regarded this as a way of obtaining valuable information. ((Audience laughs.)) Hendrick makes it appear that obtaining permission to use the American State Department facilities was a rather simple matter, and that many messages were sent by the State Department for the Germans in this way without realization on the part of the State Department officialdom of the possibly serious consequences that might ensue. That this is far from the truth will appear very soon. His statement too that, quote, "As all such messages touched England before starting across the Atlantic, the consent of the British Government was necessary before the favor could be performed," unquote, is meaningless when one considers the matter. It is obvious first of all that had the American Government been so naïve as to ask the British Government's consent to such a procedure, the latter would certainly have refused. It is likewise obvious that when Bernstorff wanted to send a code message to the Foreign Office in Berlin, the State Department could not simply address a telegram to the American

Ambassador Gerard in plain language asking him to forward the following code message to the German Foreign Office. The British would naturally not pass such a message, even though the greatest neutral country in the world asked for such a favor. Such a procedure is not a diplomatic possibility in time of war. If not in plain language, the forwarding by the State Department of German code messages had to be done through the intermediacy of State Department code. Assuming that official messages of the American Government to our ambassadors and ministers in Europe were not subjected to any study whatsoever by the British Cryptographic Bureau—which is difficult to believe—((Audience laughs)) it is possible that this practice might not have detected immediately...might not have been detected immediately by the British, but the manner in which the messages were actually drawn up was such that the discovery of the practice should and must have been particularly easy if American messages were even hastily scanned. Here is an example of the plain text of such a message copied...I copied it from the files of the State Department:

“Am. Legation Copenhagen: Forward Berlin 3803. Deliver to German Foreign Office the following message from Ambassador Bernstorff. Then add German cipher. Lansing.”

Now, what this means is that the preamble, “Forward the following” and so forth was in State Department code. What followed after that was German code groups, easily recognizable because they were in three-letter, four-letter, and five-letter groups; a very unusual thing even in those days. Most of the codes were five-letter, five-digit groups. Whereas Hendrick makes it appear that our State Department handled many messages for the Germans, Lansing in his account of the matter, makes it clear that the transmission of the Zimmermann Telegram via State Department channels was an isolated incident, or that at least...or at least that this communication channel was placed at the disposal of Bernstorff only toward the end of the period of strained relations. On at least one occasion, Lansing refused to transmit a message because it didn't appear to him that the situation was one of urgency; and I saw that message; I didn't blame Lansing. Lansing goes on in his book and says: “At 11:30 I went to the White House and for an hour discussed with the President the substance of the Zimmermann Telegram and the way to use it. The President said that he had been wondering how Bernstorff got the message from Berlin, and that the closing of secret lines of communication with his government made him a little uncertain as to its authenticity. I told him that I thought it could be easily explained, my opinion being that it was done in the following manner: during the early part of January, Count von Bernstorff, at the instance of Colonel House, had been laboring with his government to obtain concrete terms of peace. The Ambassador had complained of his inability to communicate secretly and therefore freely with Berlin which he considered essential in order to accomplish his purpose. In view of this reasonable statement, we had consented very

reluctantly to send—that is in the cipher of which the department did not have the key—messages for him through our embassy.” Remember every message they sent by radio over that Nauen-Sayville route... Every message was in a code, a German code, but a copy of that code was in the State Department, and a copy at Sayville, and a copy at Tuckerton so that our Navy people at those stations could read the telegrams and see what was in them. But this was not true of this particular type of cable transmission, you see? This we did several times permitting the German Foreign Office to reply in the same way. On January 17th an exceptionally long message—one thousand groups—came through from Berlin. On the 18th, this message was delivered to the ambassador. On the 19th, the telegram from Bernstorff to Mexico was filed. From these facts I drew the conclusion that in the long secret message delivered to him on the 18th, was the message for the German Minister, besides other orders as to what to do in case of severance of diplomatic relations. The President two or three times during the recital of the forgoing exclaimed, “Good Lord!” ((Audience laughs.)) And when I had finished, said he believed that my deduction as to how Bernstorff received these orders was correct. He showed much resentment at the German Government for having imposed upon our kindness in this way, and for having made us the innocent agents to advance a conspiracy against our country. We come now to a study of the code or codes used for the Zimmermann Telegram. Note the plural “codes;” that’s very important in this case, as you shall see.

First, as to the code used for its passage from Berlin to Washington, there can be no question that that message which carried the Zimmermann Telegram to Minister Eckardt that bore the number 1-5-8 was the one which had been appended to Berlin-Washington message number 1-5-7, and which was sent via State Department channels. As I’ve already said, the British Government has officially never published any account of the interception and solution of the Zimmermann Telegram by its cryptanalysts in Room 40. But we can see many interesting things in the versions published in the various published accounts when we study very intensely the telegrams that passed between the British and American governments dealing with the Zimmermann Telegram. In particular, there are things in Admiral James’ account which throw light on dark points in the story. Perhaps this shedding of light was unintentional. Admiral James says in his foreword: “As I had no access to unreleased official papers,”—and the framework of this book is a distillation of a mass of materials scattered through standard works which were best sellers 20 years ago—“it was not necessary for me to obtain official approval or support for publication. I was, indeed, in a better position to judge what could and what should not be published than anyone to whom the first war, uh, the World War was only a boyhood’s memory, if a memory at all, (B% slash), because I knew how much of Hall’s work was known to our enemies during the war and how much had been published to the world since the war. I had also the advantage of having taken some part, when

at the Admiralty, in passing for publication, books and articles covering various aspects of the 1914-1918 War, and informing authors what, for security reasons, could not yet be published, and more important, the advantage of personal knowledge of the men and the events I would be describing which would enable me to distinguish fact from fiction and to judge when reference to the shortcomings of individuals should be omitted.” But Admiral James was careful even though, as he said, he had no access to unreleased official papers, and therefore, it wasn’t necessary for him to obtain official approval for publishing his book, he did submit it for some sort of blessing, if not approval. This I learned in a report dated 15 December 1955 from our liaison officer in London. I have the report; I’m not going to take the time to read it. Apparently Admiral James himself didn’t know the delicate and interesting technical points about the Zimmermann Telegram which remained obscure or in doubt—in my own mind, at least, if not in the mind of others—until he published his book. And the same can be said of his clarification, unintentional I’m sure, of other dubious points about the history of the operations of Room 40. But we can’t go into these except as they impinge upon the cryptology of the Zimmermann Telegram.

I quote now from Admiral James’ account for some quite revealing details: “Then early in the new year came the Zimmermann Telegram, and though the first knowledge of this surprising communication was derived from European sources, Hall’s friends in Mexico City were soon playing an important part in the complicated business that followed.” Hall’s friends in Mexico City. “On Wednesday morning, January 17, Hall was at work at the usual dockets and papers when 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 Bernstorff 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 cannon that the names of those engaged in secret work should not be disclosed. They were: Nigel de Grey, a publisher, and after the war a Director of the Medici Society, and the Reverend W. Montgomery, of Westminster Presbyterian College, Cambridge. I’m unfortunate not to be able to show you a picture of Mr. de Grey. I had one, but just couldn’t lay my hands on it in time to have a slide made of it. In my many talks with him, not once did he mention the role he played in reading the Zimmermann Telegram, nor did anyone else in the organization in which he was Deputy to Sir Edward Travis, the chief. I have no photograph of the Reverend Montgomery, but Nigel de Grey was, and looked the part, of a character in a Dickens novel or the part of Superintendent of CID of Scotland Yard in a spine chilling mystery in book or on stage. Admiral James continues his story, “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 the one deciphered copy, were to be destroyed, locked them 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 stick [sic] at nothing? His most recent note had shown something of the way in which his mind was working. It seemed that he drew a little distinction...that he drew little distinction between the behavior of the Allies and that of the Germans, or indeed, between 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 about the Mexican plan must be made use of if we could safeguard ourselves. Publications of the telegram in the United States would almost certainly rouse the whole of the United States and might well 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 could 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 withheld all information from those best entitled to receive it and assumed the responsibility which ought never to have been his, because he would not run the slightest risk of the message becoming known to somebody who, not being familiar with every branch of his activities, might all unwittingly compromise some part of, or all of, the work of 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-Eckardt messages which "H" had secured"—I'll explain about "H" later—"might solve his problem, because the Zimmermann Telegram when forwarded on, as it must be, from Washington to Mexico would be only another in that 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, ((audience chuckles)) and that the British Intelligence Service had nothing to do with it. He was certain that even if somebody whom President Wilson implicitly trusted, like Mr. Balfour, gave his personal assurance that the telegram deciphered by de Grey 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 of

February the first; meanwhile, it was essential to keep the closest possible watch on Bernstorff and the American situation in order to be ready at any moment with alternative plans.” Well, we know that Bernstorff tried desperately, after he got this message about the resumption of unrestricted submarine warfare, to have Berlin change its decision, but it was no go. On 1 February, Bernstorff officially handed in his government’s announcement that unrestricted submarine warfare would begin that day. As we have already noted, President Wilson broke off relations two days later. Let’s continue with the story as Admiral James tells it: “To Hall’s dismay, but not altogether to his surprise, matters went no further. Cables from Washington and New York warned him that there would be delays, and perhaps no more positive action than a proclamation of armed neutrality by the President would take place. The time had come to take action, and on February 5th, Hall saw Lord Harding, the Permanent Secretary at the Foreign Office, and showed him an amplified decipher of the Zimmermann Telegram which de Grey had now been able to produce. He put forward several suggestions. In the first place it would be necessary to obtain a copy of the telegram from Mexico City. “H” was no longer there but his place had been taken by “T” who was fully aware what was afoot in the telegraph office, and Hall did not anticipate much trouble there. Hall then took steps to obtain the additional evidence that he required in the event of an exposure, and he made certain arrangements in Mexico City to get all copies of Bernstorff’s telegrams to Eckardt since 18 January 1917. These were to be sent to the British military attaché in Washington, and were then to be forwarded by cable to London in British cipher. No hitch developed in these very nice arrangements.”

At this point, I want to tell you about that part of them which involved the men whose identity James conceals simply by calling them Messrs. “H” and “T”. They were, I suppose, British secret agents in Mexico City. In a rather odd way and quite by accident, they turned out to be most useful characters in the drama of the Zimmermann Telegram. Here’s the story. I quote from James: “Since the outbreak of war, there had been several revolutions in Mexico, and as each new conqueror had taken charge of the capital city, one of his first actions had been to declare the currency of his predecessor to be valueless and issue one of his own. ((Some chuckling.)) All that was necessary was to print something on small bits of cardboard resembling railway tickets and called “cartunes” and call them money. Most of these were worth no more than a penny or two, but there were numerous forgeries always in circulation, and the matter had become so serious that President Carranza had given orders that any such forgery should be punishable by death. It was shortly after this order had been made that a printer, an Englishman, happened to return to his workshop unexpectedly one Saturday afternoon. His workmen, all of them Mexicans, were taking their half day off. To his astonishment and dismay, he found on a table a neat pile of these “cartunes” and the plates from which they had been printed. In his excitement, he made the worst

possible mistake; he locked up the forgeries and plates in his safe. He then rushed out to consult a friend on what he should do next. Meanwhile, the workmen who had made the forgeries returned for the “cartunes” and realizing what must have happened, sought to save his own skin by getting in first with his denunciation of his master. The unfortunate printer was arrested the same afternoon, ordered to open his safe, and then hurried off to a drumhead court martial and condemned to be shot at dawn on the Monday. On hearing of the arrest, “H” went to the British Minister who at once got in touch with the Mexican authorities and obtained their agreement that he should be responsible for the criminal. He then pointed out that if an Englishman intended to committed a forgery, he would aim at higher than a penny or two penny notes”—I should have said “tuppence”—“tuppenny notes and persuaded the authorities to examine the case more closely. The printer was shortly afterwards released. It was an unpleasant affair while it lasted, but it was to provide Hall with the messages he was anxious to obtain, because the printer and his friend were both anxious to show their gratitude, and the friend was working in the telegraph office.” ((General laughter.))

Now, ladies and gentlemen, it is twelve o’clock, and I have still quite a few more pages. I imagine that there are some of you who have urgent business elsewhere. Some of you are getting very hungry. And I put it to the Chairman of the Crypto-Mathematics Institute as to my next step. Shall we...Shall we have an adjournment for lunch and resume for approximately one more hour—I think, if I don’t hurry too much—maybe an hour, ((audience chuckles)) or would you like to go on and get it over with right now?

Sinkov: I propose we complete it, if the audience would like to stay. We will then rearrange our afternoon program after we see what the time is, what we have (XG).

Friedman: If you have energy. ((General chuckling.)) Well, thank you. I think that that’s...

Sinkov: If you can manage.

Friedman: Yes, yes. Oh, I’m having a big time. ((Some chuckling.)) I hope you are too. Well, when secret agent “H” was replaced by secret agent “T”, the good work went on, and that’s how Hall in London was able to get a copy of the Zimmermann Telegram in the form in which it was sent to Bernstorff...by...from Bernstorff in Washington to Eckardt in Mexico City. The possession of that version of the message turned out to be of crucial importance. Admiral James continues: “So much progress with the reconstruction of the code had been made that by February 19, Hall had in his hands an almost perfect transcript.” And James then gives the complete and perfect text of the Zimmermann Telegram as generally published in the history books—not a paraphrase. But Admiral James is throwing a little dust in our eyes. The version of the Zimmermann Telegram that was finally published was NOT the version that was in the

telegram from Zimmermann to Bernstorff in Washington. That version was in a comparatively new 10,000-word, two-part code known as Code 7500 ((Spoken as seventy five hundred.)); whereas the telegram from Bernstorff to Mexico...to Eckardt in Mexico City, although quite similar in content, was in a much older and much simpler one-part code known as Code 13040 (Spoken as one three oh four oh.) Let's continue with Admiral James: "It had always been his intention that his friends at the American Embassy should share unofficially what was so essentially an American secret at the first possible moment, and as soon as he had read the completed draft, he asked Mr. Edward Bell of the American Embassy to come to see him. Mr. Bell's first fury at learning that Germany was urging the Mexicans to re-conquer the lost territory in Texas and Arizona, turned very naturally into the belief that it was a hoax. The Germans had made some bad mistakes in their time, but this was incredible! ((General chuckling.)) Hall was able to assure him that the message was far from being a hoax, and Bell then said that publication would certainly mean war and asked if the message was to be given to the Embassy. Hall explained that the Foreign Office had not yet come to a decision whether the message should be shown only to the President or given to the American people. We asked Bell to tell...He asked Bell to tell the Ambassador what he had seen, but at the same time begged him to make no use of the information until Mr. Balfour had made his decision. 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 averse from any step which could possibly 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. But by this time"—I'm going on now—"By this time, Hall had information that the German-Americans in the United States 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 as regards bringing the Zimmermann Telegram to the attention of President Wilson. On 20 February, he received Balfour's authority to handle the whole matter as he saw fit." James continues: "For long discussions with Dr. Page and Mr. Bell followed, the Ambassador was in no doubt about the best method to adopt with regard to handing over the telegram itself. He was sure the effect on the President's mind would be infinitely greater if the documents were to be given to him officially by the Foreign Secretary, and this Mr. Balfour agreed to do. The vexed questions of an absolute cover for Room 40, the necessity for our doing nothing on American soil to 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 a 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 evident. There was

nothing to prevent the American authorities from obtaining their own copy in the Washington cable office, and the fact that the British Government had officially provided the decoded transcript would satisfy them of its genuineness. But there was still the possibility that the American Government would demand absolute proof, and that would mean handing over to them de Grey's reconstructed code which Hall would never do. Then, on 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 de Grey's tuition in the American Embassy which, technically speaking, was American ground. ((General laughter.)) As for Zimmermann's possible denial, it seemed better to wait until after the exposure before taking any decision."

So, at this point I want to show you slide number four, please. This is the staff of the American Embassy in London, and the Ambassador is sitting in the middle, and you see his military attaché on his right, his naval attaché in mufti on his left, and Mr. Bell is the gentleman on the right of the military attaché—group picture. By the way, Admiral Simms you all recognize, or many of you recognize in uniform standing up in the back row. Alright, let's have the lights again, please. After that, things happened speedily enough. On Saturday, February 24, while the newspapers in Washington were asserting that in official circles there was still hope for averting trouble, Dr. Page called at the Foreign Office and was officially handed the message. He lost no time, and within a few hours a cable was on its way to the State Department. I'm going to quote this cable because it's very interesting, and I quote it from Hendrick:

"CONFIDENTIAL" It's dated, "London, February 24, 1917, 1:00PM. CONFIDENTIAL, for the President and Secretary of State"—CONFIDENTIAL was the highest classification they had then— ((General laughter.)) "Balfour has handed me the translation of a cipher message from Zimmermann, the German Secretary of State for Foreign Affairs, to the German Minister in Mexico which was sent via Washington and relayed by Bernstorff on January 19th. 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, 1-3-0, and the second is 1-3-0-4-2 indicating the number of the code used. The last but two is 9-7-5-5-6 which is Zimmermann's signature." The slide number five, please. I think you'll be interested in seeing exactly what that looked like. There it is, taken out of the files of the Western Union Office in Washington. You see the 1-3-0, 1-3-0-4-2; and Zimmermann's signature at the end: 9-7-5-5-6. An historic message! Alright, lights please.

"I shall send you by mail a copy of the cipher text and of the decode into

German, but meanwhile I give you the English translation as follows:” And now I want the next slide, please. Now you see, ladies and gentlemen, the complete text of the message as it went from Washington to Mexico City, translated, of course. It was this part in here ((Friedman goes up to displayed slide to show relevant parts.)) about Texas, New Mexico, and Arizona, which turned the trick, because up until that point, the people in the Middle West, Southwest, and Far West, they didn’t care about the war across the ocean. But as soon as there was mention of taking away some of our property, well, that was a horse of a different color! Now, let’s go on...Lights, please.

“The receipt of this information has so greatly exercised the British Government that they have lost no time in communicating it to me to transmit to you in order that you may be able without delay to make such dispositions 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, and have made it their business to obtain copies of Bernstorff’s cipher messages to Mexico, amongst others, which are sent back to London and deciphered here. This accounts for their being able to decipher this message from the German Government to their representative in Mexico, and also for the delay from January 19 until now in receiving the information. This system has hitherto have been a jealously guarded secret and is only divulged now to you by the British Government in view of the circumstances and their friendly feelings towards the United States. 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 Zimmermann’s Telegram itself.” ((Audience chuckles.)) “The copies of this and other telegrams were not obtained in Washington, but were bought in Mexico City. I have thanked both Balfour for the service his Government has rendered, and suggest that a private official message of thanks from our Government to his would be appreciated. I am informed that this information has not yet been given to the Japanese Government, and I think it not unlikely that when it reaches them they will make a public statement on it in order to clear up their position regarding America and prove their good faith in their allies.” Signed, Page.

When Ambassador Page sent his telegram containing the English text of the Zimmermann message, he said, “I shall send you by mail a copy of the cipher text and of the decode into German.” Slide seven, please.

On the right is the text that I want to call your attention to right now; just the one on the right. That is the German text in the message from Washington to Mexico City. Lights, please. These were sent from London on March 2nd, but of course could not have reached Washington in less than a week. In the meantime, still worried about the authenticity of the telegram, Washington asked for a copy of the German code, as is

evidenced by the following telegram: "Washington, February 28th, 8:00 PM. Please endeavor to obtain copy of German code from Mr. Balfour. Decode following messages and telegraph translations. All three messages are dated January 17, signed Bernstorff and addressed to the German Legations at Bogota, Port au Prince, and Santiago, Chile, respectively. Here follow the messages: Effort will be made to secure copies of all German messages as far back as possible, and if the Department were in possession of the code, there would be a great saving of time and expense. ((Audience laughs.)) Contents of the messages decoded here would, of course, be communicated to the British Government. Publication of Zimmermann's Telegram to Mexico tomorrow."

Page replied: "London, March 1, 11:00 PM. The three messages were deciphered today and are practically identical. They contain instructions to the three legations," and so on and so on. "I am told actual code would be of no use to us as it was never used straight but with a great number of variations which are known to only one or two experts here. They cannot be spared to go to America. ((Audience laughs.)) If you will send me copies of Bernstorff's cipher telegrams, the British authorities will gladly decipher them as quickly as possible, giving me copies as fast as deciphered. I could telegraph texts or summaries in matters of importance and send the other by pouch. Neither Spring-Rice nor Gaunt know anything about this matter."

I should explain that Spring-Rice was the British Ambassador in Washington—completely out of the picture; and Gaunt was the British Military Attaché in Washington—completely out of the picture. This shows you how careful the British Room 40 people were. Mr. Page's informant was given some misinformation, or perhaps he was intentionally or unintentionally misleading him, for the message was in straight, unenciphered code, only the code wasn't sufficiently reconstructed. There is more to this than what I've just said though, and I'll get to that point at issue soon, I hope, or maybe you hope. Let's return to Admiral James' story now: "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 to the American Government. Risk of the loss of code books was being taken throughout the war by every one of the belligerents, and it could be...and it would be much better for the President to suppose that a copy of the code book had come into our hands, than that without such assistance, we had been able to read the messages. 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 might misfire? Nobody can blame Admiral Hall for trying to place around the cryptanalytic feet every security safeguard he could devise. If necessary, he would put off on the wrong trail anybody he thought might jeopardize security so as to

cover the tracks of Room 40. At the time this brochure was written, my late colleague and I didn't know all the facts. We were using inferences and making deductions. We said, quote: "Admiral Hall in his affidavit before the Mixed Claims Commission, said of this code: 'The German cipher book covering this system of ciphering is in our possession, it having been captured by the British authorities in the baggage of a German Consul named Wassmuss, who was stationed at Shiraz"—that's in Persia—"while Wassmuss was engaged in an endeavor to cut a British oil pipeline.' ((Some chuckling.)) And we went on to say, "It seemed unlikely that a German Consul engaged in an expedition to cut a pipeline should carry a diplomatic code in his baggage!" ((Audience laughs.)) Moreover, the British copy of Code 13040—they gave us a copy as soon as we got into the war—is fragmentary and gives every evidence of having been gradually reconstructed in a cryptographic bureau through the decipherment of messages. A glance at the copy given by the British to the United States after America's entrance into the war will demonstrate this fact. This copy contains about half the vocabulary, but is not a transcript of part of the code book since it comprises some words and phrases from all the pages. Some of the identifications, too, are marked doubtful. An actual copy of a code book would certainly not exhibit missing and doubtful sections." ((Audience laughs.)) That's what we said in this document. We felt that a cipher book, or at least some sort of cryptographic document was found or captured and must have contained an element of truth, but we didn't know just how much. And when the British turned over to us a copy of their 13040 code, they didn't say anything about its having been reconstructed upon the basis of another code that they had captured. But that's exactly what they had to do, and they did it, as I have since then established. For instance, in the Ewing book, we come across this paragraph, quote: "During the summer months, code books which had been captured in the German Consulate at Bushir, or Bushire, was made use of. " ((TR Note: Correctly called Bushir (Iran). Friedman mispronounces it when he says "Bushire."))

"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 the other the German Foreign Office ciphers. The correspondence of that office, with its agents abroad, gave very useful information as to the enemy's intentions and a good deal of insight into its methods and psychology." Note the illuminating statement that the captured material enabled the workers in Room 40 to read much enemy correspondence, thus providing a starting point from which to penetrate one after another the German Foreign Office ciphers. Admiral James, too, gives much more specific and valuable information on this point. "In April, even...something of even greater importance happened. There came into Hall's hands a copy of the German Diplomatic Code Book treasure trove from Persia. How this book reached Hall is one of the strangest stories of the war. A naval officer, invalided 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 Wassmuss. 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 horse back, ((audience laughs)) 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 India Office. He sent over Mr. (B% Cousins-Hard) who was then working with him to examine the baggage, and he returned with the code book. The code book 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 their diplomatic representatives in North, and South, and Central America. But ever since the special stations had been intercepting German wireless traffic, a continual flow of messages, which from their constructions were obviously not naval messages, had been arriving in Room 40, and these had been stowed away in cupboards.” ((Some chuckling.)) We do that too, don't we? ((More laughter.)) “The time had come to retrieve these piles of messages, sort them, and begin work on them.”

But now I can add a few details which may be interesting in connection with the German diplomatic codes of those days. They will go a long ways to explaining the long delay that looked so suspicious. The German system of distributing various and ciphers provided the embassies, including the military naval attaches, with first grade, two-part codes of 10,000 groups. There were about ten different ones for separate geographic areas. Legations and consulates were provided with second-grade codes which were apparently all derived from a basic, large, one-part code by shuffling or randomizing whole pages of one hundred groups, and by a similar sort of shuffling of blocks of ten on each page. There were several such semi-randomized or derived codes; one for the Near East, for example, known as Code 89736. ((Spoken as eight, nine, seven, three, six)) That was the one that was captured from Herr Wassmuss, or as Commander Denniston referred to him, Mr. “Whatmust.” ((Audience laughs.)) Another version known as Code 13040 was for Western hemisphere communications, and that is why that code was used for the Zimmermann Telegram when Bernstorff in Washington was obliged, and regarded it as his duty, to forward the contents of the original version of the telegram, a version that was in one of the first grade, 10,000-group, two-part codes known as 7500. Why didn't Zimmermann send the message from Berlin directly in code 13040 instead of making Bernstorff repeat it in another code? I don't know the answer to that. It's possible he did, but I very much doubt it. You might ask whether it couldn't have been in the...in its 13040 clothing when it was sent via the Swedish roundabout? Bernstorff says in his book—I won't quote it—enough to make it quite clear that it wasn't sent that way in that code. By the way, I think you may be interested to learn that a little further on in his book, Bernstorff has this to say:—mind you this was published in 1920—“From

the experience gained during the war, we learned that the diplomacy of the future will never be allowed to rely for important matters upon the secret of the cipher, for skillful experts are now able to discover the most complicated code, provided that they are able to intercept a sufficient number of telegrams.” I’ll add a final word as to why I think the Zimmermann Telegram was sent from Berlin to Washington in Code 7500, and not in Code 13040. I think it was done for reasons of economy and time, and labor, and money. Zimmermann wanted Bernstorff to know what he was cooking up with Eckardt in Mexico City. Why send two separate telegrams, one to Eckardt and one to Bernstorff? Why not just one to Bernstorff, and give the latter the headache of re-encoding the text and forwarding that text in 13040 to Eckardt? Save money that way, wouldn’t it? What did Zimmermann know about cryptography and the danger of sending out the same text in two different forms? Nothing, obviously! Note how the original message from Berlin starts. Let’s have that slide, please; the next slide. Oh no, that’s out of place. Stop that one; take it out. What’s the one in front of it? That’ll do. The one on the left...The one on the left is the version that was sent from Berlin to Washington. You see it has a preamble: “For your Excellency’s personal information to be handed on to the Imperial Consul in Mexico by safe route.” Number one, see, from there on, the one on the left and the one on the right is the same. Now, let’s have the lights, please.

All the data I have given you prove, I feel quite sure, that the Zimmermann Telegram was never sent from Berlin either to Washington or to Mexico City in Code 13040. Had Bernstorff not forwarded the contents of the message in 7500, it is very doubtful in my mind that the notorious Zimmermann Telegram would have been decoded in nearly so short a time. Also, the solution of Code 7500 would have taken more time. The possession of the 1304 isolog must have helped a great deal. In short, the circumstances, cryptologic and diplomatic, and the communications systems were then such that the contents of the Zimmermann Telegram were discovered just in the nick of time. Code 89726, the one captured from Mr. Whatmust, was used in Persia and the Near East. The British had copies of traffic between Berlin and Persia. It is curious that even then the Germans didn’t feel too safe in using it, because they used a string of seven to seventeen or more digits as an additive, but only for the most secret parts of the telegrams in the code. The British solved those adders also, but they never found out how Berlin sent them to Persia. It may, of course, be that the Germans didn’t fully trust the code clerks and that only the consul or the minister himself had the adders. Since Room 40 possessed Code 89736, all traffic received in it was, of course, readable, and much useful information in the Middle East was obtained, but the workers in Room 40 noted the appearance of 13040 at first in intercepted messages to and from various legations in South America. And later, after they discovered the liaison between Berlin and Stockholm, they began to collect enough cable material to start research on this new

book, and a very small staff, including de Grey and Montgomery, undertook this work. They were, of course, familiar with 89736 and soon came to the conclusion that the new book was of similar construction, but somewhat shorter. Much material was necessary to complete the solution of the book as every new group had to...identified, required confirmation. Thus, until all the scrambling of pages and blocks of tens on pages had become unscrambled to produce a clean and straight-forward, one-part 13040 code, much work had to be done, and there had to be a good accumulation of material required for the confirmations of correct numbering of pages and blocks on the pages. So now you can see what took all that time, and really, considering the job that had to be done, the people in Room 40 must have worked around the clock. Of course, Admiral Hall's lobbying with Balfour and the other high authorities took some time too. But until Room 40 had a good, clean, complete decode of the message in Code 13040, even Hall couldn't do much except to plan his campaign of disclosure to Page. With the aid of our able archivists, I've been able to dig out our old...from our old files, a copy of that German Code 13040. It's an interesting document, and here's a slide which you'll recognize as being a section of a page of a code in the stage of reconstruction. That's the one you had on. ((Said to the projectionist.)) Now let's have it again. You see it? It's the lower part of a page—I've forgotten now what page number—but you see gaps, questions, "Einzelfall" here crossed out and so on. So you see that it was reconstructed. It is nothing that was captured intact. Lights, please.

Now, let me continue to quote from Admiral James. You're going to be through in just a moment. "War was inevitable, but Hall was still a prey to anxiety, lest all his efforts to safeguard Room 40 should prove inadequate. He knew the Germans would make strenuous efforts to discover the truth. It was important to prevent publication of the German text in its entirety, and this Hall was able to do." They gave a paraphrase, "So, the exact text of the Zimmermann Telegram was not published until long afterwards, almost ten years in fact, until the Hendrick account of the episode came out in that magazine, "World's Work." You will recall that I said that the Zimmermann Telegram was published in all the important newspapers in the world on March the 1st, 1917. In pro-German circles, the telegram was immediately denounced as a forgery. 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, and he made an official statement that this is so; this is authentic. Well, there were still people who were in doubt until...until what happened? Zimmermann makes his second fatal mistake; frankly admits that he sent the telegram. He made a long statement before the Reichstag; I won't attempt to read it, but I'll just read you one sentence at the wind up: "How the American Government received information of instruction sent by secret way to Mexico is not known, but it appears that treachery—and this can only be the case—has

been committed on American territory.” In short, Herr Zimmermann brazenly admitted he’d sent the telegram, and he made a foolish apology for his inept conduct. This was his second grave error, because if he’d been really smart, he would have denounced the telegram as a forgery, a fraud, the product of British duplicity and 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 in it had been obtained. This in itself would have been enough to redeem him in our eyes, but he didn’t. And what Hall greatly feared might happen—having to prove the authenticity of the Associated Press story—didn’t happen. Room 40 was still secure. How could such a naïve man as Herr Zimmermann rise to be head of the Foreign Office of a great and powerful state? It will astonish you that he continued to use Code 13040. ((Audience laughs.)) But it should not astonish you learn that he soon lost his job. ((Audience laughs.))

I wish I had time as to go into detail as to the dither of excitement, suspicion, the criminations and recriminations which the revelation of Herr Zimmermann’s Telegram caused in the German Foreign Office and the German Foreign Office circles. Some of it is quite funny. As for Admiral Hall, he was very content to allow the weirdest stories to become current as to how the American Government came into possession of the Zimmermann Telegram. I won’t even attempt to quote the curious things that people said, and were taken as the truth. I’ll never forget the time when some Chicago newspaperman came out to where I was working at River Bay and charged me with it! ((Audience laughs.)) It was a time when it was very, very useful to have at hand that little two word sentence: “No comment.” Admiral Hall taught the British and us a few things about how to safeguard a cryptologic secret. I’d say that, wouldn’t you? Moreover, his astute handling of the information, the correct use of it, is something all of us must respect and must admire. I told you some minutes ago that Sir Alfred Ewing, the man who organized Room 40 and got the work going so successfully, left Room 40 two years later to return to his old university at Edinburgh where he now took office as Principal. In Ewing’s son’s book, and episode is mentioned which may interest you. Quote: “Some months after the American declaration of war on Germany, when Page was being presented at Edinburgh with an honorary degree, Ewing was amused, but not at all surprised, to find that the Ambassador knew nothing of his connection with Room 40, nor was he enlightened, although they had a delightful talk on other matters,” unquote. In this, do I detect a tiny criticism that the Admiral got all the credit? With this, ladies and gentlemen, I have completed my remarks on the Zimmermann Telegram. I hope you’ll come away with some of the drama of the thing, some of the technical know-how of how to use and properly use COMINT information when you have it! Thank you very much for your courtesy and patience. ((Audience applauds.))

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