Gentlemen,

It's a nice thing to have solved some code or cipher or encrypted code, and to have as a result some information right out of the horse's mouth; but if you can't use it, what good is it? Besides, perhaps, for historical purposes. In other words, it's one thing to have comes and another to use it properly.
That is, so as not to dry up the source if the cement add
continue to receive it

This afternoon we're going
to observe an excellent case off
these points
During the first part of last Friday's talk you saw and heard Walter Cronkite's "You are there" account of the Z.T. episode. It depicted in a rather sensational but generally accurate manner the profound impression the publication of the text of that telegram created in Congress when the film ended I said that I'd leave for today's session a discussion of the cryptologic background of this astounding and important episode of WWII for it certainly changed the atmosphere with great tension and had a most serious influence upon history.

The Cronkite film hardly needs comment to indicate the importance which the publication --over--
of the ZT, exercised upon history; for its publication must inevitably be considered in any study of the causes which led to the entry of the United States of America into WW1. Indirectly because the U.S. is the leading power in the Western Hemisphere, the publication of the text of the ZT helped to bring Argentina, Bolivia, Brazil, Cuba, and Panama into the Allied camp.

So important an incident in cryptologic history therefore warrants its careful study by historians as well as cryptologists. With story replete with lessons on the consequences of weakness in "C" power, and with lessons on the opportunities attendant upon great strength in "C" power. And, in passing, I may add that the story as it now
appears in the history books and popular accounts of the Z.T. episode have many errors in them, some of which will be pointed out today.

I think it correct to say that history attributes U.S. entry, on 6 April 1917, into World War I as a belated aid on the side of the Allied Power to the destruction of the contents of the Z.T. Note that this statement is qualified by a date, viz., 6 April 1917. Perhaps that would have come about without the Z.T., sooner or later, for one reason or another, but most probably as a result of German ruthlessness in the conduct of submarine warfare. But "later" might have been too late, because after 1 February 1917 when unrestricted submarine warfare started, there wasn't much time left to help Britain and her allies.
because England was being starved for food and munitions. And if America had worked with England and been starved into starvation and capitulation, it is possible that America would never have entered into WWI—or, if it was forced to enter by German arrogance, it might have been left to fight a powerful and fulminating Germany all alone. Who knows.

The fact is, however, that the Z.T. was published on March 1st and within a little over one month, on April 6th, we declared war on Germany. There seems to be little doubt, therefore, that America entered the war when she did because of the Z.T., or shall we say rather, as a consequence, on the one hand, of German obtrusiveness in affairs dep-
tomato and navete in affairs crypto-ble. Indeed, on the other hand, as the fruit of British astuteness in affairs diplomatic and brilliance in affairs cryptologic.

It was only to be expected that question and doubt should be raised as to the authenticity of the Z.T. The newspapers were full of denunciations and discussions of what many people regarded a complete hoax a fraud. In the Congressional Record the debate on March 1st takes up 22 whole pages, all devoted to the question of the authenticity of the Z.T., which had so far nothing to back it except the word of the Irish towns of the Associated Press
The publication had not been made on the
authority of the State Department of all it
had strangely appeared merely as a dispatch
of the A.P., sent broadcast apparently upon its
own responsibility. Recall Cronkhite film of lumpy scene

First read, but now let's lift the secrecy veil and
The first chapter of the secrecy veil was in 1925
when the November issue of "World's Work" magazine
brought the final installment of Burke H. Hendricks',
Life and Letters of Walter H. Page, etc. I will read from "World's Work" "and
from time to time I will make comments.

—Read—[to middle 2nd Col p. 24]
But now let's lift the secrecy veil a bit and it will be of interest to start with a brief story about how the British crypto agency organization got started.

Read from Ewing Room 40, p 173-4
Read from James p 75, 28, 19

D/F: Political Section

First hint as to crypto work by Churchill in talks reported in the Scotsman 9th July 1923 and in The World Crisis (1923). But even as early as 1921 the Scotsman
in its peace. On 14 July that a remark by a Sir Maurice
Hankel that among those who had worked in
Obstetrics, as opposed to those who were all the time in
the Führer's sight, there was no name which deserved
greater honour than that of Eyrey, and no man who had
done greater service to the country."
Eyrey remained head of R&Fm. until 1945
when Sir W. R. Maxwell Hall, Director of Naval Intelli-
gence became actual head of Room 40 too.
Several months later came the episode in-
volving the famous or infamous T. T.

The first lifting of the secrecy veil that
had been thrown about this episode came in 1925
when the Norwood of "Wolves of War" was brought the
final installment of Eyrey's wife's letters. Without it
page, I will read from the first work, and from time to
time make comments.
We shall not concern ourselves with the

...
used for sending German dispatches to the United States.

Hundreds of us authorities for the plaster

radio to transmit by radio from Naval to

Sayville. There is very good reason to doubt it, as we
shall see.

A few hours after outbreak of war, the NN, whose
always recognized master of control, comm controls as
well as sea lanes were closed, steps to isolate foreign
from rest of world that lay beyond the oceans, by
building a barrier to keep out service the two former
areas, across the Atlantic, leaving only indirect chan
nels of comm with her embassies at Washington. They
were 4 from number:

1) Radio - Namen, Sayville, Tuckerton, N.

2) Cable from Germany to Berlin, Stockholm, -
Buenos Aires, Washington — but this route was 15
secret from U.S., although there is positive evidence that
it was known to B in from first days of its use for the
cable fromStockholm to B A, passed through England.

3) Via Berlin, Copenhagen, Washington — and the
cable also passed through English girl. This was a
very unusual channel for Germans, because it could
be used only with knowledge & cooperation of the U.S.

4) Involved transmission of secret text in red, India ink
Fathoms (concealment system). It was decoded only
after war by Bermanoff himself, he was practically

As to 16th method — the radio channel — the super-
vision exercised by our authorities was very detailed.
Heckendorn is absolutely wrong when he says (p 25, 1st
col.) that little lines prohibit an interference with the
Germans is shown by the use they made of the heng
Radium station for this, the most fabulous message sent to
American during the war. I have very carefully
scrutinized every available record and file and I find not
the slightest evidence that this channel was actually
used. The German accounts have been examined as
well as American files and supervision was exercised.

By Cliffie Reed from P-1 of Trombone, paras

No, the Z.T. wasn't sent via that route, although
Nemlude's account makes it plausible by saying,

"Lp. 75, Col. 2. "On the 16th of January, 1919..." etc
while column to 1st 2 lines p. 1011. "Does Nemlude
want to employ Bernardo? I asked him previously but I
don't know". No, Nemlude's explanation is quite in
acceptance. We shall soon learn the real explanation.
for the gaps and doubtful points in the text.

We come now to the second common channel used by the German Post etc. bottom p.8 of brochure.

There is plenty of evidence that the En knew of this circular route.

Note that the Staff Dept files are only tentative.

The positive route appears to be dozens of messages that passed over this route or later appeared among the hundreds in the affidavit by Admiral

Sir W.R. Hall, W.W. distant Naval Staff attached.

Staff in London among those overseas in the Naval Staff or in London and those overseas in the Naval staff overseas.

Many naval officers order to Berlin - Stockholm - B.A - Wash. route. What the Germans did was to hand their coded telegrams over to their
Swedish friends in Wash out in Berlin, the Swedish
Ambassador or Minister embodied the German code
replaced by a message apparently written over
with a pencil, the dotted line. I am not sure. Of course,
the Germans must have realized that the
Swedes or the Germans read the cables touched
England. And, of course, it didn't dawn on the
Germans that their cable could be unravelled and
read by anybody not possessing a copy of the code-
book and certainly not the stupid Englishman.

We know too that the Swedes told the
Swedish Embassy ought to try... I don't know if we have a
answer. I'm sure...
The Neudrick account would make it appear that if the 2T only it only received special treatment to ensure its safety. But it is clear from an examination of the German records alone that the train mission's impact was by more than one route was - routine procedure with Bernstorff. But Neudrick says. Read from P. 76 of Neudrick col 1

Neudrick's statement: "In many capitals, German missions were open, but in Sweden they were..." implies that the RII read Swedish code for

Read from P. 101 of brochure: "How many be super to and 1st para of P. 11

We come now to the third and most interesting of the 2T routines - the one used with(?) cooperation of (state)
Hendrick makes it appear that obtaining permission to use SD facilities was a rather
simple matter ... p. 12 brochure all the
page do end to place p. 13 marked "stephen"
The SD was indeed careful in placing its
current facilities at the disposal of the Germans
Read from p. 14 brochure. One para only

We come now to a study of the code used for
the 7. Then it's passage from Berlin to Washington.
There can be no question that the message was the
one which had been appended to Berlin-Wash No. 157
and which had been sent via State Dept channels. We
have already said, the 74 Report has officially never pub-
dished any account of the interception and solution of the
IT by its cryptologic agency commonly referred to as Room 40 B. But when we study very slowly, the telegrams that passed between the BPA and New York dealing with the 21T as related in the Hendrick account—more especially now, the account contained in both were published only 3 years ago by a close associate and collaborator of Admiral Hall (at that time a cryptologist). This is the (Book) Eyes of the Navy, by Admiral Sir William James, who wrote with the score of Naval Intelligence about it when later at the Admiralty. He had in mind passing this publication books and articles covering various aspects of the war and informing a wider world, for security reasons could not or should be published. However, he had the advantage of personal knowledge of the war and events involved, which enabled him to distinguish fact from fiction.

Admiral James in his foreword says:

Read from p xii to xiv until 1
But Admiral James was careful. Even though, as he says, he had no access to unrestricted official papers and therefore as he says, it wasn't necessary for him to obtain official approval for publishing his book, he did submit it for some sort of blessing of [redacted] approval. As this memo to the dated 10th May 1954 from then Deputy Senior Mission Office to [redacted] clearly shows:

Read from handwritten memo

And, perhaps it's not strange to say, Admiral James himself doesn't know the delicate but interesting technical points about the ZT which remained obscure or unexplained until he published his book. And likewise can be said about his clarification -- unintentional, I'm sure of other dubious points about the history and operation of Room 40 0 0 B

But we shall have to confine ourselves to the verifiable facts about the cryptography of the Z T
Let's begin by quoting from Admiral James' account: "Then early in the New Year, I read p. 136. p. 137 to point indicated. "Comment on the truth of what I say about the sources of the 24th-Montgomery wage."

There are reasons to believe that the version that we have just been given from the 24th reading of the 23rd might contain the word's "agree" in the 255th of Washington. But I don't think it would have been possible at this time of even now to say w/ certainty even that the 24th were also interestingly reading wages of the US govt."

Then go on with their pages p. 137 and continue with p. 138. p. 139 to point indicated.

Baronoff tried desperately to have Berlin change its decision about unreacted fuel waste - to no avail. On 1 Jan 13 presented the declaration of fuel waste which began that day. Prez WIntro's relationship
Resume reading James, p 140 middle p only

Hall then took steps to obtain the additional

evidence that would be required in the circumstances

cast telegraphed to his recent agent in Mexico City to get

the copies of Bernstoff telegrams to Eckhardt since 15

January. These were sent to Wash. & forwarded by

cable to Berlin

James goes on "So much progress with

the reconstruction of the code had been made that by Feb 19

Hall had in his hands an almost perfect transcript of

James then gives the text of the ZT as published. But

James is holding a little stunt in our eyes. The

version of the ZT that was finally published was not

the version that was on the tel from Z to Bernstoff

which was in code 1500 but the equivalent version

that was in the tel from B to Eckhardt — and that

was in the secret much simpler 13040 Code"
Read the message entire as given on L10

P. 141 James,
Continue with P. 142 down to stop
Omit next para + continue as follows
But by this time it had become apparent that the German-Americans in the US were extremely active in their endeavors to stay the President's hand. He felt that the time had come for an immediate action and formally pressed for a decision. On 20 Feb he received Balfour's authority to handle the Whitehall
as he saw fit.

Continue with P. 143 James - whole page + top 3 lines on P. 144. Then continue.

We've already heard the contents of the message from Page, the Am. Amb. in Iran to the Pres. Secstate
so I won't repeat it now. You'll recall that in
the Pel Peace, Page, stated that, "early in the war the
French used one of the
But now listen to James (p. 145)"
"It was
not the case etc. - just that page, the next one.
then continue from p. 16 of F-M brochure and read
all the way to Waddell (Page 16."
Nobody can blame Halsey for trying to put
everyone on the same page. He was told by the Secretary of
the Army that he could cover the tracks of Room 40 OB. At the
time that brochure (first up F-M brochure) was written we
didn't know all the facts. We were making references
and deductions, we said.
[Read marked passage on p. 17 of brochure]
The statement that a codebook—or at least some part of a code document—was found must baffle an element of truth, because here is what the Ewing book says. Read Ewing, p. 188.

Ewing says that the captured material enabled the people in Room 10 to read much enemy ship correspondence, thus providing a starting point from which to penetrate, and after another, the German Foreign Office ciphers.

On the other hand, James gives us much more specific and valuable information on this point—and I imagine it is accurate.
"Read James p. 69 to top p. 70.
In April (1915) something..."
If I had more time to prepare for these 12 talks before coming over here I would have brought
Herman Code 13540 out with my slides etc. It's an
interesting document - as also is English code 97 and
Code 7500 - these are all in my archives now

But to get back to the LT itself again, you
will recollect that I said it was published in all the
major newspapers of the world on March 1st 1917. After
arduous debate a resolution was passed by the
Congress asking the President be asked to issue the
proclamation of the Order. He replied the same evening
through his Secretary as follows

Reed James, P 147 - January 4 next part

Jumnerman in a statement before the Reichstag
made a long, involved, and foreshadowing appeal for his
expectation, without much of it.
Dear Jack

I hope this finds you well and enjoying the beautiful weather.

I wanted to touch base with you regarding the project we discussed last week. As promised, I have been working on the design and am eager to share my progress.

Please find attached the initial design proposal for your review.

Let me know what you think and if you have any feedback or suggestions.

Best regards,

[Signature]

P.S. Remember to forward this email to the appropriate team members.
Now go back to F-M brochure, p. 17 to 112 end of 2nd para don