8

Movember 22, 1937

Major R. H. Ranger, Sig. Res., President, Bangertone, Inc., 201 Verona Avenue, Newark, New Jersey.

Dear Major hanger:

In response to your letter of November 17, I look forward to seeing you here this coming Friday. I have made inquiry and have ascertained that the Chief Signal Officer expects to be here and will be interested in seeing the demonstration and talking with you. Anticipating a pleasant visit, I sm,

Sincerely yours,



201 VERONA AVE. NEWARK, N. J.

Col. William F. Friedman Office of the Chief Signal Officer Washington, D.C.

Dear Col. Friedman:

I am planning to come down with the recording equipment Friday after Thanksgiving, the twenty-sixth. Will this be a convenient time for you and will the C. S. O be available too?

I would stay Saturday too, of course.

Yours very sincerely,

H. Ranger

November 8, 1937

Major R. H. Ranger, Sig. Res., President, Rangertone, Inc., 201 Verona Avenue, Newark, New Jersey.

Dear Major Ranger:

I have yours of November 5, which interested me a great deal. Naturally I regret the fact that the text of the general plan gave negative results but I am very glad that it has led to experiments which seem to have provided more interesting data. We will, of course, be very much interested in seeing what you have developed and shell look forward to a visit by you within the near future. I do not anticipate coming by Newark within the next two or three weeks, so that I can not take advantage of your invitation to see the apparatus at your plant. I take it that what you have is in connection with the encipherment of voice rather than straight telegraph impulses or simple audio-frequency impulses.

Please let me know a couple of days in advance of your impending visit. Thanking you very much,

Sincerely yours,



201 VERONA AVE. NEWARK, N. J.

Colonel William F. Friedman Office of the Chief Signal Officer Washington, D.C.

Dear Colonel Friedman:

At last I am back on the job although the cold does seem to hang on somewhat.

We tested out your general plan and found it extremely difficult to accomplish due to the fact that the accuracy of movement would have to be such as to keep at least a thousand cycle note in phase in order to be able to balance it out. We finally gave up trying to do it with voice and tried straight audio oscillators. This proves to be an excellent means of detecting the wow in the speed of the equipment but I am afraid that the finesse with which the equipment would have to be built in order to accomplish the purpose you had in mind makes it rather impractical. However, this very difficulty is something that would make the casual listener find it impossible to decipher. It would also be necessary to be very careful of the phase in all of the amplification work as any phase shift would prevent its operating.

In line with your main objective, however, we have gone ahead and realized something which may be of real interest to you and I will plan to bring it down to show you at the first opportunity and at the same time, as you suggest, we can show the Chief Signal Officer just what we can do in the way of recording. I am afraid it will be impossible to do this within the next two weeks. I will, however, try to work it in at the first opportunity and of course, if you get up this way, we will be very glad to show it to you here. No doubt you will find that it is more readily deciphered than you would like it but there are enough permutations and combinations so that I would think that your great facility in having various ciphering and deciphering arrangements which make use of such variables, something very practical could be worked out which would not be at all too complicated. It involves, of course, the time element in recording and the effect is certainly startling when you throw from the straight playback to the deciphering playback. Does this sound interesting to you?

Yours sincerely,

R H Ranger

RHR:DMB

S. C. Form No. 8

Signal Corps, United States Army

War Department Message Center, Receited at Room 3441, Munitions Building, Washington, D. C.

WESTERN UNION TELEGRAPH

WAG39 10= NEWARK NJ OCT 4 1049A F FRIEDMAN; OFFICE OF THE CHIEF SIGNAL

PERSISTENT COLD PRECENTS COMING TODAY WILL ADVISE WHEN CAN COME=

> R H RANGER: 1146A



201 VERONA AVE. NEWARK, N. J.

Mr. William F. Friedman Office of the Chief Signal Officer War Department Washington, D.C.

Dear Mr. Friedman:

I will plan to be in Washington Monday as you suggest at which time I will have the chance to go into things more completely.

Yours sincerely,

RHR: DMB

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201 VERONA AVE. NEWARK, N. J.

Mr. William F. Friedman Office of the Chief Signal Officer War Department Washington, D.C.

Dear Mr. Friedman:

In regard to my coming down next Friday, could you just find out informally whether Colonel Olmstead will be in his office next Friday? I want to drop in to see him without making too much of a point of it. If he is not going to be in Friday, but will be on Thursday or Saturday, let me know and I will change my plans accordingly.

Many thanks.

Yours sincerely

Ranger

RHR: DMB

8

September 24, 1937

Major R. H. Ranger, Sig. Res., 201 Verona Avenue, Newark, New Jersey.

Dear Major Ranger:

Receipt of your letter of September 22 is acknowledged.

I note that you now plan to come to Washington on the first of October. It happens unfortunately that I must make a trip to Fort Monmouth to be there on September 30. While I could, of course, be back here in time to see you, I had hoped to be able to spend the week end with my folks in New York. If possible, therefore, could you postpone your visit to Monday, October 3d?

I am hoping that the tests you have made on the repording scheme have produced some interesting results and am looking forward to seeing what you have accomplished.

Reciprocating your good wishes, I am,

Sincerely yours,



201 VERONA AVE. NEWARK, N. J.

Mr. William F. Friedman War Department Office of the Chief Signal Officer Washington, D.C.

Dear Mr. Friedman:

I am planning to come down to Washington Friday the first of October and I will bring with me some results that we have obtained on the recording scheme. I will also bring along a little playback unit so we may actually try it out in your office.

With all good wishes, I am

MINH

Ranger

RHR: DMB

8

September 17, 1937

Major R. H. Ranger, 201 Verona Avenue, Newark, New Jersey.

Dear Ranger:

Have you had a chance to try out any experiments yet with the acetate tape recording scheme which we discussed on the occasion of your visit here the latter part of July? I will be very glad to have a word or two from you indicating what you think about the proposal at the present time.

With very best regards,

Sincerely yours,