424 North George Mason Drive Arlington 3, Virginia

March 20, 1952

Dr. Bradford Hardie Box 72 The Johns Hopkins Hospital Baltimore 5, Maryland

Dear Dr. Hardie:

I was very happy to hear of your graduation from the Johns Hopkins Medical School and I am sure that your internship there will be most successful.

In answer to your inquiry concerning an English translation of the 1947 edition of Sacco's Manuele di Crittografia, I am sorry to say that, so far as I know, no English translation has been published. A draft translation of this volume which was made here requires much revision before it can be issued.

I can refer you, however, to a French translation of this book which was recently published, the bibliographical information on which is given below:

Manuel de Cryptographie, General L. Sacco. Edition francaise par le Capitaine J. Bres d'apres la troisieme edition italienne revue par l'auteur. Preface by Lt. Colonel R. Leger. Published by Payot, Paris 106, Boulevard Saint-Germain, 1951.

I am sure that, if you write to the Firm Payot, you will be able to obtain a copy of this translation. The price, if I remember correctly, is not great, approximately \$3.50. You will undoubtedly find the French version, which may be presumed to be relatively accurate since it was reviewed by Sacco, easier to read than the Italian.

With all good wishes for your continued success, I am

Sincerely.

WILLIAM F. FRIEDMAN

## REF ID: A70050

## THE JOHNS HOPKINS HOSPITAL

BALTIMORE 5, MARYLAND

Box 72 9 March 1952

Mr. William F. Friedman 424 North George Mason Drive Arlington, Virginia

Dear Mr. Friedman:

I surely enjoyed my correspondence with you while I was on duty at Carlisle Barracks in the summer of 1950. Since that time I have been graduated from medical school here and began an internship in eye disorders last July. Iam still in the Army Reserve but have been transferred to the Honorary Reserve due to marked myopia.

My interest in cryptography continues. however, and I am wondering if you might be good enough to advise me as to whether there is now an English translation of the 1947 edition of Sacco's MANUALE DI CRITTOGRAFIA. I enjoyed reading the translation of the older edition. and I have a copy of my own of the 1947 edition. My Italian is poor, however, and in the sections on mechanical devices, in which I am particularly interested, I have been able to read fairly well only the portions on already familiar devices. If a translation is available, I should very much appreciate the short use of a copy. An FBI check was carried out on me in 1951. so I assume that I can make use of RESTRICTED material at least.

I should be very thankful for any help you may be able to give me on this matter. I'm looking forward to the sixth or seventh volume of Jefferson's Writings for your section.

Best wishes to you. I surely appreciate your previous kindness in shawering my questions.

Bradford Hardie, M.D. (Capt, Hon-USAR, 0-465876 assigned 5113th ORC Grp)

424 North George Mason Drive Arlington, Virginia 15 August 1950

Capt. Bradford Hardie, AS USAR Hq ASA School Carlisle Barratks, Pennsylvania

Dear Capt. Hardie: .

keceipt of your letter of 29 July 1950 is acknowledged.

In answer to the question you raise as to the possibility of using material developed or disclosed by the Report of the Joint Congressional Committee on the Investigation of the Attack on Feari Marbor, I agree with you that there is much material of considerable interest in the Report but I do not think it should or could be used in preparing the special text and lessons for Military Cryptanalysis, Part V.

In giving reasons for that opinion I am handicapped by security considerations. I think, however, that material of equal pedagogic value can be obtained or "dreamt" up by those who are qualified or competent to do so by reason of previous experience and knowledge.

Hoping that my comments will not be too disappointing, I am

Sincerely yours,

WILLIAM F. FRIEDMAN

P.S. I don't recommend that you spend much time "trying to recover the code groups" -- I'm quite confident it can't be done with the material available to you.

424 North George Mason Drive Arlington, Virginia 7 July 1950

Bradford Hardie, Captain, AS USAR Hq ASA School Carlisle Barracks, rennsylvania

Dear Captain Hardie:

Receipt of your very nice letter of 27 June 1950 is acknowledged. It was good to hear from you.

The interlinear addition near the bottom of the first page of the Jefferson manuscript reads: "6. vowels & 4. liquids." I presume you know that in the science of phonetics certain consonants of the alphabet, such as  $\underline{r}$  and  $\underline{l}$ , are called  $\underline{liquids}$ .

If you are interested in finding contemporary references to Jefferson's invention or use of the device, you will be as disappointed as I was. So far, I have not been able to find anything more than the fact that Jefferson described the device a second time, which is also among his manuscripts. The second description is merely a smooth copy of the first -- the two are practically identical. However, I must add that I have not made any specific search in contemporary records or literature and don't know what such a search might uncover.

The Editor-in-Chief of the Definitive Edition of Jefferson's Writings, a project being conducted at Princeton, asked me to write a commentary on Jefferson's invention, in about 500 words. However, the story was so interesting that I felt it desirable to go beyond that limitation. I sent him a commentary running to a couple of thousand words, and apparently it pleased him so much that he accepted it in toto. It will appear in the sixth or seventh volume, which is to be published in 4 or 5 years from now. However, in the first volume, which was published quite recently, there appears in the introduction a footnote making reference to Jefferson's invention of the Cypher wheel. I have not seen the footnote in print although I did go over it before it was incorporated in Volume 1.

With cordial greatings, I am

Sincerely yours,

William F. Prificean