

GEORGE C. MARSHALL FOUNDATION

TAPE #4: CONTENTS AND USE OF THE FRIEDMAN COLLECTION

ELIZABETH SMITH FRIEDMAN INTERVIEWS

THE MARSHALL RESEARCH LIBRARY

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This is a recorded interview with Mrs. Elizebeth Smith Friedman at the George C. Marshall Foundation in Lexington, Virginia on June 4, 1974 in which Mrs. Friedman discusses the choice of the Marshall Research Library as the repository for the Friedman's collection, the opening of the collection to researchers, and the publication of the Riverbank pamphlets with Marshall Research Library staff members Tony Crawford and Lynn Biribauer.

TC:

This you brought up this morning and it might be somewhere but in why Mr. Friedman you know gave the collection to the Marshall Library and you mentioned something that he had some definite intentions or things that he wanted done with the collection wherever it went or he had some ideas about how he wanted it put in a library or used.

ESF:

Well by that I meant simply that he wanted someplace that would have enough intellectual caliber to for people really interested in this subject and who would be intelligent enough to appreciate the subject matter and take care of it, physically take care of it because that's what killed us about the Library of Congress.

TC:

Did he, do you remember him saying anything else how he wanted it treated and used specifically like he wanted it kept in its order and...

ESF:

No, he never said that. His explanation of the straight, sequential, numerical list was that was the easiest thing to do and it just happened that, I saw this somewhere recently, and I remember his saying it over and over again about having luncheon one day with some great librarian from Oxford or Cambridge or somewhere and it was in Cambridge I think, I was reading some, sort of a diary thing of mine after we spent that winter in Cambridge and London, that was in '58 and '59 and he said to this maybe I'll think of the identity of the man, at the moment I can't remember, he was somebody connected with Cambridge and I think it was a man, asked my husband a question what system did he use for cataloging his books and my husband replied, he had begun collecting at a very early age and that he simply numbered the items 1,2,3,4,5 and after that he just went on using the sequential series and found that that was the best thing to do and he knew of course that libraries, the formal library frowned on that type of index, where upon this expert librarian said, that is the recognized, most useful and proper method by the good librarians of the day.

TC:

Okay, I am skipping to something else. Do you think it would be premature to open the library or book portion of the collection for use, to researchers, or do you think we should hold off on all of it?

ESF:

No, I don't. I think it's unfair. I mean, people get tired of hearing about it when they're not allowed to see it. The only thing that worries me is the American Cryptogram Association people. I just don't know what they'll do, unless they, just you make a flat rule that nothing is to be taken out of the room or the spot where it is, to be taken out for study without written permission and time dating it when it goes out and when it comes in and that it would be on these premises.

TC:

With the bibliography and with the card files we've, I think then that they can be able to look through the list in the Reading Room and say, well, may I look at number so and so and then the collection would definitely be supervised and they could study the books, or pamphlets, or periodical or whatever and that way it could be supervised. I haven't let anyone other than I've showed some people the room and let them look around...

ESF:

Right, sightseers.

TC:

Uh, huh, right. But I thought maybe we could go ahead and say that the book portion of the collection at least could be used, supervised use of it.

ESF:

Now I wish that Mr. Clavenhaus could come down here for a little while because he could go, after all he's taught the thing from the day of creation up to the present hour again and again and again. And all those machines, you see, he could tell you all the difference between this number, Havalene 838 or whatever, I can't remember what those numbers mean. The M 94, something Lynn and I were doing yesterday; I kept coming across this M 94 destination and for the life of me. I had the M 94 in my mind attached to something else.

TC:

It could be mislabeled or...

ESF:

No, I am sure that it's not a mistake here, it's just that I do not, not having used the thing myself, I do not know the short designation that was used by everybody who actually used the device or machine.

TC:

This is my next kind of, next question was what maybe there are some specific areas I should be sure to talk to Mr. Cleavehaus about in the collection, things he could most readily give us advice or information on since this you just mention the machines and what else, Riverbank?

ESF:

No, I don't think...he could give you an offhand opinion I suppose but ...

TC:

But he would know about the background of the publications.

ESF:

Yes he knows the whole story. Oh yes, he knows that very, very thoroughly.

TC:

He was not familiar with your library, your personal collection at your house was he?

ESF:

Yes, oh yes he was. I don't mean to say that he came there and spent hours.

TC:

Right.

ESF:

He was the kind of guy...who could walk through the place and name anything practically.

TC:

Well, if you don't mind I think we will interview him and get his, and get information from him as much as we can about the collection.

ESF:

Well, I'll tell you, I thought when I get a hold of them...

TC:

Of course, all depending on his having taken...

ESF:

Well I called last night... I tried to get then and I don't know whether they have the telephone plug out or not because after I repeatedly put the call in I finally did get an answer. It was Helen's mother, Mr. Cleavenhaus's mother-in-law, she must have come down from New Jersey and she finally answered the phone but she said that Clevanhaus and Helen were out and taking care of some matters and she was very monosyllabic and very careful in what she said so I don't know. I know that he will talk to me and that Helen will talk to me, so I shall call him and if it's alright with you I had thought of suggesting, you know, to get away for a little while this would be a nice place for them to come.

TC:

That would be fine; I think it would be helpful for both of us. Okay, we've asked you a lot of questions and you've told us a lot of things but maybe is there anything that we haven't drug out of you that maybe you wanted to tell us, anything about Mr. Friedman or that past that you'd want to tell us that we haven't maybe got out of you by questions? Anything?

ESF:

Well, I better take a look at the vault again, at things in there. And if things occur to me, I will simply sit down and write them right out and send it along. At the moment I don't think , can't think of anything in particular. I suppose Lynn has a list of who al these photographs are. Some of them of course have...

TC:

They're all identified.

ESF:

Parker Hitt, of course, is a Virginia native and came back here when he retired from the Army, somewhere between Washington and Lynchburg, some little town in Virginia.

TC:

Oh, I don't recall...

ESF:

Between Washington and Lynchburg, and he of course was the first man, you remember that little green it's about this thick, a pamphlet in a green paper, in fact there's some bound ones too but he was the first person to ever write about the subject of cryptography. He was teaching at Leavenworth, the Army...

TC:

Who's that? Hitt?

ESF:

Parker Hitt. And he was teaching there and his rank I think then was Captain but he was teaching a class at Leavenworth and he wrote that little manual, it's kind of a primary school ranking manual and he goes up to the solution of a six alphabet cipher and that's the only thing that was in existence at the beginning of World War I in this country and in this language. And Mrs. Hitt came out to Riverbank, that man's arm had the greatest reach of any five people that you could name, I mean Fabyan had. Somehow he knew all about Hitt and Mrs. Hitt having worked with him and they'd invented this sliding strip cipher. That's kind of curious. It's one of those things that happens in science, like Mendel's Law. Five different people invented, I mean developed, the theory of heredity, in five different countries, at the same time, practically simultaneously. Well, Hitt and Moburn, and Norman, these are all Signal Corps Army officers al, that's Moburn there in the glasses, all seemed to hit up on this idea all of the sudden and started inventing cipher systems and every one of them invented a cipher system that dealt with strips either horizontally or this way, you see, so there would be more than one alphabet and a large number of alphabets and thus convert a simple kindergarten grade cipher into something so complex it would be like a college algebra or even above that and then you know what, you probably do know this, but it was discovered, what's his name who wrote the many, many volume Life of Thomas Jefferson? That, that cipher system was discovered in Thomas Jefferson's papers. And I remember Fabyan had Mrs. Hitt come out there. He couldn't come, he was too busy, but she came out there and I can remember her demonstrating that thing, it was in a wooden box and channels cut in the wood so that strips would slide and it's a very good cipher. That's a twenty six alphabet cipher. And this disc thing is the same cipher system. You see, that's just another form.

TC:

There's one other thing that kind of crossed my mind. What, did Colonel Friedman ever talk about his relationship with NSA. Was that allowed?

ESF:

Well, NSA wasn't even in existence. He wasn't even alive when NSA was formed.

TC:

I thought I read where he was in an advisory role but...

ESF:

Well, he could have been an advisor to the Signal Corps but he really wasn't officially, he never was. Moburn, of course, dabbled in ciphers and understood them and all and he was the first person ever to decipher the ___ Cipher which was the British Army cipher for generations and so Moburn and Hitt and what was the other officer I named, but Fabyan was not even alive when NSA was formed because I think he died in '34 and Mrs. Fabyan died in '36 and NSA wasn't formed until after World War II.

TC:

Yes, but your husband ever have any relations with NSA?

ESF:

Oh heavens yes,

TC:

That's what I had asked.

ESF:

Oh, oh I see, I'm sorry. I thought you meant Fabyan and NSA.

TC:

No, I'm sorry.

ESF:

I thought you meant Fabyan and NSA. Oh, yes, yes indeed, he was at NSA when he retired, was stricken and I guess I told you, three coronary occlusions band, band, bang in four months and he didn't go back until the end of the summer, he went back one or two days a week. They sent a limousine for him and he was driven out to Mead and he was out there a couple days a week and then General Canine persuaded him that he should retire and he said, in so many words, I was present when he said it, you are worth a lot more to Uncle Sam alive than dead and I think you'd better retire and you can still do much valuable work.

TC:

Did he have a good working relationship with NSA?

ESF:

Oh yes. Yes, indeed. I think even the new people out there, they have regular historic lecture that new people still seem to hear about him. And that who's who thing, that curriculum vitae that that's what they use officially in NSA for new employees and they keep that alive, I mean they really seem to be, maybe it's because of nice people like Vince Wilson but they really try to...

TC:

Did NSA worry when Mr. Friedman died that some of this material might get into the wrong hands? Or was there anything that maybe?

ESF:

Well, no, because he'd already given it to the Marshall Library, you see. And he and I had been working on the annotated bibliography, you remember that was the condition, that it stay at our house until the annotated bibliography was completed and we had already been working on it well over a year. I can't remember if it was as much as two years or not. '69 or...

TC:

None of the collection went to NSA or none of his things?

ESF:

Well, no, that's another thing I'll tell you about, why he left it to George Washington, he was so disgusted with NSA and its library and the way that things were just dumped there and no track was kept of them, they weren't cataloged, nobody was responsible for them. There was just a woman who sort of handled them physically but it really wasn't a workable, usable library, it was this hit and miss kind of a thing and he used to get so upset and so angry because people didn't use the books that were there and there was no effort to make a consistent collection and he was very annoyed about that and I don't know whether they ever got that situation cleared up or not because I still had to finished the annotated bibliography, of course, when he died and I had a long ways to go and probably the part that I did wasn't nearly as good as what, as the part that was done by us both but I wouldn't know what that was now because it just depended on, well there were certain subjects that we tried to do the annotated bibliography on a given branch of the subject and finish that, all the items in that and go on to another category and work on that consistently. We had, the time he was retired really and didn't go to NSA except as a consultant and the advisory board met very often in those days, they don't meet so often anymore but they met very often in those days and he always attended. They'd send a car for him and brought him

back. He was on the, Dumes who were here last year, Dume was one of the people on the advisory board as a consultant and then Cobeck who went into the statistics world and became the head of the department of statistics, mathematics and statistics, and that man Ed Malinger. They had people from industry, they had people from other services, and people who had been or were still, had been in NSA or been advisors to NSA made up, they had an enormous advisory board. And all that time too from the time he was retired in '55 to the early '60s, through the early '60s, the NSA director furnished a typist who came to our house and worked but her salary was paid and all materials were furnished and he developed a series of lectures, training lectures. He used to give, the most shush shush thing that he ever did, that I remember he wasn't even allowed to keep the papers in his own house, I'm sure there's nothing in this collection. Every year he gave a lecture classified as secret, as top secret, to the officers training corps at Quantico in the Marines and that is the most shush shush thing I ever remember. They used to send an Army, an armed Army courier with him and I can remember all this goings on and whatever. There would be a telephone call coming in asking to speak to him about something and if the word Quantico or Marines came into it, I knew that it was prohibited.

TC:

This was after 1955?

ESF:

Mmhm. I think he continued to give those annual lectures at Quantico up until, I don't know maybe it was clear up to '65. I remember it went on for a number of years. And it was the one thing I never even had a suspicion about what he could have told them that was contained in that one lecture and nowhere else. And I was trained better than to ask the question. So I never did understand the full implications of that.

TC:

Well, before the day gets away from us why don't we go down and talk to Lynn about the Riverbank pamphlets.

SIDE TWO

ESF:

...intelligence of a, not even the intelligence of a kindergartener. He could type, period, type period, follow copy that's all and he is the only assistant that my husband had for years. And it was during that period that my husband wrote this. This is the first thing that ever appeared on the subject of, as comprehensive a subject as cryptanalysis. Of course, there had been Parker

Hitt's which went up as high as six alphabets called the manual of something or other. Well there's that. That's just a collection of reprints.

LB:

These are all the ones we think we could sell. These are those copies.

ESF:

Yeah, this is a... This is just a bound and printed copy of this method of solution which he discovered.

LB:

Uh huh, here's the originals.

ESF:

Well that's all what this is. He discovered this principle, worked it out himself and it was the first time... He was the chief of military intelligence. So how many of these are there? Are there a lot of these?

LB:

There's eighteen of those and two originals.

ESF:

Oh, well, I can't judge anything about prices. This may still be... I haven't talked to him about that, Riverbank pamphlets and so on. I haven't the faintest idea how it can be. My husband sold the whole series for about two hundred dollars.

LB:

This is eighteen

ESF:

Well I certainly would start selling. Well actually, that's not a system or anything you know, it's an aid, a cryptographic aid.

Lynn: And the other half. I wondered if you knew the reason why.

ESF:

Well, that must have been a reprint unless this was printed... Well, that says Riverbank Laboratories. Actually this is just a mechanical aide like used in typing, this is an aid used in deciphering messages.

LB:

Well, I was just wondering about the seals.

ESF:

Well, I can't explain that. This is obviously... and yet this must have been... Turn to this page in that copy. Well it's exactly the same.

END OF TAPE