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NATIONAL SECURITY AGENCY  
CENTRAL SECURITY SERVICE  
FORT GEORGE G. MEADE, MARYLAND 20755-6000



Serial: MDR-114575  
26 June 2023

This responds to your request of 25 June 2022 to have *The Oral History of Philip W. Dibben* reviewed for declassification. The material has been reviewed under the Mandatory Declassification Review (MDR) requirements of Executive Order (E.O.) 13526 and is enclosed. We have determined that some of the information in the material requires protection.

Some portions deleted from the document were found to be currently and properly classified in accordance with E.O. 13526. The information denied meets the criteria for classification as set forth in Section 1.4 subparagraph (b) and remains classified TOP SECRET as provided in Section 1.2 of E.O. 13526. The withheld information is exempt from automatic declassification in accordance with Section 3.3(b) (3) and/or (6) of the Executive Order.

Section 3.5 (c) of E.O. 13526, allows for the protection afforded to information under the provisions of law. Therefore, the names of NSA/CSS employees and information that would reveal NSA/CSS functions and activities have been protected in accordance with Section 6, Public Law 86-36 (50 U.S. Code 3605, formerly 50 U.S. Code 402 note).

Please be advised that the responsive document includes another government agency's information. Because we are unable to make a determination as to the releasability of another agency's information, the subject document was referred to the appropriate agency for review. At the time of this letter, the response is outstanding. However, we were able to isolate the other agency's equities, so we have protected them using the other government agency (OGA) redaction code.

Since your request for declassification has been denied you are hereby advised of this Agency's appeal procedures. Any person denied access to information may file an appeal to the NSA/CSS MDR Appeal Authority. **The appeal must be postmarked no later than 60 calendar days after the date of the denial letter.** The appeal shall be in writing addressed to the NSA/CSS MDR Appeal Authority (P133), National Security Agency, 9800 Savage Road, STE 6881, Fort George G. Meade, MD 20755-6881. The appeal shall reference the initial denial of access and shall contain, in sufficient detail and particularity, the grounds upon which the requester believes the release of information is required. The NSA/CSS MDR Appeal Authority will endeavor to respond to the appeal within 60 working days after receipt of the appeal.

Sincerely,



Jacqueline M. Amacher  
Chief  
Declassification Services

Encl:  
a/s

Oral History Interview  
NSA-OH-09-85  
Philip W. Dibben  
10 May 1985

PL 86-36/50  
USC 3605

~~Today is 10 May 1985. Our interviewee is Mr. Philip W. Dibben~~  
[redacted] office, Operations Building.  
by R.D. Farley

**FARLEY:** Mr. Dibben joined the Army Security Agency as an Army Infantry reserve officer during the Korean War, in 1951. He later returned as a civilian and as a professional mathematician, worked on various crypt problems on the then [redacted] analytical element of the Agency. He later became associated with a number of Soviet problems and spent the bulk of his career in predecessor elements [redacted] and his last few years as deputy and chief [redacted] Mr. Dibben will briefly discuss his recollections of Black Friday, which was the day the Soviets changed all their cryptographic systems, the Berlin Tunnel operation, and the intercept sites targeted against the Soviet missile activity.

Mr. Robert A. Highbarger is also participating in this interview.

Interview is taking place in the [redacted] office, Operations Building, National Security Agency, Fort Meade. Interviewer: Bob Farley.

Mr. Dibben desires that the classification of this single cassette be Top Secret Codeword. This is NSA Oral History Interview Number 09-85.

FARLEY: Tell you what I'd like to do is run through a quick and dirty on your personal background, experience and then we'll devote a lot of time to the Black Friday and the loss of Soviet comms, and maybe to EGGHELL and TACKSMAN, the Berlin Tunnel and anything else. This is primarily for the history that's being prepared by the [National Cryptologic] School as well as the historical section. Sort of a handout to the people who come in, and also an educational primer for the people who are fairly young in the business, who don't know what we contributed, what NSA, what AFSA, what ASA, did for the country. So, if you would just start off.

First of all, we can talk at any level you like; if you want to go TK, if you want to go VRK, your decision.

DIBBEN: I'd prefer to stay at Cat III, if I can.

FARLEY: All right, if you can. Now, we're protected. I'll give you a form, which is an accessibility form. You can decide who can hear the tapes, who can see the transcripts. Your decision. Are you still on oath or not? Are you--you're a consultant?

DIBBEN: I'm not a consultant, but I've never been debriefed.

FARLEY: Good, so there's no problem.

DIBBEN: No problem with that. I still have all the clearances, as many clearances as I had when I sat in this chair.

FARLEY: Beautiful. Okay, Phil, if you just give me, as I said, a quick and dirty, late teen-age life, before college, or before military service, and then we'll pick it up from there.

DIBBEN: Okay. To begin with, I'm a high-school dropout. My jobs before the army were driving a dump truck on highway construction, driving over-the-road tractor-trailer. I had lied about my age and passed a commercial driving test. And then at seventeen, I started working for a small company in Ohio, Morse Instrument Company, and loved the work. I worked in experimental machine shop, and within a year and a half I was a qualified Class B machinist. Loved it. From there I went into the army.

FARLEY: Was this about Pearl Harbor, a little before Pearl Harbor?

DIBBEN: It was after Pearl Harbor; 1942. Went into the army and was in the infantry. One event that happened to me in the army that Art Levenson--I send him up the wall every time I tell him about it; I keep reminding him about it--was that during the Ruhr Pocket I was--because of the Remagen Bridge. We were able to surround a complete German Army corps, get them surrounded. There were three approximately thousand-man patrols sent into the inside of this pocket, simply to destroy communications. And that was our order. Destroy material and communications.

FARLEY: What a heartbreak.

DIBBEN: The small group that I was with, about forty men, walked into a corps headquarters while the generals were having lunch, captured them, and I personally [chuckles] took an axe to an ENIGMA machine. But I'll guarantee you that there's no infantryman in the world that's going to carry an ENIGMA machine in one hand and a rifle in the other.

FARLEY: Nobody was briefed to look for something like this, communications sites--

DIBBEN: We were told to destroy communications. We were told to destroy--I knew--you know, I had seen the M-209 that was used in U.S. front communications. I knew it was a cipher machine. Our instructions were to destroy it. Every man had wirecutters. We must have cut the same telephone lines thousands of times.

FARLEY: I can see destroying telephone wire, but not equipment--

DIBBEN: Those were our instructions, but I'll guarantee you there's not an infantryman alive that would carry a cipher machine in one hand and a rifle in the other. He's just not going to do it. Anyhow, I send Levenson up the wall every time I tell him that story.

FARLEY: Because he was sent with that TICOM team after the war to collect that material. No wonder he couldn't collect it. These guys had destroyed it all.

[Laughter]

DIBBEN: Those were our instructions. Incidentally, the very concept of destroying their communications--they could never organize to fight their way out. It's a superb concept. They could never organize to fight their way out. And we were outnumbered at least a hundred-to-one, and we were able to contain them. So it's a very good concept from an army tactical standpoint.

FARLEY: Phil, this was pretty close to the end of the war, wasn't it?

DIBBEN: Yes, getting on toward the end. As a matter of fact, while I was in that Ruhr Pocket, Roosevelt died. And he was buried before we even knew he was dead.

FARLEY: April 1945 then.

DIBBEN: Yeah. It was very close to the end of the war. Anyhow, that's a war story I love to tell Levenson.

FARLEY: I interviewed Art Levenson, and he said there was no equipment left.

DIBBEN: [Laughter] Now at least you know part of the reason why.

FARLEY: Phil, you got out of the service in the middle of '45?

DIBBEN: Late '45, and I had intended to go back to Morse Instrument Company. I had job rehire rights. When I went back, John Morse, the president of the company, and owner of the



company--and by then it was about 500 employees. When I was there, it was about 75; it was about 500 by then. He sent all returning servicemen up to a vacation spot he had on Kelly's Island, Lake Erie. He rented the place, he had a couple there, and you went up and you fished and you hunted; you did anything you wanted to for two weeks, and were fed superbly. He said, "Come on back and we'll talk about your new job." What he did was offered me--his plan for me was to send me to Warner Swayze in Cleveland for six months, learn their new turret lathe and small screw machine and then I was going to be the setup man for a string of half a dozen of them for the company. My first reaction was to be thrilled, because as a 21-year old that was a great thing, and my salary would have been on the order of five thousand a year, which in 1946 was a good salary. And then I looked around the company, and I saw that everyone in a level in the company higher than that was a college graduate. I started looking in the mirror and said, "Phil, old boy, you've topped out at twenty-one." So I walked in on Monday morning and quit. Said: "I'm going to go to college--somehow." So I did.

FARLEY: Okay. Where did you go to college, Phil?

DIBBEN: North Texas State and University of North Carolina.

FARLEY: And you studied to be an engineer?

DIBBEN: Mathematics.

FARLEY: And from there you came to . . .

DIBBEN: I came here. While I was there, while I was in college, I met and married my wife, Alice. Largely because of finances, I joined a reserve unit. I had not stayed in the reserves following World War II. I came out as a five-striper, a tech sergeant. I joined a reserve unit largely for financial reasons. When the Korean conflict came along, they pulled me out of graduate school to bring me here, because of the reserve, and that's how I got to what was then AFSA.

FARLEY: I'm missing something. Out of college you joined ASA--

DIBBEN: No, in college, I joined--

FARLEY: ASA reserve?

DIBBEN: Yes.

FARLEY: Okay, so when did you actually join ASA, physically employed?

DIBBEN: February '51.

FARLEY: That late?

DIBBEN: Um-hmm. That late. February '51, that's when I came to the Agency.

FARLEY: All right, let me run through. When you came aboard, you were a lieutenant?

DIBBEN: Yes.

FARLEY: A second lieutenant.

DIBBEN: Yeah.

FARLEY: What sort of an orientation did you receive at Arlington Hall?

DIBBEN: Almost nothing, and the reason was Frank Raven was at the time, was involved with hiring their junior mathematician program, and I think Bob was a member of that.

HIGHBARGER: Yes.

DIBBEN: Frank decided that he wanted some kind of control, and since I had walked in unannounced at about the right time, with the right background, he decided that I would be one of two people they would sort of throw to the wolves, in a sense. Just put them to work. No orientation whatsoever. Had none. Zero. However, it was--to me it was an advantage. I worked as--sort of personally at Frank Lewis' elbow, at Polly Budenbach's elbow and at Frank Raven's elbow, as sort of their assistant. In a very short time I had a lot of good training, on the job. No formal training whatsoever.

FARLEY: Were you aware of the overall mission of the ASA at that time?

DIBBEN: Only by osmosis.

FARLEY: I see. Was the Russian problem compartmented by then?

DIBBEN: Yes, oh yes. Very definitely compartmented by then.

FARLEY: So you were trained as a cryptic?

DIBBEN: Yes. I started on manual systems, but what--Frank's idea was, he wanted to see how I would do relative to those that

came in and had all the special training. The second person involved, incidentally, was Ignatius Mattingly, who has since left the Agency, but who was a good personal friend and a very bright guy.

FARLEY: Did [weak] come in about the same time as Bob did? I know there were about four or five other whiz kids--we called them that--who came in at the same time.

DIBBEN: Actually there are several others that are associated with the junior math program that were not part of it. Jim Bates is one, and Ned Newberg is another.

HIGHBARGER: Peter Jenks?

DIBBEN: Peter Jenks was another.

FARLEY: Were all of them given commissions, or were some of them retained as civilians?

DIBBEN: Peter came as a civilian. Jim Bates never got a commission; he was enlisted, in the Navy. . . .

FARLEY: Phil, when you came in, it was AFSA, and the Korean War was on. Did they threaten to send you to Korea at all, or were you so new in the game that it wouldn't be fair to you?

DIBBEN: No. Incidentally, I was an Infantry officer.

FARLEY: Not Signal Corps.

DIBBEN: Not Signal Corps, I was an Infantry officer, because that was my Army experience. No, there was no threat to send me to anything but here. They wanted me here because by then I had

a master's degree in mathematics. When I was recalled, I just went ahead and got the master's degree. My intention had been to go for a PhD.

FARLEY: Phil, do you remember the name and letter and number of the organization to which you were assigned?

DIBBEN: I don't remember the first one. It became [redacted] [redacted] shortly after I came. It had some other number before that.

HIGHBARGER: I remember it was [redacted] from the middle of '51.

DIBBEN: Yeah, but when I first came, it had another mixed letter-number. And I have forgotten what that is, but it soon became [redacted].

FARLEY: And that was within the analytical, the major analytical unit?

DIBBEN: Yes . . . [redacted]

HIGHBARGER: [redacted]

[redacted] That's the only designators it's ever had, those four. . . June of '51.

DIBBEN: There was one before it, but it was only for the first month or six weeks I was here, and I have forgotten what it was.

FARLEY: You remember the chief?

DIBBEN: Oh sure. Frank Raven. He went all the way through [redacted] didn't he? [redacted]

[redacted]

HIGHBARGER: When the first set up [redacted] Dale Marston was the chief and Lutwiniak was his deputy. That lasted a very short period of time and, as we said, Dale went to sea and I came to

[redacted]

FARLEY: What target country did you first work on?

DIBBEN: I first worked on the European satellite countries, mainly Bulgaria and Romania and Albania. That was considered a European satellite at the time.

FARLEY: Were their systems pretty difficult, or were they basic additive or machine or--what type systems did--

DIBBEN: No machine; they were all manual systems. Largely because of Soviet influence, all their major systems were one-time-pad.

[redacted]

FARLEY: I don't think we need to get into any more detail on those systems. Phil, when did you work your way into the Soviet problem?

DIBBEN: First of all, I left for a year. When I got out of the Army, I got out at an odd time, not one that fit the academic

year. Levenson talked me into just staying on. You know, "Well, if you stay on, you can go back to school if you want to." So I did that. I didn't have anything else to do; I had someone to support. But I did want to go back to college. This had interrupted what I considered my new career-to-be; that is, an academic career. And while I thoroughly enjoyed it here, I wasn't certain that this was what I wanted to do for a career. I went back to the University of North Carolina on a scholarship that paid my tuition and gave me a stipend of about \$1800 a year for graduate school.

FARLEY: You couldn't have picked it up on the GI Bill here?

DIBBEN: I had used most of my GI Bill by then. So this was very nice. But after a year I simply was bored. I missed this place. I missed the fun of it, the excitement, proving the theorem did not have the excitement of solving the system. It simply did not. I was particularly bored one night, and I called Levenson and said, "Can I have a job back?" He said, "Sure, come on back."

FARLEY: Great. And from that point, you worked into the--

DIBBEN: For practical purposes--well, with two exceptions--I never left the Soviet cipher problem, neither manual or machine. Those two exceptions--in my early period, working with Polly Budenbach and with Frank, I did work on what are now some  problems. And I spent a year as Deputy  and then I spent

early work even though I didn't do it. I only read about it and tried to analyze it and study it, what changes they made and try to decide why.

FARLEY: Phil, when you lectured out at the [National Cryptologic] School in '83, you talked about the Black Friday incident. Rather than having me ask specific questions on this, maybe you'd just like to talk about what you remember, or what you know, or what you learned, about the Black Friday incident.

DIBBEN: Okay, now, I worked on systems that followed Black Friday, both machine and manual systems. So it was more than just history that took me back to Black Friday, and tried to analyze what had happened. Most of that was done by--oh, incidentally, a lot of it was done by people that you can still interview, a lot of the actual work, and they were here working at the time of Black Friday. Certainly Cecil Phillips is one. Or Juanita Moody is another still available to be interviewed.

FARLEY: [Too weak]

DIBBEN: Don't know; I know those two did.

FARLEY: Ted Leahy?

DIBBEN: Ted Leahy might have. Tim Holcroft might have. Art Levenson might have.

FARLEY:

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DIBBEN: All those were around during that period, working. George Vergine is another.



HIGHBARGER: Frank Lewis? Probably not . . . he might've.

DIBBEN: He could have, but Frank's not in--all the rest of them are in the area. Frank--

FARLEY: I've interviewed Frank already. I'll have to look over my interview and see whether he mentioned anything. If he did, he glossed over the term Black Friday. He just mentioned the change in the Soviet communications. It may be in there.

DIBBEN: At this point, of course, it has to be memory, what I learned, and also what I worked on. From 1945, when the United States government started a real attack against Soviet systems, because they didn't have a large attack during the war, but when it started a fairly sizeable attack against Soviet systems, there was fair success against their major systems. Compared to the size of efforts today, the size of the effort then, it was a nice success. Then, on one day, every system that we had had any success on, and were producing decrypts on, went off the air--never to be seen again. And every system that we had been unable to make a dent in stayed on the air. It is no doubt that very specific information got to the Soviets. One thing that I had to satisfy myself on, my own mind on, was how on earth they did it. Because I didn't think that the United States would be able to do something like that. Even if we had the specific information, I didn't think we would be able to take all--a significant number of our major systems off the air. Everything

was replaced by one-time-pad. But when you started analyzing it, all the systems that they were replaced were as manpower intensive as one-time-pad would be. So it really gave them not a heck of a lot of a problem. So I satisfied myself as to why they could do it, although it still took quite an effort. I guess they did it on Friday--and this is purely and simply a guess--so that they could quickly analyze how complete it had been Soviet-wide, and then they had the weekend before Monday to straighten out any post that had fouled up. And there were a few.

FARLEY: Was it a universal change throughout the Soviet high commands?

DIBBEN: It was a universal change except for--they kept callsigns and frequencies. It would have been chaos, probably, without that. So you did have T/A carryover. But all indicator systems changed, even on the systems we were not reading. They enciphered their indicators. Indicators that had been in the clear before, they now enciphered. If they had enciphered them before, it was a different system now. As soon as they knew everyone was all right, they changed their callsigns and frequencies as well. So within a very short time, it was as complete a communications change as you could almost imagine.

FARLEY: That when they went to

DIBBEN: No, that was later.

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HIGHBARGER: [REDACTED]

DIBBEN: Incidentally, there isn't absolute proof--I don't think there's any doubt in anyone's mind that it was Burgess and Mclean that got all the information. And that led to the compartmentation of the Soviet problem. Two things: Black Friday led to the compartmentation of the Soviet problem, which then led to other problems; that was the first one compartmented. The technical aspects also altered the reporting methods on the Soviet problem. Because since that time, I don't believe an actual decrypt of a message has ever been produced as intelligence product.

FARLEY: Is that verbatim or in reports?

DIBBEN: Verbatim or in reports or any other way. You never get a decrypt in a Soviet . . .

FARLEY: How is the information passed?

DIBBEN: It's passed in intelligence reports. Okay? But you don't--the decrypt gives you the time, the date, the link it's on and all that information--all the externals. Plus the verbatim text. That's all Burgess and Mclean had access to.

FARLEY: Phil, you mentioned Burgess and Mclean. Is there a relationship to Weisband in this situation? Do you know, is there any tie-in at all?

DIBBEN: Don't know. It's tied to them because they were here. They had access to all these decrypts. They weren't in NSA; they were in State or CIA--State, I think.

FARLEY: State, yes.

DIBBEN: State Department. They had access to all this. It wasn't too long thereafter that they took off for the Soviet Union. All the evidence points to the fact that they were the ones. But whether it was Burgess or Mclean or not, it was absolutely clear that the Soviets had specific information about which systems we were reading.

FARLEY: Do you know anything at all about Weisband's modus operandi?

DIBBEN: I don't even know who he is.

FARLEY: This is the Army officer who was charged with passing secrets to the Soviet Union while he was a civilian here. And almost immediately after he supposedly passed the information, came Black Friday. He was not prosecuted; he was sentenced to one year in jail because he failed to answer a subpoena from a judge who was going to discuss this. Apparently, NSA didn't decide to prosecute because it would open the books and the secrets would be exposed. But you don't--

DIBBEN: No, I don't know the name.

FARLEY: That's interesting.

DIBBEN: Actually, it didn't particularly worry me at the time how the information got out. It was clear that specific information did get out. But I was interested, as a cryptanalyst, in what the Soviets did, how they reacted to it, how they changed their systems.

HIGHBARGER: [Weak, in background] . . . worked on the Soviet problem, on successful systems development, as Phil did, I always, for whatever reason, I always associated it with Burgess and--

DIBBEN: Burgess and Mclean. That's right. Yeah.

FARLEY: I've talked to people who knew this fellow Weisband and said he was a little curious about goings on in certain of the Soviet areas. He was a very personable sort of individual, and he'd kid along, and then say, "Well, what are you doing on this and that system?" And apparently fed it back. I wish I'd brought his obituary over here; you'd probably get a little more information on him.

DIBBEN: I'll be darned. That really caught both Bob and I by surprise--caught us completely by surprise.

FARLEY: Here I thought I was going to get the whole story.

DIBBEN: [Laughter] Sorry about that.

FARLEY: In your lecture you also noted that Black Friday helped to break their cover, and in trying to trace it back the security people were getting to them. Could you elaborate on

what the hunt for the source entailed? Were there others involved? Was--again Weisband--was he alone? Did he have accomplices?

DIBBEN: I simply don't know. You know, it was simply a comment I made. The Soviets, when they decided to change everything on one day, a massive change like that, they clearly must have realized that they were compromising their source of information. And they were willing to do it. But I wasn't particularly interested in that aspect of it. You know, it had already been taken care of. I was interested in the technical developments.

FARLEY: It's interesting that the security files contain very little information about the Weisband case. Now whether it's been sanitized, I don't know.

HIGHBARGER: What year was this?

FARLEY: In '48. That period.

DIBBEN: Okay. If he had passed the information in '48, I would almost say that the Soviets could not have reacted that fast.

FARLEY: Maybe he was just feeding them piecemeal, and then one day they decided: We have everything we want to know and--

DIBBEN: Yeah. Because it took them a while to decide what to do and then lay out all the plans. They couldn't do it in a short period of time, I don't think. Do you, Bob?

FARLEY: Gosh, no. The sheer volume of--

HIGHBARGER: Have you interviewed Lou?

FARLEY: Tordella?

HIGHBARGER: Um-hmm.

FARLEY: For two years I've been trying to get to him.

HIGHBARGER: I'm sure he's the one that could--he the most  
authoritative--

DIBBEN: That's right, because he was sitting in a position  
where he would know all the details of this.

FARLEY: He's weakening. I'll get him eventually. Phil, let me  
read something, again, I don't know whether it's related to the  
Black Friday case. Dave Martin, in his Wilderness of Mirrors,  
writes about a Churchill to Truman telegram which was  
intercepted and decrypted from the New York-Moscow Soviet  
diplomatic link that pointed to a high level penetration inside  
the British Secret Intelligence Service. According to Martin,  
AFSA's search for the culprit focused on the codename HOMER. Do  
you have any idea who HOMER was, or any information on the  
SIGINT side of this story?

DIBBEN: No. The actual source that they're talking about, I  
was aware of from a technical standpoint. I worked on it. But  
I didn't work on the intelligence output. I did work on the  
technical; I helped on that. A lot of people in NSA--well, I  
guess in NSA and IDA. The person I can think of best: Dick  
Labler. Dick Labler worked on it. Lutwiniak certainly worked

on it. I worked on it, but I worked on the technical aspects of it. For obvious reasons, the intelligence output was probably the most compartmented product that this agency has ever produced. And still is.

FARLEY: That makes sense. . . . Let me just read another similar incident. Stevenson, in Intrepid's Last Case, refers repeatedly to BRIDE/VANOSA traffic, intercepts as well as decrypts. He says Kim Philby "watched the coded BRIDE/VANOSA traffic for British intelligence from his Washington post. He decided Burgess had better be transferred." And he also said there was a "long history of burrowing into the key bureaucracies of the West." And this was also "available through BRIDE/VANOSA cryptops." "Cryptops" is the word he uses. He also said that the codename GISEL kept "recurring in Soviet intelligence traffic intercepted by BRIDE/VANOSA." And Stevenson also claims that John Watkins, a former Canadian ambassador to Moscow who died mysteriously in 1964, had Soviet connections that "were confirmed from" . . . "the BRIDE/VANOSA cryptops." Do you have any indication or any information at all on what the system "BRIDE/VANOSA" is, or do those codenames mean anything?

DIBBEN: No.



HIGHBARGER: The . . . VANOSA sounds familiar. BRIDE doesn't ring a bell at all. I'm not sure what VANOSA was. I think it was a source, but I'm not sure.

DIBBEN: I'm not sure either.

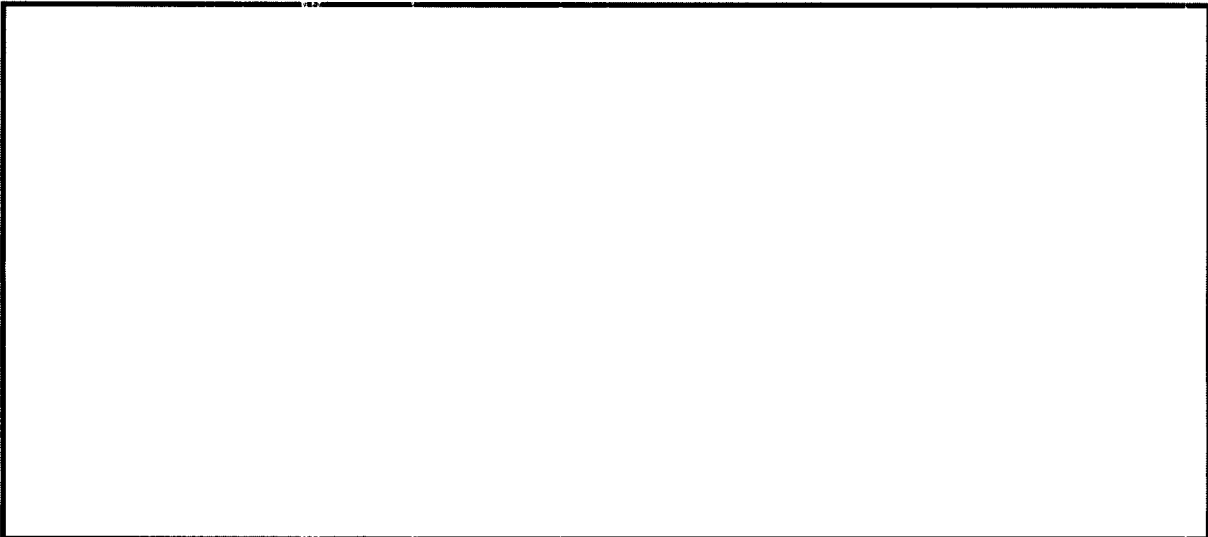
FARLEY: Doesn't mean a thing?

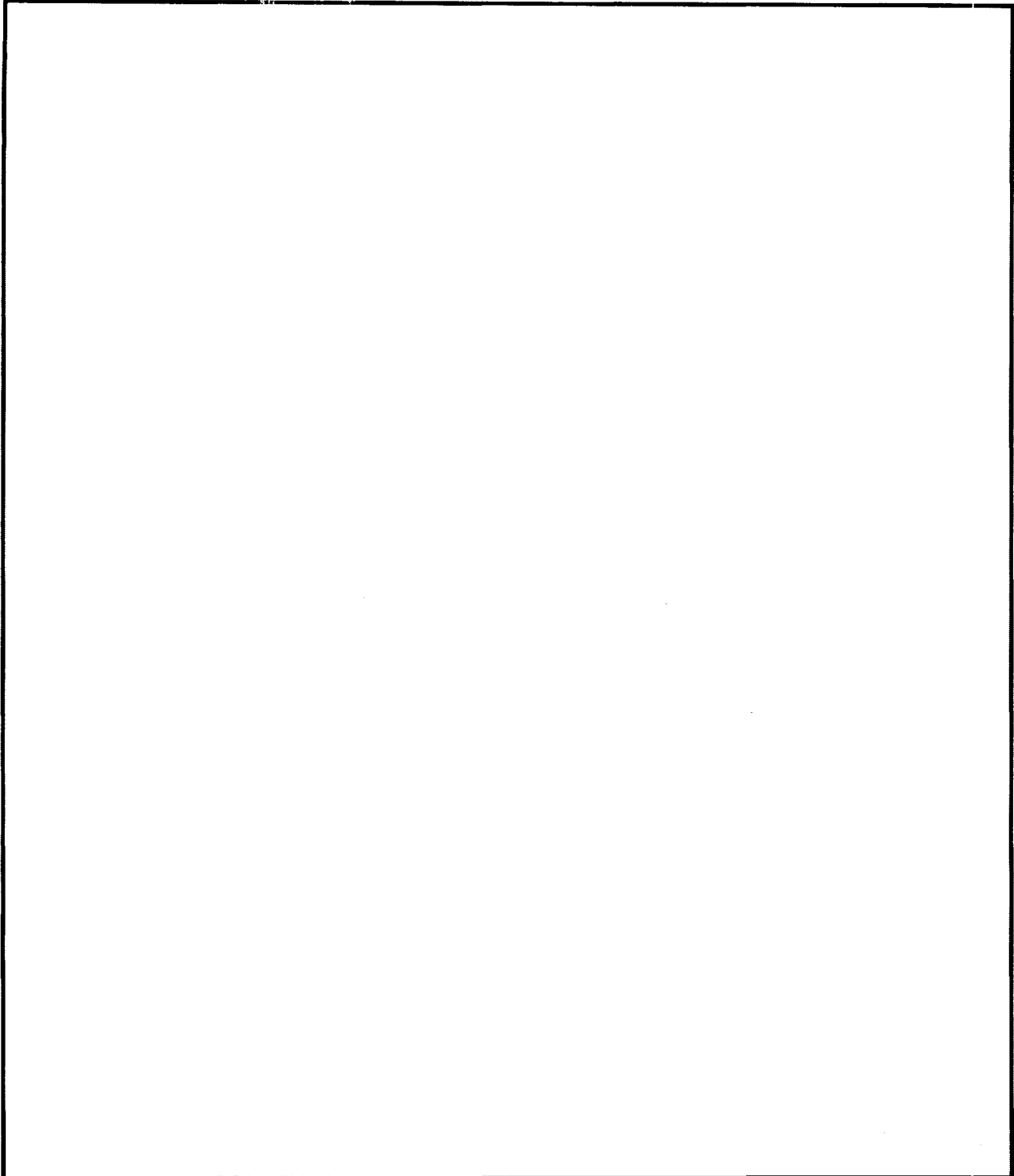
DIBBEN: Doesn't mean a thing.

FARLEY: I think you discussed this already, Phil. I was going to ask you whether you recall whether the Weisband compromise was limited to Soviet dip cipher, or were other Soviet cipher communications involved. You talked about that. You know anything about how the suspects were narrowed and finally the finger of suspicion was pointed at Weisband?

DIBBEN: No.

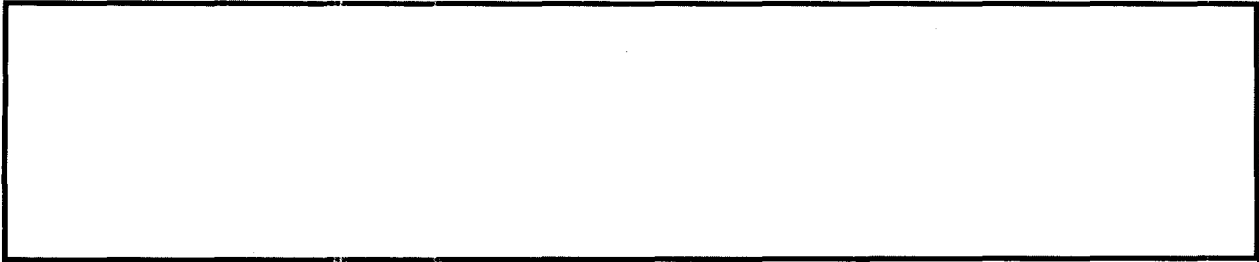
FARLEY: Here's one you might hit. Dr. Tordella lectured on multichannel printers in the 1947-48 period and used the





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[End of Side One]

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DIBBEN: Of course, if they're producing them, they can double-produce and they can keep a copy and give a copy out. [Laughter]

FARLEY: I wouldn't suspect them of doing anything like that.  
[Laughter] Fine, upstanding people.

DIBBEN: I'd love--oh, find, upstanding people--I'd love to be in a position to do that myself. [Laughter]

FARLEY: We've never done it, I guess.  
[Laughter]

FARLEY: Phil, after we discovered what had happened--Black Friday--you said everything went compartmented. Who directed that the Soviet problem primarily, and some others, become a compartmented area?

DIBBEN: It was "others" after that. As far as I know, it was only the Soviet problem that was compartmented immediately. I don't know. It certainly was the director of NSA and deputy director that ordered it. I don't--

HIGHBARGER: AFSA

DIBBEN: Oh, AFSA. I don't see that they had to have any authority outside of that. They shouldn't have had to. They could have done it inside. I wasn't aware of that; I was too junior at the time, but there probably was argument about the method of reporting. It's of interest to me, sort of historically, that no other part of the Agency has ever adopted that method of reporting.

FARLEY: Did the users or the consumers, or whatever we used to call them then, did they complain about not being provided a paper copy?

HIGHBARGER: Oh, I'm sure--

DIBBEN: I'm sure they did, but I don't know--

HIGHBARGER: They are still complaining. [Laughter]

DIBBEN: They are still complaining. Yes they do complain, but on the other hand, there was a good reason. There probably still would be for that kind of information to get out to a lot of consumers. I personally think it's a good idea for NSA to do it, for NSA to produce intelligence reports, and not produce a report as a pure decrypt, a decrypt of a message. As a matter of fact, as far as I'm concerned, NSA has good intelligence analysts that are capable of taking decrypts, taking traffic analytic information, and melding it together into a good intelligence report. They're better capable of doing that than, I think, CIA, or DIA. Most of them take that communications information and marry it to other sources.

FARLEY: Phil, was AFSA/NSA compelled to advise the recipients, or the users of the consumers, that we were having problems-- having difficulty--on the Soviet problem?

DIBBEN: Well, suddenly all the intelligence information disappeared.

FARLEY: Did we have to explain what happened?

DIBBEN: I don't know. I would suppose we did, but I have no knowledge of that.

FARLEY: Probably through USIB or--

DIBBEN: Yeah, I have no knowledge of it, but certainly high level people at State and other agencies would wonder why things had dried up suddenly. There was a trickling off, because you were still producing decrypts for a while. But in a relatively short time intelligence had to have gone down significantly. There was a big difference between pre-October and post-October of '48. We called it Black Friday. GCHQ called it the beginning of the seven-year drought, which also gives some specific information. It was seven years before headway was made again. That's how complete a change it was.

FARLEY: Were pretty stringent measures implemented at that time to prevent a similar recurrence; that is, of the Soviets being provided information that their systems were being read, which would provoke them to change everything?

DIBBEN: The compartmentation certainly was aimed at that, and the not producing an actual decrypt as intelligence product leaving the Agency is another thing. It put it all within NSA. The systems we were able to make headway on stayed largely within NSA and there within named people.

FARLEY: What was the relationship with GCHQ on this? They were reading certain Soviet systems also, weren't they?

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DIBBEN: We had a very complete relationship with them. It carried on past World War II, and it was essentially the same as it is today, as far as I'm concerned. It was a very complete relationship. Some of my earliest memories, or knowledge, of GCHQ came from the fact that Ignatius Mattingly and I were working together very early on, when I first came. And he and I had done a piece of work that had attracted attention. And here was the GCHQ liaison man, Phil House, sitting at our elbow. It was quite a close relationship. Always has been.

FARLEY: Phil, would you recall whether there ever has been a damage assessment written about Black Friday? Have you ever seen one?

DIBBEN: I've never seen one. I've heard that--yes, it was done, but I've never read it. I don't know who did it.

FARLEY: You wouldn't have any idea where it might be found, or who would have access to it? Could it be in

HIGHBARGER: It wouldn't be in

DIBBEN: If there was one, my guess would be Lou Tordella would have had it. That would be my guess.

FARLEY: You know a lot of his old files were inadvertently destroyed. Somebody said, "We need this file drawer. . . ."

DIBBEN: You're kidding!

FARLEY: [Laughter] That's another story.

HIGHBARGER: I would think that whoever had it would have [Weak]

DIBBEN: Back then it wasn't Lou Tordella. It would have been--

HIGHBARGER: But if it were handed down--

DIBBEN: Handed down--

HIGHBARGER: I would have thought--whether it be [ ] the predecessors of [ ] would have held a copy. If it were someplace in [ ] archives, that would be the other possibility, I would think.

FARLEY: It would be extremely sensitive though, wouldn't it? I mean, we shouldn't have it over in our archives.

HIGHBARGER: No.

DIBBEN: It would be very sensitive and my guess would be that in the period we were originally talking about--when Bob and I were here working on the problem--it would have been held at the directorate level. My guess would be that [ ] would not have a copy--the predecessors would not have a copy. Because things like that, very few copies are made. Because they are quite revealing.

FARLEY: Phil, is there anything--I giving this quick and dirty again. Is there anything about Black Friday you'd like to put on tape--for the record--that we've glossed over?

DIBBEN: No. No, I don't think so. To me it was--my interest in going back and studying it, as I said, was the technical aspects. How the Soviets responded to this challenge once they got--they clearly got specific information as to which systems



we were reading. And they responded to it by a massive communications change. My interest was in how they designed those changes, and the fact that they could do it, would do it, were willing to go to that effort. And the technical continuity that went through the change. That was my interest in it, and that pretty well wraps it up as far as I'm concerned.

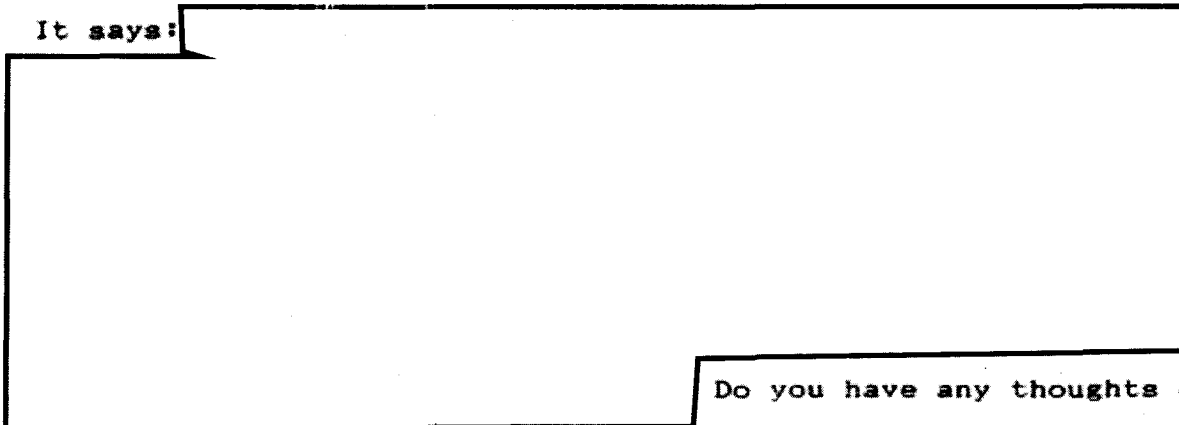
FARLEY: Bob, do you have anything to add to that?

HIGHBARGER: No, I don't--Phil really knows more about it than I do.

DIBBEN: And specifically because I stuck my nose into it. I dug out as many reports as I could find and talked to as many people as I could at the time.

FARLEY: Phil, I have a couple more questions. One on the Berlin Tunnel story. I'll just read what somebody researched.

It says:



Do you have any thoughts on that? And if you remember anything about it, what was the intelligence value of the printer traffic?

DIBBEN: To begin with, an awful lot of it was plaintext.

OGA

HIGHBARGER: A lot of IT1.

DIBBEN: Yeah. Plain stop-start printer that never got on the air in radio and therefore, they thought, was secure. That was the whole idea of the tunnel. The idea of it came originally from NSA, from Frank Rowlett. In some of the captured German documents, if I remember correctly--I remember Frank telling this story. He saw this map of Berlin which showed all their buried telephone cable. Looking at the map, here's the U.S. sector and here's an empty field; right there is one of their big trunk lines. [Laughter] And we've got--and it's an empty field right up to the trunk line. Didn't have to go through any basements in the Soviet zone or anything else. He suggested it to CIA, and by the time it was actually dug, he was in CIA, so he [Laughter]. He'd put on a different hat by then and was able to carry it through.

FARLEY: So CIA would have been aware of it then, since he had seen it from the NSA point of view and then moved to CIA.

DIBBEN: You better believe they would have. The main intelligence came out of the plaintext printer. I guess it's an impression of mine; I have been involved and interested in electromechanical, electric and electronic equipment radiating--the magnetic fields associated with electrical equipment on. I have been interested in all my career. I guess it's almost [an] admission that I think that we were always one

step behind the Soviets. We needed information from them more than they needed it from us.

FARLEY: There was one period in there when they managed to jump ahead of us.

DIBBEN: More than one period.

FARLEY: Again, the intelligence derived from the tunnel operation--the REGAL operation--what were some of the most significant SIGINT contributions. You say most of it was plaintext. Was there ever any enciphered material passed?

DIBBEN: Oh, yeah, there was cipher traffic in there as well. Well again, particularly during that period, I was not involved with the intelligence output. . . . A great percentage of the cipher traffic was available to us on the air. Not all of it. [Weak background discussion between Bob Highbarger and Bob Farley]

FARLEY: I remember we used to haul three and four mailbags back from Berlin, take turns pulling courier out to Berlin and back to Frankfurt, hauling that material back.

FARLEY: Bob, was all the processing done at ASAE, or was some of the material sent back to--

HIGHBARGER: I think it must all have been sent back here, but I--

DIBBEN: It was sent back here. The analysis of it, from an intelligence standpoint, took place on the--at least part of

it--took place on the third floor of one of the barracks buildings. It was while this building was under construction. Carrie Berry could give you some information on that.

HIGHBARGER: I think Bill Payton could also give you some information on this, because--I saw this recently, within the last three or four years--something about CIA and the . . . I talked to Bill about it, 'cause I believe he was involved in the processing of that material here.

FARLEY: Okay. Did CIA have an operation in Temporary Building 32 down on the Mall where they helped process?

DIBBEN: I have no idea.

FARLEY: Did you ever hear of that?

DIBBEN: No.

FARLEY: I was curious whether we volunteered any help down there, gave CIA--

HIGHBARGER: My knowledge was strictly during the period we were in Frankfurt, and before that--it was all over, fortunately, by the time I got back here.

DIBBEN: My knowledge was that I happened to work on the--Peter Jenks and I were working together at that time, and we worked on the third floor at the barracks building. If their output was cipher, we would get the output. So we knew where it was coming from.

FARLEY: It was very tightly held--

DIBBEN: Oh, it was very tightly held. Yeah.

FARLEY: Maybe if I get Frank Rowlett aside; he's coming to the Phoenix Society dinner tonight. Maybe I can just get him aside, and he may stop by over here next week, so we can question him in detail on that.

DIBBEN: Yeah. Tell him I told you. [Laughter]

FARLEY: Bob, anything else on the tunnel operation we should put down?

HIGHBARGER: No.

DIBBEN: As far as I'm concerned, it was a pure intelligence operation, that we really didn't get anything of cryptanalytic value out of it.

FARLEY: It was successful while it lasted.

DIBBEN: Yup, yup, it was a nice coup. There is another story that I was told about the tunnel when it was first being built, and I think it was Frank Rowlett that told this story. It could have been someone else, but I think it was Frank Rowlett who--it's an interesting war story. The tunnel was there; it was operational. Overnight they had a very early snowfall that just dusted the ground--except for the path [of the tunnel]. And the heat melted it. Soviet soldiers over there were actually pointing it out, but by the time any senior people who looked there, the sun was out and melted all the snow. We transhipped--in a hurry--air-conditioning equipment.

FARLEY: Or insulation.

DIBBEN: [Laughter] Both. I'm pretty sure Frank Rowlett was the one that told that war story. . . . And the other was the way we lost the tunnel, which was a pure accident. Very heavy rains, and we weren't able to pump the cable tunnel dry on the Soviet-- We could pump our own tunnel dry, but where the cables were, we were trying desperately to pump it out, and just couldn't keep up with it. Everything shorted out.

FARLEY: They came to check it and find out what happened.

DIBBEN: Yeah. There the tunnel was. It was sort of a shame that we didn't have bigger pumps. I was told that we drastically overbought for our own tunnel, but not theirs.

FARLEY: I just have a couple more, and then I'll leave you. We should be finished in fifteen, twenty minutes, unless you want to talk longer. EGG SHELL and the TACKSMAN sites. In the late 1950s CIA operated the two sites, as you know. One at Kabkan and the other at Behshahr, to collect signals from Tyuratam. Could you discuss the history of the EGG SHELL sites? Could you recall anything about them?

DIBBEN: No, I can't. Don't know. I really--do you know the history of those two sites, TACKSMAN and EGG SHELL?

HIGHBARGER: No, sorry.

DIBBEN: I certainly knew about it; I got information from them.

FARLEY: Was it a CIA-generated operation, or was it a combined NSA-CIA operation?

DIBBEN: It was combined, and it's entirely possible--I would look into the possibility of it--the idea being generated from NSA.

HIGHBARGER: There's two other people that can answer, because . . . don't go back that far. . . I assume it was just in the normal course of--they ran--CIA ran almost all of the covert sites--

DIBBEN: Covert or quasi-covert sites. My assumption would be that the main idea for the site would have come from NSA. But because of the policy at the time, CIA would have run it, would have been responsible for the site. That's purely an assumption.

FARLEY: You saw some of the information provided from the sites. How useful was it?

DIBBEN: A lot of it was sort of unique. We couldn't get the intercept anywhere else, at the time.

FARLEY: This all on the missile launches and the testing?

DIBBEN: Largely, but there was also a lot of military traffic from that same part of the Soviet Union that was not readily available, the intercept was not readily available from other sites.

FARLEY: Was it directed primarily against TTMR or also against KYMR or Vladimirovka and all the others?

HIGHBARGER: I think it was mostly what you could see with line of sight . . .

DIBBEN: Yeah, so Vladimirovka wouldn't have been part of it.

FARLEY: I guess that's too far away.

DIBBEN: Yeah, that's too far away.

HIGHBARGER: . . . clear view of the trajectory.

DIBBEN: . . . a good part of the powered flight, which was important. Until overhead came around, it was unique; it gave absolutely unique stuff.

FARLEY: All the telemetry we needed, I guess.

DIBBEN: I'm sure of that, and a lot of cipher traffic as well. Bob?

HIGHBARGER: I doubt it was all we needed.

DIBBEN: No.

FARLEY: You mentioned the word unique. Did EGGSHELL provide any unique

[REDACTED]

Were

we lucky enough to pick up some of that?

DIBBEN: Do you--

HIGHBARGER: [Weak] I don't know where it was . . . doesn't ring a bell with me.

FARLEY: [REDACTED] was--



DIBBEN: Oh, EGG SHELL [All three talking at once here]

FARLEY: I don't either, Bob.

DIBBEN: Isn't that one of the Turkey sites? Or was it an Iranian site?

FARLEY: Iranian.

DIBBEN: Iranian; yeah, Iranian. Here again, people more closely involved with the actual intelligence output are better able to answer things like this, but I do know that the close-in intercept sites were extremely important for the early enciphered speech intercept. It was very definitely a crypt problem. So all of the close-in intercept sites were important there.

FARLEY: Good. Bob, one site, Kabkan, was on the Soviet border, the other was at Behshahr, on the Caspian Sea near Tehran, to collect Soviet signals from Tyuratam--

DIBBEN: Right on the Caspian; it was looking right straight across the water. So you got ground wave across the water.

FARLEY: I remember that; I think I was inadvertently exposed to that, and I dropped the codename EGG SHELL to Zaslow, and he said [Broken up by Dibben's laughter]

DIBBEN: He became a six-footer?

FARLEY: [Laughter] Did you hear that, Phil? It was just a briefing I went to downtown or something. Phil, in your lecture in '83, you talked about President Nixon telling Khrushchev that,

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"We're reading some of the Soviet systems." On the tape, it's obliterated or it's inaudible. [Much laughter]

DIBBEN: He did--

HIGHBARGER: In the kitchen debate?

DIBBEN: Yeah, in the kitchen debate, he just blew the fact that we were reading

And he blew it wide open.

FARLEY: What system is that?

FARLEY: Oh gad. When did we find out about that? When the Soviets changed the system again?

DIBBEN: Oh no. It was on television. [Laughter] That--it was televised worldwide.

FARLEY: With the people at NSA pulling their hair.

DIBBEN: Yeah, Lou Tordella can--if you ever get him, why, he'll comment on that. I've heard him on that.

FARLEY: Lost his cool, did he?

DIBBEN: Yeah. One of the few times that Lou Tordella grits his teeth.

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FARLEY: He had every right to.

DIBBEN: Yeah.

FARLEY: Can we trace any resultant Soviet action as a result of that disclosure, revelation?

DIBBEN: Oh, yeah. They took them off the ranges immediately.

[REDACTED]

[REDACTED] Now, I think this was something that they would have done eventually anyhow. It would be a logical development. I guess I was mildly surprised at the time, and looking back on it I still am. They didn't have fully mechanized communications there anyhow. At the time they didn't, but they very rapidly changed over to them. It wasn't a one-day thing. But it was certainly a progression following that. [REDACTED] lasted in other parts of the Soviet Union for quite some time, again, it wasn't too long before all of them had disappeared and been replaced. How long they would have continued without that revelation by then Vice President Nixon, I have no idea. As I say, I think it was a logical progression that they be replaced by a much more automated system, [REDACTED] But how long it would have taken the Soviets to do it without that is anybody's-- a guess. You know, it could have been a long time.

FARLEY: Anything more on that. Phil, that we should record?

DIBBEN: No.

FARLEY: Let me just bounce back, again, to this--Ed Wiley wrote this. Again, in part of your lecture. You mentioned a Soviet code clerk who defected to Australia in the early 1950s, but you don't mention Gouzenko, the Soviet code clerk who defected to Canada in 1945. Did you have any association or knowledge of the Gouzenko affair?

DIBBEN: Yes, I was aware--I'd read reports, debriefing things on Gouzenko. But if I remember correctly, it was really not a great deal of information. Not cryptanalytic.

FARLEY: No, I guess not. This is from Intrepid's book. It says a Russian cipher clerk, Igor Gouzenko, defected to Ottawa in September of '45. The Soviet Union pressed the Canadian government to return him. Stephenson took over, hiding Gouzenko from . . . a group of KGB thugs who would have killed him. The Canadian prime minister, MacKenzie King, was anxious to avoid offending Russia and initially wanted to surrender Gouzenko. A subsequent inquiry by a Royal Commission exposed Soviet espionage within the U.S., Canadian and British atomic projects. So, you were aware of that defection too, I guess.

DIBBEN: Yeah, I was aware of that but, you know, from my standpoint, it didn't give me a heck of a lot--as a cryptanalyst. He was not a good source. The fellow from Australia was.

FARLEY: Oh, so you were able to submit questions to be asked by the interrogator of this individual?

DIBBEN: Through GCHQ. The--oh, I have forgotten the fellow's name. Little redheaded Scotsman--Englishman. Oh, darn. Yeah, he died. Anyhow, he was the one that--in reading the debriefing on this fellow, he's the one that picked up the bit of information, almost a contradictory thing--the debriefers reported it as he had a tour of the Soviet--by a tour, you know, a walk-through of the Soviet key-generation--their COMSEC, where they generated all their keys. And it should have been "tour" in the working sense of the word, not walk-through sense of the word. But he picked up the fact that he remembered the technical designator of a tube that was used, a gas tube that was used. And he said, "If you walk through it, how in hell did he remember that years later? [Laughter]

FARLEY: Some things just stick in the mind.

DIBBEN: It turned out he actually worked in that Soviet key-generation factory. And we were able to submit questions through GCHQ on that one.

FARLEY: Phil, that exhausts my list of questions. I don't know--is there anything else that we should put on tape? Bob?

HIGHBARGER: No.

DIBBEN: I don't think so. I'm interested to know that someplace that talk I gave exists.

FARLEY: Part of it has been transcribed. Again, Ed Wiley had it transcribed. What I want to do later on is interview you in detail. Again, it's been quick and dirty, as I said four or five times. But get into the specifics and a little more on your career, a little more on things that should be on the record. I have found that a lot of the reports that are written are written for consumption by people who really don't care. I ask people whom I've interviewed: What really happened behind this report? Can you tell me the true story? And it's amazing how contradictions come out. Or supplementary information comes out. They say, "I was coerced into writing that report that way, but classified so-and-so. It's good to get behind-the-scenes information.

DIBBEN: I think it's certainly true of me. It's true probably of most of the NSA technical people, is that we were not very good at reporting our technical accomplishments. We simply didn't put it down in detail. We reported it to people that could understand--that knew what we were doing and therefore could understand a one-paragraph report as to an accomplishment. And an outsider--someone coming in--would have no idea what we were talking about.

FARLEY: It sure comes through now, when you read some of these old reports.

DIBBEN: Yeah, but those things were written for the consumption of people that had the complete background on what we were doing. They already knew that, and we didn't give it again. We'd write just a very short description of a technical development.

FARLEY: Well, I think it was all a short-term, rather than a long-term, writing for history.

DIBBEN: Yes, a lot of it was short-term, and also a fact that on the Soviet problem--I think much more than other parts of the Agency--there were more one-man tour de forces. It was a group effort. It was a fairly large number of people that combined on a technical development, or on a breakthrough. Don't you think that's true, Bob? It wasn't a one-man--none of them were one-man things.

HIGHBARGER: Yeah, that's true.

DIBBEN: That's probably another reason why no one person sat down and wrote them up. Because it wasn't that individual's work. He was reporting some of his own ideas, but a whole lot of other people's accomplishments as well.

FARLEY: I guess that's true.

DIBBEN: Therefore, no one ever did it. Probably a shame.

FARLEY: Sure is. Sure is, especially when we're trying to write the history, in some detail, of NSA. And there are a lot of gaps, many gaps, and the people--

HIGHBARGER: I'm glad we're doing it.

DIBBEN: I'm glad someone's trying to do it. I agree. But don't you agree that's probably the reason?

HIGHBARGER: Yeah, that certainly--

DIBBEN: It certainly contributes to it. Part of it--

HIGHBARGER: You find somebody that could do it, you didn't want to take him away what he's doing.

DIBBEN: That's right, in order to do it.

HIGHBARGER: Not everybody could write it. I mean, you have to have a pretty good understanding of the technical--a very good understanding in most cases. So it was--

DIBBEN: Yeah. When I was chief  I tried to have that done on one problem. I didn't take some--it just happened that a person was convenient that knew quite a bit of the history of one of the problems. And so I said, "Okay, for the next six months you have nothing else to do. Write us a history." And it was not a good history.

FARLEY: I can believe that.

DIBBEN: It was not a good one. I wouldn't publish it. I wouldn't have it published. I don't want to mention any names. I did that and it was not a--I was disappointed. He was disappointed that I wouldn't publish it.

FARLEY: Is it still around?

DIBBEN: I did not destroy the draft.



FARLEY: Because we'll take anything.

DIBBEN: It still could be in the  files. I'll tell Bob what it was later, and let him. . . .

FARLEY: Bob, I want to interview you sometime, at your leisure, about your illustrious career. The good old days, too.

HIGHBARGER: Sure.

FARLEY: I'm cutting into your lunch hour. Phil and Bob, thank you so much for your time. It's been worthwhile, and we'll transcribe this and eventually give you a copy.

DIBBEN: Okay, and see how it comes out.

FARLEY: How should we classify it?

DIBBEN: This should be Category Three, Top Secret Codeword.

FARLEY: Top Secret Codeword; so we'll control it that way. And I'll give you that accessibility form.

DIBBEN: Okay.

FARLEY: Thanks again. Philip. Robert.

repeated several times  
to "BRIDE/VANESSA"  
-- it should be  
BRIDE/VENONA

repeated several times  
to "BRIDE/VALENTINE"  
- it should be  
BRIDE/NEVENA