

Securities and Exchange Commission Historical Society
Interview with William Jaenike
Conducted on July 13, 2011, by James Stocker

JS: This is an interview with William “Bill” Jaenike for the SEC Historical Society’s virtual museum and archive on the history of financial regulation. I’m James Stocker. Today is July 13, 2011. Welcome, Bill.

BJ: Thank you, James. Glad to be with you.

JS: To start off, I wanted to ask you, where were you born and where did you grow up?

BJ: I was born in Washington Heights on the northern part of Manhattan Island in 1937 in a neighborhood that was fascinating, because it was a very cosmopolitan neighborhood, about 40 percent Irish, 40 percent German Jews who had fled Hitler, and the rest was a mixture of Italians, Hispanics, and some African Americans. Because of that mixture, you got to know a lot about different cultures and different people and different religions.

As a kid, before I went to school, I thought everybody in the world was Jewish.

(Laughter.) So I learned Yiddish. They’d see this little red-headed kid speaking Yiddish, and it was hysterical. But I’ve forgotten it all, so don’t give me any tests on my Yiddish.

I went to local schools and then went to Manhattan College, 1956.

JS: Were either of your parents involved in securities at all?

BJ: No, my father took business at NYU, and was an accountant for the Maritime Commission. My mother was a stay-at-home mom, in a rent controlled apartment, six-story apartment. We were considered wealthy because we had an elevator in our building. So that sort of was a dividing line.

JS: That's something.

BJ: Elevators were.

JS: So you said you ended up going to Manhattan College. What did you study there?

BJ: I studied electrical engineering. That was the peak of the space race. Khrushchev had become Secretary General, and he had gotten Yuri Gagarin as the first man in space and stuck his thumb in our eye and Eisenhower's eye and then Kennedy's. It became a Holy Grail mission for the United States to catch up. We were frightened at the Russian military capabilities. The place to get involved was electrical engineering. That's where the future was. I decided to major in that. Transistors were just coming online. When I first went to Manhattan, everything was vacuum tubes. When I left, everything was transistors.

JS: Did you hope to work for NASA or for the space program?

BJ: I wanted to work for any organization that would have high tech, and could lead to a long-term career. That might be in the space program, whatever. In junior year, I had a summer job. I needed the money. I applied to Grumman out on Long Island. Grumman was the prime contractor for the lunar excursion module. I don't know if you remember what that was. I sent my resume to them and they said, "We're thinking about it. We'll get back to you." They took too long to get back to me. An offer came along, a very interesting offer from the New York Central Railroad, of all things.

You would think of the railroad as sort of a stodgy old organization, but it was headed by Alfred E. Perlman, who was a dynamic mechanical engineer from MIT. He had this thing for young engineering boys that would be his replacement and take over, so they made an offer I couldn't refuse for the summer internship. I got to know the place so well and the people so well, enjoyed the experience so well. I was always a train buff. I thought I had died and gone to heaven, working for a railroad, being paid to do things that I would have done for nothing. I worked with them for a number of years in the computer area, and that led to an opportunity to go to Xerox.

JS: So just to check, you graduated in 1960 and then you worked for the railroad for a while. Then in '64 you went to work for Xerox.

BJ: Correct. Oddly enough, going to work for Xerox got me closer to NASA, because Xerox had some contracts for technology products that it sold to NASA. I was a support engineer on that.

JS: What sort of products were they?

BJ: The central product was an extremely high-speed facsimile system that would transmit a page in five seconds. At that time, that was really hot stuff. It was a terrible bandwidth hog. It took sixty voice channels for a single transmission to send it to the receiver. But it was so important to high speed, especially in graphic communications for NASA and in the Air Force One, that we sold a boatload of them to NASA, and then to a number of other high tech companies. Then we found out in 1966 that we plateaued. We had penetrated the market to the point that all of the low-hanging fruit had been gathered, and we decided to start to cut back the program.

I decided I wanted to go back to the railroad, because they made me an offer again that I couldn't refuse in the cybernetics department. That was Alfred Perlman's name for advanced systems development, cybernetics being the application of technology to mimic human actions in controlling processes and so forth. I became a project manager on a number of projects there.

JS: Still with the railroad?

BJ: Still with the railroad. Then in 1968, the New York Central and the Pennsy merged. I had a worm's eye view of that merger, and I could see it wasn't going to work. There were terrible human interactions of the part of management. I decided I was going to

leave – prescient, because two years later it went bust. Then I answered an ad in 1968, an ad in the *New York Times* for the American Stock Exchange. They wanted a communications coordinator, somebody who would be able to have the member firms of the American Stock Exchange and the floor communicate electronically. I had a lot of expertise from my time on the railroad in that area.

JS: Did they have any system in place to do that at that time?

BJ: The system in place was pneumatic tubes. The word had come down from the SEC that what was happening in the brokerage industry could not continue, because the industry was literally coming to its knees.

JS: This was what was called the back office crisis.

BJ: Right, the paperwork crisis.

JS: Tell me what that was.

BJ: Basically, what happened, the mid-1960s was a bull market. The institutions, mainly the mutual funds and the pension funds, moved into the market in a big way. The trading volume was such that the back offices of the brokers couldn't keep up with it. The brokers wound up unable to deliver securities because they couldn't get the physical certificates back from the transfer agents, and they wound up with a fail. Then when you

have a fail, keeping track of where the dividends belong and all that sort of thing becomes a monumental accounting problem. Tremendous write-offs took place, and a lot of big brokers went out of business, like Goodbody and F.I. Dupont and others.

JS: They even started closing down for one day a week.

BJ: That's right. The exchanges closed down on Wednesday, all day Wednesday. The other days were ten to two, and that didn't do it because all it did was push that much more volume into the remaining trading days and hours. So the crisis had to be dealt with. The federal government – the SEC, but mainly Congress – both houses of Congress thought the answer to this problem was to nationalize the clearance and settlement system – because Congress would know best how to run something. It would be a first and a last. So they actually drafted bills in both houses. At that time, 1969, 1970, the paperwork crisis had tailed off a bit, but it was still something that everybody knew was going to come back.

JS: Had they already tried to implement some technological solutions to that problem?

BJ: It was a lot of talk and nothing of any meaning, other than the New York Stock Exchange began this Central Certificate Service, which was a book entry system which was the precursor to DTC.

JS: That was created in 1966, right?

BJ: They took their first deposits in 1966, their first book entry deliveries in 1968. The key problem with that was that it was for brokers only. The real problem in delivering securities was not as much between brokers as it was between a broker and the institutional customer. The institutional customer had something called the COD privilege, meaning that, unlike the retail customer who had to pay on settlement day, and then when he got his certificates, he got his certificates. The institutional customer wouldn't pay until the certificates were delivered.

So now the broker has had to pay the other broker, the selling broker, and he's sitting there and he's waiting to deliver securities to the institution or the institution's custodian bank, and there are no certificates. So the certificate is stuck in transfer.

JS: Was the Central Certificate Service only for New York Stock Exchange customers?

BJ: It was only for New York Stock Exchange brokers and New York Stock Exchange issues. It got off to an inglorious start. It crashed the first time they attempted to bring it up, and then they decided they would bring it up more slowly and carefully. The second pass worked all right, but it was lacking the key ingredient, and that was the institutional customers' custodian banks. That led to one of the seminal events that I think was a humorous event. It's funny, when top people work together – things that stick in their minds often involve some sort of a humorous incident.

In this case, it was Ralph Saul, who was president and CEO of the American Stock Exchange, former Director of Trading and Markets at the SEC, and very highly regarded as Mr. Clean. The AMEX had had some scandals. He came in, cleaned it up, and then he's faced with all of these problems, paperwork problems.

He got to know Walter Wriston. Walter Wriston was the chairman and CEO of First National City Bank, soon to become Citibank. He called up Wriston. He says, "You got a terrible problem. You're supposed to turn around transfers within two days. It's taking you two weeks." Wriston said, "No, that's not possible. Come on over. I'll buy you lunch and I'll take you on a tour." He went over and had lunch, took the tour and then, the way Wriston tells it, "You know, Saul was wrong. It wasn't taking two weeks. It was taking three weeks!"

Wriston never got tired of telling that story, to the delight of people listening. That led to awareness on the part of the big banks and big bank transfer agents that they had a problem. They had to deal with the brokers to solve the problem. Otherwise, Washington was going to impose a solution to the problem, and they didn't want that to happen. "I'm from the government. I'm here to help you."

Nixon was in the White House at the time, so you had an administration that was sort of pro-business. Anyway, the idea was, "Let's get together at the very highest level of banking and brokerage – CEO level – form a committee. We'll call it the Banking and Securities Industry Committee, BASIC." They did that in the very beginning of 1970.

JS: Did BASIC have its own staff, or was it just these heads of the organizations working part time?

BJ: Let me explain that to you, because that's important, and that's why I'm here. BASIC was comprised of three big bank CEOs, who it was agreed among the Clearing House banks that they would speak for the Clearing House. So Wriston, John Meyer and Bill Moore became the representatives. John Meyer of Morgan and, because Meyer was chairman of the Clearing House, he became the chairman of BASIC. David Rockefeller and the other high rollers said, "Yes, I'm giving you my proxy. You can speak for us." The brokerage side was the president of the New York Stock Exchange, president of AMEX, Saul, and the president of the NASD. They decided that they needed somebody to do the real work. Committees can't do staff work.

Herman Bevis had just retired as the CEO of Price Waterhouse. You probably know Price Waterhouse as the Cadillac of the Big Eight. It was the Big Eight in those days. Herman had known John Meyer very well, because he was on their account, and I think they used to have martinis at lunch together and became fast friends. They hired Herman to be the executive director and the seventh voting member of BASIC. Herman said, "I will take the job only if it's pro bono." They said, "But we've got to pay you something." He said, "You can pay me in the form of a donation to the Greenwich Hospital," where he was, I think, on the board.

They paid the hospital \$50,000 and they expected it would last a year. Well, it didn't last a year for him; it lasted three-and-a-half, four years, but it was still the same \$50,000.

Herman decided he needed some presumably bright young guys to help him get the facts and produce first drafts and that sort of thing. I was finishing up my project at the AMEX. I got a call from Paul Kolton, who was the COO with the AMEX and executive vice president. He said, "Come up and see me."

I was thinking, "Hmm, what is this? I'm going up to see God." He said, "We're very pleased with the work you've done, and we think you have a lot to offer this new BASIC thing. You'll go to work, if you're willing, for Herman Bevis for up to two years. You'll stay on our payroll, but you'll report to him. There'll be five others like you who have different types of expertise." There was one transfer agent person, one delivery person, one general management person. I was the technology person.

I went over to Herman Bevis. I can remember this like it was yesterday. It's one of those events, like Robert Frost, the fork in the road. I went into 60 Broad Street where Price Waterhouse had their offices. Herman was there in a small room by himself, a nice, courtly southern gentleman who grew up poor in Alabama, went to, I think, East Tennessee College, modest. But somehow or other, Price Waterhouse thought he was worthy to go to Harvard B school. They sent him there. I think he took an instant liking to me, but he wasn't sure. He didn't want any surprises. This was going to be a very visible assignment.

We chatted a little bit, and then he said, “Bill, this is going to be something the media is going to follow. There are going to be some people who will try to oppose us. I want to make sure that there are no surprises, and there’s nothing in your background that would embarrass us.” So I’m thinking, does he think I could be a child molester or something? (Laughter.) He said, “Can you think of anything that might be a problem?” I said “I really can’t, Mr. Bevis.” It was Mr. Bevis at that point. I said, “But you should know that my experience is in the front end of the business at taking orders in, getting those orders executed. Your effort is going to be about the stock certificate and streamlining the back end.” I said, “Mr. Bevis, to tell you the truth, when it comes to certificates, I don’t know the difference between a stock and a bond.” He said, “You’re just the guy I want.” (Laughter.) We were off to the races at that point. It was love at first sight, and I had the privilege of working for him for two-and-a-half solid years and then on and off for another eighteen months.

Paul Kolton had told me that going to work for Herman Bevis would be like getting a master’s in the securities business, as he was trying to encourage me to do this. When BASIC finally went out of business, that was driven by Herman. Herman said, “There’s no reason for a committee to stay in business once it has achieved its objective. It should go out of business.” We had a little get-together of the BASIC members, and some of the task force people still left. I was the recording secretary, and I asked, “Can I say something for the staff?” I described Paul Kolton saying I’d get my master’s degree. I said, “What Paul left out was that working for Herman Bevis was like getting your Ph.D., not just in the securities industry, but also in how to live your life.”

He was such an extraordinary gentleman. He met with some of the most junior people, clerks in back offices, and you'd never know that he was anybody special. He could talk to Richard Nixon and with the same comfort, and so he taught me that. It was a question of respect, respect for your fellow human being. I just can't say enough good things about that experience. But we have to move on.

JS: Right. Sounds like a great learning opportunity. One of the first big issues that you all had to decide was what to do about the stock certificate. What were your options and how did you all make that decision?

BJ: The two major options that were being pushed by the industry were to take CCS away from the stock exchange. Buy out the stock exchange for their investment in it and make it a cooperative owned and controlled by the users, all the users, including the banks. The banks said, "We're not going to put our securities into this thing unless we have a voice in the board of directors and in the management." That was the main direction that Herman pushed for, testifying before Congress and giving Congress progress reports and so forth. The Stock Exchange was sort of pushed into this thing somewhat reluctantly.

I wouldn't have said this ten years ago, but now it's ancient history. They didn't want to give up this crown jewel. They saw this thing as a potential huge profit maker. But the political pressure was there. So under Herman's guidance and direction, they finally agreed to the plan to spin it off, make it into The Depository Trust Company, a

cooperative, New York State limited purpose trust company, and a member of the Federal Reserve. I think it was the first limited purpose trust company that the Fed took in.

JS: Explain to me really quickly why they thought that it was such a big potential moneymaker. Was it because there was just so much volume?

BJ: That's right. And it was really the answer to paperwork problems and the costs associated with the physical certificate processing. During my time with DTC, one of the first things I did in 1974 was to work with some brokers to find out what does it cost to process a receipt of physical certificates compared to what does it cost to take in a book entry delivery?

A physical receipt back then, in those dollars, 1974 dollars, was typically ten to fifteen dollars when you take all the costs and the errors and rejects and the whole nine yards, and distribute it over the number of units, whereas a book entry delivery was less than a tenth of that. The Stock Exchange didn't know those numbers, but they had a gut feel for the value-added of this thing, and that over the long term, five, ten years, it would be a moneymaker for the Stock Exchange measured in the tens of millions of dollars a year or maybe more.

JS: At a very early date, BASIC recommended against eliminating the stock certificate altogether. They came upon this solution of immobilization.

BJ: Right.

JS: But at the same time, there were a number of voices on the Street and in the SEC and even at the Federal Reserve who were encouraging the elimination of the stock certificate. Was there any debate about that within BASIC, or was it pretty clear from the beginning that immobilization was the solution?

BJ: The debate lasted for about fifteen seconds, and it was driven by strong feelings coming out of Congress that there were too many Americans who wanted to have their physical stock certificate. If we try to legislate it out of business, you're going to have a lot of angry voters. So don't do it. That went from Congress to the SEC to BASIC. It was decided that way, and that took a very short period of time.

JS: Was BASIC ever directly in touch with Congress or was it usually through the SEC?

BJ: It was directly in touch with Congress. Herman met probably somewhere between ten and twenty times with congressional leaders of both houses. John Moss of Sacramento, California was sort of the point man for Congress on this. Herman testified in front of his committee. Herman was a cool cookie and, being a humble country boy, was able to meet them on their own turf, and he just won them over. He listened very well, and the listening involved getting to keep the stock certificate.

Now there was, however, a very emotional and sometimes angry group of brokers who believed in the punch card stock certificate. There were a number of vendors who developed a certificate, engraved certificate. You know what engraving is? You crush the ink into the paper. One was Federated Bank Note Company. It was a British company, and it produced a stock certificate with an engraving of Churchill on it. A punch card, this was. Everybody saluted this thing. Everybody from the brokerage side saluted this and said, "Isn't this wonderful?" Even some of those people on the BASIC task force, including me, said, "Maybe we should go down this path as well, in case something goes wrong and CCS gets derailed, and we'll have this as backup."

Wise old John Meyer from Morgan said, "How do we know that this punch card certificate will really behave like a punch card, because you're crushing it and putting ink into it and so forth." A broker said, "No, he's just an old fart. He's in the way." He called me and said, "Bill, I want you to do tests. You're the technologist on the task force. Why don't you do a test of those Federated Bank Note company punch card stock certificates?" So I got a bunch of certificates from Federated. When I say a bunch, it was maybe 2,000 or 3,000. They had been stored in an ordinary office environment, no special humidity control or anything, just the way you would store punch cards. I got these certificates, and I took them to the back office of the leading proponent of the punch card stock certificate, a fellow named Jay Peake of Shields and Company, Junius W. Peake, very bright guy.

I said, "I want to put this through your machines." Peake had one of the most modern back offices from the perspective of equipment. He said, "Okay, I'm going to take you over there." He was one of these hands-on guys. He said, "Give me some of these certificates, these punch cards." He had a Honeywell high-speed card reader that would read 3,000 cards a minute. It's hard to believe. It had an open belt, and the cards would come down a stack and then go on the belt and be carried across through a photocell reader. He put the cards in, and the cards would go across the belt, and they would never get to the photocell. They'd fly across the room.

He said, "What's going on here?" He picked up the cards and stacked them again and so forth. This happened repeatedly. Coincidentally, the Honeywell maintenance man was on-site at the time, and Peake said, "Your machine is out of order. It's throwing these cards out." The Honeywell man said, "No, I've looked at all the equipment. It's perfectly in tune." He said, "Let me see the card. This card has got a bulge in it." The bulge came from the intaglio printing press pushing the ink in. That made it follow Bernoulli's Principle that led to the airplane wing. So we had these little airplane wings flying all over Peake's back office.

Peake said to me, "This is terrible. This shouldn't have happened. You're not going to tell Herman Bevis about this, are you?" (Laughter.) I said with sing-song inflection, "No, Jay." That quickly got back. There was a big meeting of a lot of brokers at the Clearing House, maybe fifty brokers, and I gave a report. Jay was sitting in a front seat, and he knew I was coming. I reported how the test had gone and that it was an

unmitigated disaster. We had tried similar experiments in punch card punchers, IBM standard, the 026 card punch machines. The cards got jammed in every case.

So what had happened was the crushing of the fibers in the card made it a non-punch card, made it something different. We gave it to IBM. IBM put it through their labs and concluded that it was not a punch card and it never would be. That was the end. It was a famous story that not many people remember – on purpose. (Laughter.) But it's a fun story for me, being in the middle of it.

JS: What other projects was BASIC working on at this time? For instance, there was the imposition of uniform forms for communication between banks and brokers.

BJ: Right.

JS: Maybe you can tell me about that.

BJ: Yes. Each broker, each bank had their own unique forms, different shapes, different sizes. They thought their forms were the best ever designed, each of them. A similar story to Peake's. I had to go to visit one of the leading proponents of having uniform forms based on their forms. This fellow was a head cashier for a big brokerage house, which I think was Dean Witter. In any event, he had a handful of these forms, delivering instruction forms, in his hand. He said, "See, each one is different, and I can see right

away, here's one that sticks out. It's orange. If I want to get that one, it's from Shields, I can just pull it. I can pull it out."

As he pulls it out, all the forms go all over the floor. (Laughter.) He said, "Well, that doesn't happen all the time." That was a big boost. The biggest brokers got behind the idea of a uniform form, and we wound up, with the help of forms design people, designing four uniform forms that were the most commonly used forms. BASIC had no authority itself, but it could recommend to the regulators that the regulators require their member firms and in the case of the banks, the members of the Clearing House, that they use those forms. That's how BASIC imposed them.

In fact, I can remember – it was Walter Wriston again. He said, "I understand there's a lot of complaining about how maybe the form is too big, is too small." This was at a BASIC meeting, "If we can't agree on putting the date on the upper right hand corner and the money in the lower right hand corner, if we can't make that simple thing happen, how is anybody going to take us seriously when it comes to something like the depository?" Everybody saluted, and his homespun wisdom carried the day. So that was uniform forms. Then it was the automated transfer instructions.

JS: Tell me about that.

BJ: A brief on that. When a retail customer wants to take physical possession of their certificate, what happens is a broker will put an instruction into the transfer agent, usually

a big bank. That instruction has a certificate with it, the certificate typically in the name of the broker. They want to transfer it into the name of James Stocker, and it goes to the transfer agent. It's been keyed by the broker on the way out. The transfer agent takes it in and re-keys it into his computer, then issues a certificate, gives it back to the broker. The broker mails it out to James.

It was so obvious that the answer was to agree on a set of standards, so that the output from the broker would be in the same standard communications format as the input to the transfer agent. The transfer agent takes it in, reads it directly into his system, saves anywhere from fifty to seventy-five, maybe a hundred clerks keying all this stuff in, and making mistakes when they are keying it.

JS: Sounds simple, in retrospect.

BJ: It was obvious to somebody with a systems background to say, "Why don't we do this?" Many other people investigated it and concluded, "Let's do it." There's always the recalcitrant who says, "I'm not going to convert to a standard format, so leave me out of it." Then DTC stepped up to the plate and said, "What we will do is take all these instructions from the broker, and we will format them for you transfer agents." Then the transfer agents said, "Okay, as long as you'll handle the conversion."

JS: Because you are saving them the effort of doing that.

BJ: Yes, saving them the effort in the programming.

JS: And the cost.

BJ: And the cost. The operations people at the time, too many of them were not far-seeing, and couldn't see that down the end of the road, five years out that this thing is going to save us a lot of money. They had a short-term view of what the future was, so convincing them took a lot. Gradually, it was such a good idea that enough people signed on, and it became a great success and is the way it's done today. In fact, when the transfer agent is finished issuing the certificate, he doesn't send it back to the broker. He mails it directly to the customer and sends the broker a message, saying, "I mailed it on such and such a date to such and such a customer," which is more effective, obviously.

JS: When did BASIC wrap up its job, and how did you go from there to the DTC?

BJ: BASIC wrapped up its efforts in 1974. DTC had been formed. It had been incorporated as a bank. It had its own board of directors. It had a planning department. Herman said, "From now on, the planning for things like uniform forms and so forth can be done by the depository. We should go out of business. We've done our job." I was the recording secretary. Earlier, I'd gone back to the American Stock Exchange, but still worked part time for Herman, including being the recording secretary for the BASIC meetings.

When the next to the last BASIC meeting was over, I left the room and Bill Dentzer, who was the chairman and CEO of DTC at the time, followed me out. He said, “Why don’t you come to work for us? You can work for me 49 percent of the time. It will be a great experience, and you’ll have a lot of fun. But I need an answer soon, because we’re looking at other people.”

I thought for about ten seconds, and I’m thinking, yes, but he’s off by 2 percent.

(Laughter.) So next day, I called him. I said, “Remember, you said 49 percent. Can you make that 51?” Dentzer’s a sharp cookie. He understood. Then he said, “Yes, I think we can do that.” I went to work for him. He was my primary report. I was there doing marketing and getting the banks to come in to the system on a voluntary basis.

JS: What was your job title there at that point?

BJ: Vice president, Participant Services. It was basically marketing and sales. I had a small team of maybe, I guess at the peak, about fifteen people.

JS: Was it difficult to convince people to participate in the system?

BJ: Absolutely. A lot of banks, especially trust bankers, are used to dealing with little old people who come into from time to time to the bank, people who are immensely wealthy and want to feel their stock certificates. The idea that we’re not going to have them for you anymore; we’re going to give them to this thing in New York was a tough sell for the

trust bankers. Therefore it was a tough sell for us. But in the course of several years, we managed to get that to grow a little bit at a time with good examples given by some of the more progressive banks.

JS: From the beginning, was DTC actually holding the physical stock certificates themselves?

BJ: Yes.

JS: Did they have to get an office or something like that or a vault?

BJ: We had a huge vault and, in fact, a little bit ahead of the story, but later on in the eighties when we took on custody for bearer bonds, namely, municipal bearer bonds, over a million different issues, we built the largest vault in the world. It was out in a Grumman site at Roosevelt Field, which is now mainly a Macy's. It was 60,000 square feet. That's a lot of space, of R10, which is the top rated, from a security standpoint, and three-foot concrete walls and all that kind of stuff, because we had hundreds of billions of dollars of bearer bonds in it.

JS: Which could be redeemed for cash.

BJ: Which can be redeemed for cash, but there's a misunderstanding on the part of the vast majority of people. That is that when a bearer bond is surrendered or one of the coupons

from the bond is surrendered, the bond and the coupon have a unique number. When the paying agent takes it in and he's got to pay out on it, he checks that number against a stop file to see if somebody might have reported it stolen. That was not well known, and to this day it's not well known, but now there's hardly any bearer bonds left anyway. Congress ruled those out, because there was a lot of money laundering going on.

JS: Let's go back to the 1970s. This is before you got the big vault. You're still working with the little vault. How did you convince all this banks and trusts to turn over their certificates to you?

BJ: There was a lot of pressure from the brokers. "We want you to take book entry delivery from us brokers, and once you try it, you're going to like it. It's so efficient and it's so safe." Then one of the big holdouts in this whole story was, of all banks, David Rockefeller's bank, Chase. There was a senior executive there at the time who was very skeptical of the safety of DTC. He had been told by his staff, "What happens if, somehow or other, DTC is penetrated, either from the bookkeeping system or from the physical assets? We'll be out of luck. If we have our securities in there, what happens then?"

The answer was, Chase could be penetrated. If it were all alone and not in the system, it would have to face its insurance companies and its customers all alone. If it's in this massive industry cooperative, it's in there with everybody else. It's in there with Morgan and Citibank and Merrill Lynch and every big bank and broker in the country. "We're all

in this together.” That carried the day, from a safety standpoint. The little old people who wanted to feel their certificates were still a problem, but gradually they were worn down and they were told this had to happen.

JS: At the beginning, when you talk about a book entry system, was that a computer data bank or was it pen and ink?

BJ: It was all computers from the start.

JS: Did you have backup systems in place?

BJ: We had the most sophisticated backup systems you could imagine. As time went on, and we grew and the stakes became greater, and the oversight from the SEC and the Fed became greater, we introduced additional backup, hot standby. We installed a backup site as far away as computer-to-computer technology would permit. We went through a tremendous analysis of the site. We wanted to make sure that if there were ever a tsunami in the New York area, it would not reach this backup site as well as our main site. All of those kinds of things were done. Later, in the late eighties and into the nineties, we decided to put a backup site in a secret location in the Southeast, and another one in the Southwest. The exact location, even I don't know.

JS: So only a few of the tech people knew that?

BJ: Well, the top executives at the time, but once I retired I was cut off from that – as I should have been – cut off from that knowledge. It was a need-to-know kind of thing. If you didn't have a need to know, we're not going to tell you.

JS: Maybe I can convince Bill Dentzer to tell me. (Laughter.) Probably not.

BJ: He was gone. Yes, he wouldn't tell you because, number one, he wouldn't do it, and number two, he was too long gone by that time. There was also pressure from the Fed. The Fed wanted to make sure that we were bulletproof. That was a big driving force behind that dispersion of our assets. Each of those backup locations was a mirror image and a semi-hot standby, meaning they were maybe half-an-hour to an hour behind the main system.

JS: Did the creation of the DTC and the initiation of this book entry system have any impact on trading patterns?

BJ: Yes. The trading that you see now could not possibly have been done with physical certificates, from two perspectives. Number one is the stock loan business, which has grown exponentially over the years. The second is simply going from twenty million shares a day back then when CCS was new – that was a big day, twenty million shares – to two, three, four billion shares a day now. And there are days when you have double settlement, because you have two trading days, settling on the same settlement day. So you can have six or even eight billion shares traded, now being settled.

JS: I saw some articles that suggested that it also increased odd lot trading, so trading groups of smaller numbers of shares, because it reduced costs.

BJ: I think that's a fair statement. It's not at the top of the menu, but it's a fair statement.

There's one thing. I don't know how much time you want to spend, but one of the more interesting things that happened on my watch, when I was executive vice president of operations is we had a strike.

JS: What year did you become executive vice president of operations?

BJ: '86, '87, somewhere in there. A union strike was one of our perceived Achilles heels.

JS: DTC's employees were unionized from the beginning, right?

BJ: Yes. It was a carryover from the New York Stock Exchange, the Office and Professional Employees International Union, an affiliate of the AFL/CIO. They accounted for about, at one time, maybe 50 to 60 percent of our total employee head count. They were the ones who were actually physically handling the certificates. Importantly, a few of the jobs running the computers were also unionized.

JS: But not all of them.

BJ: Not all of them. Through some very nuanced measures and good human relations with the union, we managed to get the computer people out of the union. That was probably mid-eighties, because we could not have the computer systems interrupted. The physical handling of certificates could be slowed down or whatever.

JS: But you were still somewhat vulnerable to a strike.

BJ: Somewhat vulnerable, and some of the biggest users said, “We’re afraid to put our securities into DTC, because we might not be able to get them out because of a strike.” We didn’t have an answer to that, other than, “We’ve never had a strike and we’re never going to have a strike. Don’t worry about it.”

JS: But eventually there was a strike.

BJ: Eventually there was a strike. It’s interesting human dynamics within a union. The employees who are older and can see their retirement soon, their pension soon, are the most militant. They don’t care if the company suffers a staggering blow, because they’re going to retire. They’re okay. But the young people who had a long career ahead of them, they had well-paying jobs, wanted DTC to be strong and be around for a long time. You had that intra-union problem, inter-generational, and this is true with all unions. With GM, we saw it in a big way. Anyway, the militants were disproportionately the old people, and they had a strike vote. We thought that the strike vote would be that they

wouldn't strike. We got ready, though, just in case. We cross-trained all our employees, the non-union employees. We got hundreds of volunteers from participants, all on the QT. They didn't want their names used so we had secret lists of who these people were going to be. So we thought we were in pretty good shape. It was a Friday night, rainy Friday night. They had the vote, and the young people had families. They wanted to go home to their kids, so they didn't go to the union hall. The old, grumpy people went to the union hall. It was a close vote for a strike, and the strike was to take place that Monday morning.

We had two days to prepare for it, and all our preparation that had been done earlier, including getting the volunteers from participants, who incidentally, did not want the union to look good, because then their own employees would say, "Hey, look what they got out of DTC. Maybe we should have a union at Chase."

JS: So what did you do after that weekend? You got on the phone and you talked to all these participants?

BJ: Talked to all these people, all these participants. They had been pre-trained, pre-alerted, including people from out of town, out-of-town banks and brokers, who viewed it as a lark, going to come in and stay at a hotel, do some microfilming certificates and bundling them up. Then go home to the hotel, have a nice dinner, and go out and go to a Broadway show, and DTC's going to pay for all of this. Hey, that's not a bad deal. We got many dozens of people who answered the call that way. Several hundred answered the call

from local participants. Most importantly, about a third of our best employees, especially the younger ones, said, “I’m going to cross the picket line.”

There were threats and tires slashed and all this kind of stuff, and the strike lasted for two weeks. Every day, the quality of our product improved, and every day, more of the union members crossed the picket line. By the fourteenth day, more than 50 percent of the union members were now coming to work, and the union ran up the white flag. What management does in that case is it makes it clear, for appearance purposes, that the union got a good deal. Don’t rub their noses in it, because you have to deal with these people in the future. So everybody came away happy.

It’s worth noting that this happened a few years after Ronald Reagan’s firing the air traffic controllers. I can tell you, as a senior executive of a union shop, that that so electrified senior executives, it gave them so much spine. The president of the United States set an example. He was willing to risk the entire air traffic system, shut it down if necessary for a principle. It gave our department heads tremendous courage.

JS: Good story. What was going on with the regional banks at this time? Let’s switch gears a little bit.

BJ: The regional banks used to clear their transactions through the New York Clearing House banks. You’d have even a big regional bank like Mellon, the fifth largest trust bank in the country, that would clear their trades through Bankers Trust. Bankers Trust was

handsomely rewarded for that work. Bankers Trust also would make Mellon pay up front in good, same day funds for a receipt. When there was a delivery by Mellon through Bankers Trust, Bankers Trust would give Mellon next day funds. So they spread there, and it used to just gnaw at the regional banks all across the country. So DTC comes along, and suddenly it makes it easy for regional banks to come into DTC as direct users, bypassing the New York banks.

By the way, DTC has this thing called the Participant Terminal System. So there's a terminal now in Mellon, and Mellon can make its own book entry deliveries. Bankers Trust says, "Hey, wait a minute. This isn't such a good idea." That led to eyeball-to-eyeball confrontations that we finally, in DTC, won, because the top people in those banks had made a commitment to Congress that they would not pull out. So politics carried the day. But that was many, many months, several years of tension in a relationship between the Clearing House banks and DTC staff, including me. (Laughter.) I was the bank's bad boy for several years in that area.

JS: Was this after you became the president?

BJ: Oh, no. This was when I was vice president and senior vice president. By the time I became executive vice president, the battle had been won.

JS: That was in 1991 that you became executive vice president.

BJ: No. I became president in '91, replacing Conrad Ahrens, beginning of '91.

JS: What was going on at DTC at this point in time when you became executive vice president?

BJ: DTC had pretty much grown up. We had virtually all of the big banks in the country, no matter where they were located, as direct participants. Our computers had become robust and foolproof. We had constant testing. We hired consultants, some of the best hackers in the country to come in to try and penetrate it.

JS: You would recruit hackers to come to try to break into your system?

BJ: Yes. We would recruit them carefully, because we didn't want them to learn too much about the system, because they might do some bad stuff to us later on. But with the cooperation of some of our major participants – Ed Goldberg at Merrill Lynch, he's now retired, but I was a tremendous fan of his and he was a fan of mine. He was tremendously helpful in having his people do penetration kinds of analyses in working with us. The answer was an obvious answer; we had to be bulletproof.

JS: You had to be a Fort Knox.

BJ: Yes. If somebody got in there and started stealing stuff, the whole idea would become suspect.

JS: Around this time, the SEC was pushing for a faster settlement period of trades, for a three-day settlement period. Is that correct?

BJ: That's correct.

JS: How did the DTC react to that?

BJ: It reacted poorly at first. Bill Dentzer was not a fan of T+3. When he retired, his replacement was a fan, and I knew we could do it.

JS: What was the objection early on in the early nineties?

BJ: Bill felt that the system was working well, and that there was no need for it. To shorten the settlement cycle could introduce additional risk and errors. You didn't have extra time to resolve errors. Some bad transactions would get into the system, not foul up the whole system, but those transactions could affect other transactions going through the system.

JS: What was the argument for a faster settlement? What would that have helped?

BJ: One of the SEC commissioners, his name escapes me now, gave a speech in 1993 or '4. He had been with Alex. Brown, and he gave a speech to some huge assemblage. One of

his catchy points was, “Nothing good can happen between trade day and settlement day.”

The more you think about it, the more that is a profound statement about risk management in the securities business. If you have a trade, and then something happens to that security, the price drops in the second or third day, the person who bought it says, “I didn’t buy that from you. Don’t deliver that to me.” The more time between trade and settlement, the more the opportunity for that kind of thing to happen.

JS: So there’s more a concern about what could potentially happen, rather than what had happened.

BJ: Right. It was a time when there was a tremendous amount of focus on risk management. *Risk and Other Four Letter Words* was a book, I think, written by Walter Wriston.

JS: There were some other settlement issues going on, also, right, from next day funds settlement to same day funds settlement?

BJ: That’s correct.

JS: That was also an issue that you tackled during your chairmanship?

BJ: Yes. Bill did not want to do that. I should let him speak for himself, and he’s already spoken, I guess.

JS: No. I'll talk to him next week.

BJ: He can speak for himself about his reasoning. He did not believe in it, and when he retired the pressure continued to mount, and I felt comfortable with it. It was a tremendous conversion effort.

JS: What was involved in that? What sort of technical processes or other processes?

BJ: The settlement of the funds was purely by New York Clearing House check, no matter who the participant was. Mellon Bank in Pittsburgh had to have a New York Clearing House bank present a check for us or pick up a draft from us. That was pretty idiot proof, and because of five-day settlement, you had extra time to make sure you had the money all lined up and so forth. The industry, though, was moving away from checks and drafts and toward electronic funds settlement, using the Federal Reserve wire.

It's called Fed funds settlement or same day funds settlement. It was much more efficient. It reduced our head count, because we had many people taking in these checks, many hundreds including drafts every day, and making sure they were endorsed right and so forth, and then getting them to the bank. Once we went to same day funds, it was done automatically by the Fed, untouched by human hands.

JS: Another major issue that was going on during this period was the gradual absorption of the smaller regional depositories. Let's go back in time just a little bit, and maybe you

can tell me about these regional depositories. Did they arise about the same time as the DTC?

BJ: Soon after CCS and before DTC. There was a belief on the part of the regional exchanges, Chicago, San Francisco, Boston, Philadelphia, that if you're going to run with the big dogs, you have to have a full product line. So there are these people that all go to Harvard and learned about vertical integration and all this stuff, and concluded that we, as a modern exchange, have to have a modern depository to settle our transactions. The only problem with that is depositories cost a lot of money to develop and operate, especially backup sites and all of this. If you don't have a substantial number of transactions going through it to pay for all of that, you got a loser on your hands.

It took a long time for them to realize that. They thought they could fight it. Maybe DTC would have a misstep, and these regional banks in our area like California here, and Wells Fargo and Bank of America will join us in the Pacific Stock Exchange Depository. We did not make any missteps, but we learned to be very careful not to have too much of a siren song to these banks, such that the depository in San Francisco would say that we were practicing predatory, monopolistic practices. So when we dealt with them, we dealt very gingerly. We said, "If you'd like to come with us, that's fine. If you want to stay with your local depository, that's fine. We'll help you do that, whatever you want." We had the most non-marketing marketing plan for those kinds of people, as you can imagine.

JS: You were worried about being seen as a monopoly.

BJ: Monopoly, and then the Justice Department would come down on us. As I said, over time it became self-evident that they just did not have the business to support all the costs associated with a depository. So in all cases – almost all – they came to us and said, “Would you like to buy us out?”

JS: So they came to you all?

BJ: Yes. They came to us, and we said, “How much money do you want?” “Well, we want twenty-five million bucks.” The board spent a lot of time on it, because this was clearly a board issue. We wound up paying each of them a substantial amount of money, typically in the tens of millions of dollars. We got their business, which didn’t pay, didn’t amortize the outlay we had, but politically, it was the right thing to do for the industry, and everybody came away happy.

JS: Also during this period, the DTC began working with Thomson on some different products, like an electronic trade confirmation system. Why was that, and why was DTC interested in cooperating with a private group?

BJ: The system that we had developed initially went back to 1973. It was called the Institutional Delivery System, also known as ID, creatively. Are you aware of what it did? It took a confirmation from a broker electronically, put it through DTC, and since

we had this electronic network, we could get it out to the bank and the institutional investor very efficiently. They would come back and say, “Yes, we know that. We know that confirmation.”

JS: So each one had a terminal and –

BJ: Each one had a terminal. Things that used to be done by facsimile and by mail were now done by electronic communications that took minutes instead of days. It worked very well. It gradually grew, slower than we would have liked, and then in roughly 1980 some of the big brokers said, “Let’s make this mandatory.”

They got a rule passed by the stock exchanges to require their member firms to use ID to confirm all institutional trades. If the institution didn’t want to be part of this system, it would lose the COD privilege, and would have to settle the way a retail customer does. The SEC approved that. Full page ads announcing it went out in the *Wall Street Journal*. In fact, I think there’s a couple of them in that book, telling everybody this is going on and get ready for it.

It fell on DTC’s shoulders to train the industry in the new procedures and how it would work. So we had a task force of about forty people working for about a year-and-a-half, going to every single institutional investor in the United States, and training them in how to interface with us on this system. Now, Thomson had about that time a desire to get into the business. It was a lot of the institutional investors with their customers for other

purposes, and they saw an opportunity to compete. They said DTC is big and fat and bureaucratic and sluggish. They called us every name under the sun, all untrue. But they gave it a run, and finally, after years of back and forth, the brokers said, “Let’s put these two systems together. DTC, it’s not critical to your future.” DTC spun off the ID system, and Thompson spun off their version of it. It became something called Omgeo, and Omgeo became a for-profit company.

JS: Let’s talk a little bit about preparation for the DTCC merger in 1999. I know this didn’t happen on your watch, but there was a little bit of preparation for it, wasn’t there?

BJ: The preparation consisted mainly of improving the systems relationships between our two companies so that we would have efficient handoffs of broker-to-broker trades, which were compared by NSCC. Then they would hand those off, computer-to-computer, to DTC to make the debits and credits. We constantly refined that, so that by early 1999 into late 1999, it became clear that there wasn’t any need for two separate companies. Jill Considine, who I spoke to had said, “Have you contacted – ” I don’t think you had at that time. She said, “I’ve got amnesia of a lot of that stuff, but I’d be glad to talk to James.” She did a masterful job of putting the two companies together in a way that NSCC, which was much smaller – tiny – in size compared to DTC, didn’t feel like it was steamrolled. They came out reasonably happy, and she handled that very well. That was late 1999 or early 2000.

JS: So that was just after you left in 1998.

BJ: Yes, when I left, the beginning of 1999.

JS: You left at the beginning of 1999.

BJ: Right.

JS: That was because you reached the mandatory retirement age or were you –

BJ: No. I had always felt that the 24/7 job that I had was just too much, and I wanted to spend more time with my family. I was into my early sixties and we did a search.

JS: Tell me about the search.

BJ: First, there was some displeasure on the part of some directors, asking me to stay around. Finally, they understood. Some of them were retiring early too, so they said, “Okay. We’ll do a search, and we’re going to call it a selection committee of the board. We’re going to select your replacement.” I was on the committee, and we had about fifteen different industry executives who wanted to run their own system, be the CEO of an important company, thought it ought to be a lot of fun.

Their interviews, in some cases, were good. None were outstanding. About halfway through this process, Jill Considine, who was on the board by virtue of her ex-officio

capacity as president of the New York Clearing House, she said, “I think I’d like to throw my hat into this ring.” Jill has a sparkling personality. She’s sharp as a tack and has got such a command presence, and she’s fun, and she’s a woman. She has all these great things going for her.

JS: Which would have been a new thing for a chief executive –

BJ: Right, in Wall Street, yes. In Wall Street, there are very, very few.

JS: At that time.

BJ: She hit the hide off the ball in talking to the committee, and it was unanimous. Once she threw her hat in, the rest of it was a no-brainer. The thing that I remember most clearly is once it was decided – I was still the chairman, CEO. She came from the banks, the banking side of the business. I was fearful that some of the brokers might resist her as an alien invasion. I took her around to breakfast, a number of the big brokers, and one of them was DLJ. We had a long and happy relationship with DLJ. Dick Pechter was on our board, senior executive, if I remember, many years. We had this breakfast at their executive dining room, and there was maybe ten of them and two of us, Jill and me.

It was lighthearted stuff. Toward the end, Gates Hawn, who I think was the president of DLJ’s Pershing division at the time, said, “Jill, now that you’re CEO of DTC, how do you want us to refer to you? We wouldn’t call you Madame CEO. Shall we call you

Chairman or Chair or Chairwoman or Chairperson?” She said, “Ever since I was a little girl, I hoped that some day I would be the chairman of the board of an important company. Now that I’ve achieved that, do you think I’m going to change the title?” (Laughter.) It brought down the house. It was so ingratiating and so much fun that she won the hearts and the minds of the brokers that way. She’s a great asset for us, did a great job.

JS: Bill, since your retirement, you’ve worked on a number of interesting projects. One of them was the Iraq Capital Markets Project, which you started on in 2003. Would you mind telling me about that?

BJ: Sure. This study was arranged by the Financial Services Volunteer Corps, an organization that was designed to tap the expertise of, typically, retirees, senior executive retirees, in doing good things for developing countries. Iraq had been pacified temporarily at that point, and L. Paul Bremer was the, in my words, Lord High Commissioner for Iraq, sort of a John McCloy or Douglas McArthur. He wanted to have FSVC come in and design a modern capital markets system, especially a stock exchange and clearance and settlement system.

JS: Did Iraq have anything like that before this?

BJ: What they had was a big blackboard and chalk. They put up quotes, and brokers would come in and say, “I’m going to buy one of those, Baghdad Sparkling Water Company,” a

real company, in fact, maybe the biggest listed company on the exchange, I think it was roughly thirty, listed companies at the time. Then the transaction would take place, and the eraser would be used to put up a new quote. The paperwork would be very manual and very simple. Checks or cash would be handed back and forth, and certificates would be given out. Certificates were really not engraved certificates as we know them, but they were more like promissory notes in appearance. It worked fine, but wasn't good enough for the Americans.

So I was one of a small group of four or five people, including a fellow from the SEC whose name escapes me at the moment. He was director of foreign markets or something like that. I'm sure you can look that up. He was a good man. We went over there to give advice, but even getting there turned into a great big struggle between State and Defense. Even the idea of how we should fly from New York to Amman became an issue. I've got long, gangly legs. I don't fly well in coach. I said, "I'm going. I'm volunteering my time. I would get at least \$500 an hour. I'm saving you tens of thousands of dollars of my time. I'm going to fly business class."

I was told that it went to the Secretary level to make that decision, because consultants fly coach class. The government doesn't reimburse them for business class, but they're getting paid \$500 an hour. It was only two or three days before we were to go that that was finally settled. I bring that up just as an example of how bureaucratic and clumsy our government was.

JS: Tell me when you got involved in this project.

BJ: This was the summer of 2003.

JS: So the invasion had already happened.

BJ: The invasion, the country had been pacified temporarily. That's choosing that word carefully. That was before the insurrection started and all those mistakes that were made, and L. Paul Bremer had a big hand in those mistakes. We were flying Royal Jordanian to Amman, wonderful service. Then we were going to take a puddle jumper from Amman to Baghdad. It was one of these things that was going to dodge the rockets, which were starting to be used. So we'd make steep turns and all that kind of thing in getting into Baghdad. The day before we were to take the puddle jumper, there was a rocket attack on Paul Wolfowitz in the Al Rashid Hotel. They missed him by one floor. It entered the wrong floor, and obviously he survived.

Bremer panicked over the idea that we might fly into Baghdad. Here are these volunteer big shots from the United States. We all get killed; how will that look? So we stayed in Amman, and the Baghdad Stock Exchange people came to Amman, and met with us for about a week. It was mortifying that they had to come. We didn't have the courage to go and help them in their hour of distress. We came up with a solution, which was made for a modern system of thousands of issues with tens of thousands of trades a day, and it was ridiculous because it was overkill.

JS: You were encouraged to come up with that system?

BJ: We were encouraged to come up with that. Yes, what we should have been given is a blank piece of paper and told, “Design something. You know what’s needed. Interview these people and come up with a plan to meet their needs.” We were not given that opportunity. I went back to DTC using my connections. I’m retired now four years. DTC slapped together a system, cost about a million five; saw that they could run a DTC-like system for the Baghdad Stock Exchange on DTC’s computers with high-speed lines back and forth to Baghdad. So the terminals in Baghdad, in the Stock Exchange, would look as though they were connected to a local computer just down the hall.

About that time that that was all done, big disruption, big cost for DTC, the time ran out, and the Coalition Provisional Authority – I think it was June 6, 2004 – ran out and the Iraqis took over, and Bremer and company were history. The Iraqis said, “That’s a very nice plan you have. We’re going to put it on the shelf, and we’re going back to our own way of doing things.”

JS: So it was never truly implemented.

BJ: It was never implemented. In fact, the whole thing was so ineptly done, we couldn’t even get space to put the terminals in. You couldn’t get a decision out of the American authorities to get a hardened site protected against rockets and that kind of thing.

Couldn't make a decision, and it was a great experience of how inept we had become in Iraq, and it was a harbinger of what was to come soon thereafter.

JS: Bill, do you have any final thoughts, looking back over your career?

BJ: The greatest thing that ever happened to me in my career was my interview with Herman Bevis when he said, "You're just the man I want." From that point on, I understudied one of the greatest men I ever met. I take that back. I understudied the greatest man I ever met for two-and-a-half years, almost one on one. It was a tremendous education for me. I think it prepared me for the good stuff that happened to me later on. I hope that your effort with this SEC Historical Society is going to produce material that young people, especially young people, can learn from and use to help form their own lives and their own careers.

JS: Well, Bill Jaenike, thank you so much for taking time to talk with us.

BJ: My pleasure.

JS: I really appreciate it.

[End of Interview]