

Federal Reserve Board Oral History Project

Interview with

Marianne Emerson

Former Director, Division of Information Technology

Date: October 31, 2007

Location: Washington, D.C.

Interviewers: Lynn Fox and Maureen Hannan

Federal Reserve Board Oral History Project

In connection with the centennial anniversary of the Federal Reserve in 2013, the Board undertook an oral history project to collect personal recollections of a range of former Governors and senior staff members, including their background and education before working at the Board; important economic, monetary policy, and regulatory developments during their careers; and impressions of the institution's culture.

Following the interview, each participant was given the opportunity to edit and revise the transcript. In some cases, the Board staff also removed confidential FOMC and Board material in accordance with records retention and disposition schedules covering FOMC and Board records that were approved by the National Archives and Records Administration.

Note that the views of the participants and interviewers are their own and are not in any way approved or endorsed by the Board of Governors of the Federal Reserve System. Because the conversations are based on personal recollections, they may include misstatements and errors.

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MS. FOX. Today is Wednesday, October 31, 2007. This interview is part of the Oral History Project of the Board of Governors of the Federal Reserve System. We are interviewing Marianne Emerson, a former director of the Division of Information Technology at the Board of Governors. Ms. Emerson worked at the Board from 1982 to 2007. This interview is taking place at the Board in Washington, D.C. I am Lynn Fox of the Board staff, and I am joined by Maureen Hannan, also of the Board staff.

Ms. Emerson, thank you for participating in this oral history project. Could we begin with you saying who you are, where you're from, and how you came to work at the Board?

Background and Early Years at the Board

MS. EMERSON. My name is Marianne Emerson. I'm originally from Seattle, Washington. I went to school in Philadelphia and after that I came here to Washington, D.C. My first husband had worked here as an economist for five years, so when I was looking to move from a part-time position to a full-time position, he recommended that I come here. He gave my résumé to a manager here at the Board in the Division of Information Technology [at the time called the Division of Data Processing and then Information Resources Management], and that resulted in my coming here. That was the summer of 1982; I was hired as an information systems analyst and started here on August 2.

MS. FOX. What were your first impressions?

MS. EMERSON. It was a much larger organization than where I had worked before, which was FEMA (Federal Emergency Management Agency). I had worked at the University of Maryland as an application developer, then I had a classified position for a small firm doing work for the Pentagon, then FEMA, and then the Board. So I liked the fact that it was a pretty large department. I think there were 350 people around then, if I remember correctly. I had a lot

of room for career growth, and we were doing a lot of things. Also, for government offices, they were much nicer than the ones that I had at FEMA.

MS. FOX. Do you remember any interesting people that you knew early in your career?

MS. EMERSON. The man I worked for was much more family-oriented than the man I had worked for at FEMA, which was one of the reasons I had been thinking about leaving FEMA. On my second or third day on the job, he told me that he was going to take his official day off, which he didn't usually take, because he had to go and buy his four children shoes for school. My previous boss had no kids and could never understand how one of my two preschoolers could manage to get sick on a day that was my official work day; he was very inflexible. So I was impressed by my manager's flexibility.

MS. FOX. Were there many women in your division?

MS. EMERSON. About half of us in the Division of Information Technology were women. And when I was in graduate school at the University of Maryland getting a master's in computer science six years before, half of us were women. So that seemed normal to me.

MS. FOX. Did you interact with Board members early in your career?

MS. EMERSON. Not at all. The first project that I got involved in was an early records management project. We needed funding for the project and, as a result, my manager invited me to go to a closed Board meeting where the budget for this thing was going to be approved. He told me that he had worked at the Board for 10 or 15 years before he ever went to a Board meeting or got involved with the Governors themselves. So I was excited. I went into the room expecting a longer discussion, but the whole thing was over in two or three minutes. And in the course of it Chairman Paul A. Volcker held up a microfiche that was a part of our brand new

system, and he was joking about how he couldn't read the things that were on the microfiche. And then they said, "Approved," bang, and that was it.

MS. FOX. Who were your mentors and bosses?

MS. EMERSON. Richard "Dick" Manasseri, the man who hired me. He had an unusual position as a manager. Officially he was responsible for our databases, but, in fact, he managed application projects—ones like the records management project. He made me a project manager fairly early on. I came to the Board mid-career because my career in information technology started in 1968. I had already been a manager, but I took some time out, working part time, while I had young kids. He made me a project manager after about two or three months. Then there was a reorganization in which he was promoted to assistant director and I was appointed to be a manager of a small database function under him. That's my recollection.

I realized that function was kind of precarious, and I knew that IBM had, after all, started manufacturing personal computers in 1980. And in early 1985, the Board decided to have what they were calling an information center, which was a place that anybody could go to get information about how to use the equipment that they had on their desks. We were also responsible for putting in local area networks and for using desktop software. I competed with five other people for the job as manager. The assistant director in charge of it was Stephen R. "Steve" Malphrus, and Steve selected me. That was the beginning of my advancement at the Board. It was challenging. I had to write job descriptions for every member of the unit or section. I put in place service-level agreements. Steve had all these different ideas and I was the one who executed on his ideas. We put in the first local area network here. We did all these different things with different divisions.

Under Dick Manasseri, we had developed a model of how business worked here. The purpose was to align databases, which was unrealistic because the model expected that you were going to do databases from scratch rather than take existing ones. The project required interviewing people from every division at the Board, and so it gave me an unusual chance to meet people from all of the divisions. I used that information when I set up an advisory group on what kind of help was wanted from this information center. It turned into an advisory group that still exists today. It is called the Information Technology Advisory Group or ITAG for short.

Steve nominated me for a special achievement award one year after this information center went into place, and I was awarded in 1986. Steve has always been a strong supporter of mine. One could call him a mentor.

MS. FOX. Who was the director in those years?

MS. EMERSON. The director at that time was Charles L. "Chuck" Hampton. There was quite a bit of dissatisfaction among senior Board staff, and the divisions themselves, with the way Mr. Hampton was conducting information technology. I didn't see it very much. The only thing I saw was that I had an employee who was not performing what he needed to do. I tried to redo his performance appraisal after it had already been signed and done. I learned quickly one cannot do that. There was not a good process in place at the time to set up new expectations. Moreover, I didn't have support from the division director. So it was quite a time of turmoil. Mr. Hampton was moved out of his position and there was a year of not having anybody. Then a new director from the outside was moved in, a man named Allen E. Beutel.

The Board's Management of Information Technology

MS. FOX. Can you describe how the Board manages its technology investments and the extent that it has changed since the 1980s?

MS. EMERSON. At the Board, each division is given a certain budget for information technology. When I came to the Board, almost all of our applications ran on a mainframe. And we had more of a regulatory model. They had talked about charging the divisions for information technology services. And that started in 1987, which changed the culture of the Division of Information Technology quite a bit. Up until the early 1960s, we had been a part of the Division of Research and Statistics. Then we were spun off into the Division of Information Technology. During a period of turmoil, in the mid-1980s, the Research Division recaptured some 30 or 40 information technology professionals and pulled them back into their division. Each division could make its own technology decisions. IT was responsible for coordinating things and working things out among the divisions. We provide more support to smaller divisions that don't have their own support. It has always been a kind of back and forth between how much is done within the individual division and how much is done centrally.

MS. FOX. Can you recount, over the period that you've been here, the growth in the number of professionals working on information technology?

MS. EMERSON. I think our numbers have remained steady. They grew a little bit for a while, and then they decreased. One of the things about our chargeback system, where we bill the other divisions, is that it makes us competitive. It has meant that every time there's a vacancy, we have looked to see how to use that vacancy best so that we provide the best services for the most reasonable cost. I believe competition is good, so I have liked the fact that the other divisions have had their own information technology services and that we have had to compete with them to prove our own expertise. That has made us sharper as information technology professionals.

For example, when I came to the Division, I believe we had 15 to 18 secretaries. Today we have three. So we have refocused each of our professionals. When I came here, almost everybody had worked here 20 or 25 years, and there wasn't good discipline and good management as to how many people each section needed. As a result, people would ask for more and more people that they didn't necessarily need. They didn't necessarily have good discipline to make sure that each professional was really working up to their full capacity because your stature was increased the more people that you had.

My manager was a bit of an anomaly. He grew dissatisfied with the Board and left by 1987 or so, but, by and large, we had so little turnover that we had to be careful with each position for which we hired. We had a group of senior people, and then we had some very junior people. And there was this big dearth in the middle. That was one of the things that Maureen Hannan, the director subsequent to me, Richard C. "Dick" Stevens, the directors before me, Steve Malphrus, and I worked on—moving people around the division, finding ways to develop them professionally, hiring for ability to learn, and so on and so forth—to the point where I believe that Maureen and I have a very strong IT competency model that directs the way we hire people, the way we coach people, the way we measure people at the end of each year in the performance appraisal, and the way we promote people.

Becoming Division Director

MS. HANNAN. I am Maureen Hannan, current Director of Information Technology. Marianne, what was the path you took to become division director?

MS. EMERSON. I would say it was something that evolved with Steve Malphrus's support because Steve was always one level ahead of me. I am someone who has always worked hard to do the best I can at the current position that I have. I like to please people and I wanted

to please my customers when I was the manager of the Information Center. Steve was very satisfied with the work that I did and recommended me to our director, Allen Beutel, to become an assistant director. Mr. Beutel was looking to promote a couple of people and he told me that he wanted me to move out of the Information Center into the cost management function of the division, which was the least interesting work, by far. Mr. Beutel was big on running the division as if it was a private sector operation running at breaking even, if not at a profit, which was unrealistic. So he emphasized cost management, in addition to the things he was doing otherwise, to get the division to focus more on quality and having fewer production problems and things like that. So I agreed. He told me I would only need to be there for nine months, although I ended up being there for three years. I managed the people that purchased all the equipment, software, and services, and handled financial management. I did not like it at all because it was not information technology. However, for independence of duties, my function had these two people who were responsible for information security, and they managed all of our permissions on the mainframe. During this time period was the beginning of computer viruses; they would come in primarily on diskettes. As people used more and more PCs, we began to have more problems with information security, and so I got interested. It was the one technological aspect of my work, and I started learning more and more about it. So February 14, 1990 came along, and I was promoted. I became a Board officer, an assistant director, with that function under me. In addition, I was given these customer business representatives who, in my opinion, did the work that our managers should have done. We couldn't get the managers to do the job; we had these guys doing it. So that was kind of a challenge.

Not long after that, Mr. Beutel left the Board. He had not conducted himself with the best ethics. He knew that he was about to be indicted for a felony of soliciting work from a

contractor while he was with the Navy. He pled guilty to that felony, was fined some \$25,000 or so, and went back to where he came from in California. When he left, Steve Malphrus became the Division Director. Steve realized that we had way too top heavy a management structure and took either five or seven management layers out of the division. We weren't even a single division. We were in parts and pieces.

Steve also realized that there were three things on which we needed to focus. One was learning distributed computing because we had tensions in the division between the mainframe folks and the PC—or distributed—folks. I knew this well because, as the manager of the Information Center, I had a mainframe side and I had a PC side. I had continually worked, during my year and a half in that management position, to get everybody to work together. The second was to understand the customer's business, and the third one was training—learning more about technology. Steve brought courses in here.

We had semester training from American University because, at the time, 20 percent of our employees did not have a college education. There were people who'd been in the military who had shown an aptitude for logical thinking and had done well in the mainframe days, but they didn't have the knowledge that you learn when you go to college. We still have a number of successful professionals who have not gone to college, but the number is far smaller. And they're the exception. They were thus struggling to learn distributed computing.

MS. HANNAN. To clarify, Mr. Beutel was indicted over an issue in prior employment?

MS. EMERSON. Correct. It was not during his Board employment. He was indicted for some work he had done when he was at the Department of the Navy. It caught up with him after he got to the Board.

MS. HANNAN. And might you share any memory of how that period felt as an employee?

MS. EMERSON. It was a difficult period. I was somebody who always worked to please the person that I worked for, but Mr. Beutel was a difficult person to please because he had very strong ideas about things. He didn't listen as well to the people who worked for him as he might. He brought in a computer-aided design tool that wasn't necessarily the best. He emphasized cost management, as I had mentioned, over other things. He did do some good work for the division in turning the division around, making it more responsive to its customers. All that took a lot of work, but he was very dictatorial in what he did and a lot of people resented it. He brought in a quality management program that people made fun of.

After Steve Malphrus became director, he modified a number of the things that Allen Beutel had started and then ran with them over the next 10 years. In addition to the flattening—which made a huge difference because Steve then put the responsibility for communication with our customers on the managers—as well as emphasizing that the managers learn more about the business of the customers, we were aided by having a strong statistical data collection function that we call Statistical Services.

The Statistical Services people are not IT professionals. They were financial analysts with backgrounds in economics, business, and accounting, and they understood the customers better than the IT professionals did. Maureen, was that while Steve was director or was it when Dick Stevens was director that we started putting the Statistical Services people and the IT professionals together in the same section?

MS. HANNAN. We started that when Steve was still the division director. I was a manager reporting to Dick at the time. Dick was an assistant director. We started an experiment

with our branch to pull in the technologists along with the financial analysts in a branch with the same business line of work. For example, supervision and regulation was a big customer of ours, so we pulled in the financial analysts who were doing the data analysis, along with the technical staff who were developing and writing the code to support those systems. They were in the same area and the same unit working together.

MS. EMERSON. That's right. Because one of the things Steve recognized was the value of moving around the division. He wanted that in his officers and in his managers. That then led to my next promotion. Dick went on loan to the Office of the Secretary for a year, where he had an opportunity every week to sit in on the closed Board meetings and to see what was going on from a business perspective. So after 10 years I had been assistant director over three different branches—one where supervision was my primary customer and one where I had bank operations and some other folks.

One of the things that, I believe, Steve did was to align by function the infrastructure side of the division, and to align by business area the other side of the division. An assistant director who was responsible for a particular business line therefore could develop more rapport with the business officers, and thus we would provide better technology services. During those three years, I had developed a lot of expertise in information security and, therefore, I kept that responsibility because the man who had been responsible for information security was one of the layers that we eliminated. His name was William "Bill" Jones. He was a Ph.D. economist by training who had come from the Division of Research and Statistics; he went back to Research and Statistics as an associate director. So regardless of which function I managed, I took those information security responsibilities as ancillary responsibilities.

One of the things that every leader does is to carve out a certain part of the work that they themselves are going to focus on more closely. Whether they're going to do all the work by themselves, or whether they're going to do that as more of a first line manager or a second line manager, there's going to be some area on which they're going to be focusing. From 1987 on, my particular focus has been information security. That is my subfield of expertise within information technology, and that was unique to me. That wasn't Steve's specialty, nor was it Dick Stevens' specialty, the director before me.

After 10 years I guess you could say I experienced the first time that I was passed over for a promotion. Steve didn't have a deputy director. It was just the director and some aide or some of us assistant directors. He decided he needed a deputy director because Y2K was coming and the workload was increasing and so on. He promoted our most senior assistant director, Dick Stevens, who had been on loan to the Office of the Secretary and had the biggest branch. So I was passed over and Dick was promoted to deputy director. Then a couple of years later, S. David "Dave" Frost, our Staff Director for Management, retired and each of us moved up. Dick became director, I became deputy director, and Steve became the staff director. Working for Dick was a wonderful experience. While I was a little disappointed that he was made deputy and not me, it made absolutely logical sense. He had much more experience and was clearly the best person for the job.

Addressing Security Compromises

MS. HANNAN. Can you give us examples of attempts that were made to compromise security and how those were handled?

MS. EMERSON. The major attempt to compromise security was the viruses. We started off with the diskettes, but then we had these big virus attacks in the early 2000s. We had a

wonderful group of information security professionals and, by then, Dick and I had promoted what we called peer reviews or after action reviews. After every virus attack, the guys that had fought the viruses would have an after action review and figure out what they needed to do, and then step up the protection so that the next time a virus came around, we were even better able to defend ourselves against it than the previous time. So we just kept staying one step ahead of things; it was really exciting. In addition to that we have had a strong information security culture because we have always had to protect our money and our networks from the very beginning. So we had strong protection on the mainframe and, as soon as we put in distributed networks, we knew we needed to have a firewall to protect ourselves. We had a wonderful technical analyst put in one of the first firewalls in the country. We brought in consultants who were surprised at how deep our expertise was and how much we knew. Over the years, the whole bunch of leaders have worked to develop and encourage our information technology professionals. We have a marvelous staff.

MS. HANNAN. Who was the person who set up the first Systemwide distributed network?

MS. EMERSON. That was Robert “Bob” Semon who was, I believe at the time, a network analyst. He subsequently moved into the information security arena. He was responsible for working with a woman named Elizabeth “Libby” Flanagan who, at the time, was the manager of the Automated Research Computing Section, or ARC, in the Division of Research and Statistics. She had recognized that we needed a distributed type network throughout the Federal Reserve System, a so-called internet protocol network. Bob worked with her and some lead analysts in Research and Statistics—I think a man named Robert “Bob”

Drysgula and some others. A bunch of them and Steve designed this nationwide internal distributed network.

MS. HANNAN. In customer relationships, both internally and externally, how do you see the Board as being different from other technology users?

MS. EMERSON. That's a hard question to answer since I've spent so much time here at the Board.

MS. HANNAN. I guess your comparison could be this recent month that you've been away.

MS. EMERSON. Yes. Well, just recently, I've been at the Seattle Housing Authority as the Chief Information Officer there. The staff at the Seattle Housing Authority is so small that we have no custom applications. Ours are all purchased applications that we configure. But this is also 2007. The Board has been a heavy user of information technology for years. You don't get a Ph.D. in economics, particularly not with a concentration in econometrics, without being a pretty decent programmer. So our research staff has used computers for years; they have needed statistical software to be able to build models and run them and so on. I can talk about the things that we've done, but I cannot compare us to any other organization.

Year 2000 (Y2K)

MS. FOX. You were here at the Board at the rollover to the new millennium—the year 1999 to 2000—when there were challenges related to the “millennium bug” computer virus. Could you talk about your personal experiences and what lessons were learned during that period?

MS. EMERSON. I'm not sure of the lessons we learned from Y2K. We built a complete inventory of all of our information systems and that did perhaps help with September 11, 2001,

by giving us some insights that we were able to use. At the time, we recognized that—despite the fact that our main data warehouse had recently been rewritten (it was called the National Information Center) and we used all four digits of a number [for a year] rather than just storing the last two digits—which is what Y2K was all about—there were probably many other systems that were not ready. There was a fear that in this highly automated country all of our computer systems would come grinding to a halt. Our electricity, all of our telecommunications, airport control, everything has little computers in it.

We needed extra money for that project. I can remember going to the Board meeting in which we got extra money to mitigate the things from Y2K. Former Chairman Alan Greenspan held up his second and pinky finger to form a little space, and he said, “I remember when I was the head of Townsend Greenspan and we were only storing two digits.” Of course, everybody laughed. But it was also, to me, exciting and interesting that the Chairman of the Federal Reserve understood in that kind of detail what the problem was, and it was an example to me of the breadth and depth of our former Chairman’s knowledge on this huge range of topics.

We all went about documenting our systems and getting them ready, putting the extra two digits in. I actually did not do that much of the work because, from the summer of 1997, give or take, until the summer of 1999, I was on loan to the Division of Banking Supervision and Regulation, where I was working as a consultant or an advisor to Jack P. Jennings who was the head of their new information technology function. I was working nationwide on a bunch of application development issues, which had nothing to do with Y2K; however, I was the Board’s information security officer during all of this time. As it got closer to being a rollover, we became increasingly worried that, if there were a problem, hackers could take advantage of breakdowns in computer systems to break into our system from the outside.

Although I was supposed to have stayed in supervision well into 1999, if not into the year 2000, I was brought back into the IT Division around May or so. I was promoted to deputy director and we had some retirements going on at the time. Because of those retirements and Y2K coming, we didn't do any reorganization. I ended up with three positions simultaneously. I was the deputy director, the information security officer, and assistant director for banking supervision applications because the assistant director had retired. The workload was crushing. And I was just finishing up an MBA at Maryland with a concentration in finance. Fortunately, by that time, both of my daughters were in college. One had graduated. So I didn't have any home responsibilities. I was working about 16 hours a day to take care of all of these things. In December 1999, we had a huge information security symposium at the Ronald Reagan Center, where we brought people in from all over the federal government and from the banking sector to talk about different kinds of things that we needed to do to protect our networks. It was some of those kinds of things which served us very well two years later.

MS. FOX. We survived the Y2K experience with very minor disruptions.

MS. EMERSON. Absolutely. The disruptions were so minor that, in retrospect, we wonder whether we did too much. But ahead of time, it was hard to tell what was enough and what was too much. And, we are the nation's central bank, so we were the folks that everybody was relying on. If something had gone wrong and we hadn't been prepared, we could have been strongly criticized. So, in retrospect, we can be criticized for having spent too much money, but that was impossible to tell going forward.

Lessons Learned from the BOND (Banking Organization National Desktop) Project

MS. FOX. Could you tell us a story of a project that went awry and what you learned from it?

MS. EMERSON. Absolutely. I learned a huge amount—I learned that you’ve got to have good project management discipline around a project.

I mentioned that, in the summer 1999, I was brought back early from the Division of Banking Supervision and Regulation, and I had these three jobs. I was the deputy director, assistant director for banking supervision applications, and information security officer. One project called BOND, which stood for Banking Organization National Desktop, was going to bring about a major culture change in the way bank examiners throughout the Federal Reserve System did their work. It was supposed to standardize things.

I knew that I needed to have a review of that technology. I also knew from my consultant time in the Division of Banking Supervision that we were modifying codes provided to us by IBM. They were underlying Lotus Notes codes. That’s a major thing that you just don’t do. IBM had encouraged us to do it because we were having performance problems. We had identified performance problems for two years or so. As we got closer and closer to the production date, which was April 1, 2000, the performance problems kept plaguing us. We had a very active customer involvement on the front end, design interface, and things were all going well on that side. But, in the background, we weren’t getting the information loaded overnight. And as we got closer and closer to the time, it was just not where it needed to be. So I met with the senior project manager for banking supervision, and said to him that things were not looking good. But I didn’t sit down and say to him, “What happens if we don’t go live?” His name was Stephen M. (Steve) Hoffman Jr. He ultimately became deputy director of banking supervision here at the Board. He came to the Board from the Federal Reserve Bank of Philadelphia.

Sure enough, we could not get the data loaded overnight. So, on the morning that we were supposed to have gone live, we had to cancel it. It was a huge embarrassment because we

hadn't given any warning to the Reserve Banks. Because this software was bringing about a culture change that they didn't want to have happen, there was a lot of animosity about the project. When it didn't go live on schedule, everybody made fun of it over the next several weeks. I was unfortunately attending my brother-in-law's funeral in a small town—Spearfish, South Dakota—so I was outside the cemetery taking part in this conference call while we were announcing that we couldn't make the software go live.

It eventually did go live. It took about a year. We put a new project manager in place and new project discipline. From my perspective, the fact that I hadn't had the review, even though I knew we needed it, and that I hadn't properly alerted our customer in banking supervision made it, by far, the worst disaster I've managed. Today, it is a widely used piece of software, and very successful, but one has to understand what the risks are with information technology projects. One needs something called an issues log. There's a whole range of things that one needs to do to keep a project on track, and I learned all of that the hard way.

MS. FOX. What were the challenges in the partnerships with Reserve Banks?

MS. EMERSON. Well, the Board was driving the change. I had suggested that maybe they would bring in some folks from the Reserve Banks, but they said they were going to bring them in at a later phase. I did not see particular challenges in the relationship other than wanting to please these people, and perhaps not taking a strong enough stand in retrospect. I think that our current director, Maureen Hannan, would have taken a stronger stand and said, "Look, this project is just not developing the way it needs to be getting production ready. We had better alert people." There had been some tensions between the Board's banking supervision function and the Reserve Banks because they were driving this culture change through this new software.

I felt terrible for the application developers who worked for me—who had put in so many nights, so many weekends trying to get this software production ready—and the subsequent damage to their morale being part of a project that wasn't a success but was a failure. Again, ultimately it was a success. Things turned around within the next year and a half, in large part, thanks to a woman named Sharon Mowry, who was an assistant director that became the project manager.

MS. FOX. As the manager what did you do to help those people through that period?

MS. EMERSON. I took the failure on myself. I felt that, as the leader, it was my failure, not theirs. I was the one who didn't do an adequate job of explaining the risks to the business project manager, and therefore, letting it happen. I was too optimistic.

It was a helpful lesson. The other thing that I learned from it was when we had a big post-implementation review that was negative. I swore that we were not only going to have these reviews on projects that were failures. We were going to have them on our most successful projects.

I mentioned how we did these reviews after each one of our virus attacks. I then worked with the director at the time, Dick Stevens. We started having peer reviews of projects throughout the division. It was a key part in helping people learn more about what was going on elsewhere in the division. We pulled people together from all over, and people got to know one another. Subsequently, it has helped our division be more creative and innovative. People will share ideas and come up with ideas on their own. We moved around from one area to another, reviewing things in the division. Each time we looked at what went well and what didn't go so well. People started getting in a mode of just being a normal part of business where they would

review things, and continuously improve what we're doing in small ways. It ultimately had some beneficial outcomes, but, at the time, it was pretty demoralizing.

Terrorist Attacks on the United States on September 11, 2001 (9/11)

MS. FOX. Where were you on September 11, 2001?

MS. EMERSON. I have to back up to the beginning of 2001. There was a growing sense that there were people outside the United States who were not comfortable with American politics. We had, after all, had a bombing of the World Trade Center in 1993. We had had the U.S.S. Cole bombed. We had attacks on three embassies in Africa. There was a growing feeling that information security and physical security needed to be beefed up. I had a top secret clearance, which I had gotten, I guess, renewed back in 1999. As part of the information security, I was also doing physical security work, but Board divisions were reluctant to spend money on having backup systems elsewhere because the belief that we would need a backup somewhere was hard to imagine. I had hired a physical security specialist who had worked at Treasury. He had done a good deal of work after Treasury had a big fire. He felt that we needed a tabletop exercise. At the time, Vice Chairman Roger W. Ferguson, Jr., was our Administrative Governor.

I thought that the tabletop made a lot of sense. It was going to have three different scenarios in it. We worked and we worked on the thing. The specialist, John Nash, had wanted a full day event, but we narrowed it down to four hours. The first scenario was something happening in New York at the World Trade Center that caused quite a disruption. The second one was a suspicious powder that appeared in an envelope of the secretary of our legal division that might or might not have been anthrax. The third scenario was a small nuclear device being

detonated in, of all places, a houseboat in the marina where I lived at the time. It was called the Gangplank Marina, and it was down here on the Potomac River in Southwest D.C.

MS. FOX. What was the purpose of the tabletop?

MS. EMERSON. The purpose of the tabletop was to see how well senior Board officers were or weren't prepared. The Vice Chairman participated as Administrative Governor to set the tone. As I recall, we didn't have any division directors, but the room was full of officers. It was all division officers who had some responsibility for information technology, physical security, and continuity of business operations.

It was absolutely astonishing to me that three, four months later in September—and then in October we had that big anthrax incident—that the firm that devised those scenarios had as close a clue about what would actually happen as they did. It was just absolutely amazing. As a result of that, I guess we had some more work done on business continuity, but we were fortunate in that the computer systems here at the Board all continued to operate on September 11.

On September 11, I was at a meeting with some of my staff, and the security specialist motioned me out of the room at 8:50 in the morning. He had a television on all the time in his office. That was part of his job. He said to me, "Marianne, there's a plane that's just flown into one of the towers at the World Trade Center." I said, "Wow, that's kind of weird." I was remembering how a private airplane had flown into the Empire State Building some years back. He said, "Marianne, that looks like a commercial airplane." At that time, Dick Stevens, the director, and Steve Malphrus realized things were happening, and they were in contact with New York. Vice Chairman Ferguson was the only Board Governor who was here that day. All the

others were around the country or out of the country. Chairman Greenspan was in Switzerland at the time.

Dick and Steve set up a computer and opened a line to New York in our Special Library. We have this telephone priority system called GETS (Government Emergency Telecommunications Service) and Steve was able to get this line open to New York. Dick took care of the technology side. He took a couple of our crack engineers with him. They started setting stuff up in the Special Library. Then, the second plane hit. When the second plane hit, we knew things were really happening. It was some kind of a terrorist attack. We didn't know if it was a domestic terrorist like Timothy McVeigh, the guy who was responsible for the Oklahoma City bombing, or what. But two planes was not an accident. Some people started to panic. Some people left. They had children; they felt that they needed to get out of town.

I'm someone that always stays calm in a crisis. Since the technology side of things was being taken care of, I was going to focus on the people side. I was surprised that some of my colleagues, but more so the people who worked for me and stayed calm in all kinds of computer crises, were not at all calm in this crisis. We also had guards giving us not so good information on the loudspeaker system. They were telling us that we had to evacuate the building. I chose as my role going from office to office and floor to floor telling each and every employee whom I found that they had to make their own decisions for their own personal safety. It was also surprising to me to hear over the public radio rumors that were completely false. For example, there was an announcement that there were fires that were going off at the Washington Monument. We were told that a bomb had exploded at the State Department. Given that we worked next door to the State Department and we hadn't heard the least explosion at all, I thought that was incredibly strange. I did avoid the elevators because I felt that if the Board was

going to get hit, I didn't want to be trapped in the elevator. I take the stairs all the time anyway. It was a strange experience being completely healthy, completely fine, while you were seeing people jumping out of buildings on television. We had people who were really nervous. After the second plane went into the World Trade Center, they went up to our cafeteria and went out on the balcony to calm themselves down by smoking a cigarette. They watched the plane come up and go over the Pentagon and come around and go into it. I had an employee, a manager, who came in late to work regularly. She started work between 9:30 and 10:00. She was on the highway—I think it's Route 27—as the plane flew over her and into the Pentagon, and the whole thing went up in smoke. She turned around and went back home again. She didn't try to get into work. We shortly had gridlock here. You could not go anywhere. Things were bad enough after the fireworks on the Fourth of July, but that was nothing compared with the gridlock on our streets in the middle of the morning on September 11. And there were rumors that maybe things would happen with Metro and maybe they wouldn't. We got conflicting information. In fact, people got home fine on Metro.

So, as I said, I felt that the role I could play was to reassure people and to empower each and every individual to make the best decision that they could for their personal safety and for the safety of their family. We also needed somebody to put together a message to go up on our intranet, which we call *Inside the Board*. I worked with our personnel function to take a message that Vice Chairman Ferguson had worded and see that it got posted on our intranet. By noontime, when all the planes had been grounded—and I must say, I felt better knowing that there were no more planes flying around in the sky—things were eerily quiet. It was unbelievable. It was quieter than Christmas. I had this top secret clearance that I mentioned, and I had been briefed to participate in a continuity of government event. So I talked to Steve and I

talked to Dick, and I said, “Hey, you know, I bet they’re constituting this continuity of government thing. Should I be going to it?” And they said yes. I can’t say anything more about it, it’s classified, but I did drive to that place and participate in that activity. I had remarried by then. My husband was working away on his construction project in Georgetown. He saw the smoke from the Pentagon, but he didn’t worry about it. He just kept on doing his construction thing because he had his own business and needed to keep moving forward. I drove out on roads that had no people on them, and went and took part.

Afterwards it was, to me, quite exciting to be a part of the senior Board group that had conference calls two, four, five times a day as the Board injected liquidity into the markets. Our Director of Banking Operations and Payment Systems, Louise Roseman, worked with counterparts in New York and did a fabulous job. We listened to her. I learned a lot about the other side of System work, payment systems, through the opportunity to participate in these closed Board meetings. And, of course, we brought the Chairman back.

Balancing Work and Motherhood

MS. FOX. Tell me about balancing work with your role as a mother and, I understand, a soon to be grandmother.

MS. EMERSON. That’s correct. I’ll start with the last part first because, indeed, my older daughter, with whom I am staying, went into labor this morning and is expecting to give birth to a daughter sometime later today.

Balancing motherhood and work has been a challenge over the years. I alluded to the fact that I liked how understanding my manager was when I first came to the Board. And the Board itself, like the rest of the country, has evolved over the years in balancing work/life. I’ve had male managers tell me that it’s their turn to stay home with a sick child. Of course, all of our

telecommuting and all of the increased technology that we've got means that you're connected whether you're here or you're not. The BlackBerrys, the cell phones, and so forth, have, in some ways, made it easier and, in some ways, more difficult because you're working continuously or intermittently 24/7. I've been very fortunate in being able to balance my work life with my professional life.

Benefits and Challenges of a Board Career

MS. FOX. Would you give us your thoughts on the benefits and challenges of a career at the Board? What would you tell someone who was considering that?

MS. EMERSON. For me, there is an enormous satisfaction in making a difference in the financial health of all Americans or, one could argue, world citizens, given the role of the United States in the financial system in the world. I think that the most important thing is one's physical health—you need shelter, you need food, you need to be physically safe. The second thing that you need the most is financial health—you need to have the satisfaction of a job. You need a stable payment system, and an economy that has the stable prices so that you can have it grow at an appropriate rate.

I believe that it is important work to be managing, from a regulatory and supervisory perspective, the financial institutions of the country. In some places, that is a part of the central banking, in some places it isn't. It is a role here at the Board. As someone who's a strong believer in public service, it has been enormously satisfying to have been a part of the central bank, and the Board has been exceedingly kind to me over the years. I tell people that if they want to be a part of a mission, if they want to have a sense of making a difference as a piece, perhaps a small piece depending upon your role here—if you come here as a Ph.D. economist, perhaps your role is a little bit larger. Obviously, if you make your way up to being an officer,

your role will grow increasingly. But still, you're making a difference to the financial health of all Americans and, in addition to that, there are some terrific people who work here. It's fun to be working with exceedingly intelligent, committed people questioning things and doing their very best, too.

MS. FOX. Thank you again for helping us with this project.