



Oral History of Stanley (Stan) T. Myers

Interviewed by:
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Craig Addison: We're doing another of the SEMI oral history archives and the guest today is Stan Myers, president and CEO of SEMI. Thanks, Stan, for joining us.

Stanley (Stan) T. Myers: You're welcome, Craig.

Addison: Can we start right at the beginning and have you tell the story of how you became involved with your first job, whether that was in the electronics industry or not.

Myers: Actually I graduated in Chemical Engineering from the University of Kansas in 1960 and went to work for Monsanto Company. And it was not in the electronics business. It was what we called sand and gravel, or sodium tripolyphosphate. It's actually the basic raw material used in detergents. And I did that for about a year and then I was transferred to the silicon plant in St. Peters, Missouri.

Addison: What about during your studies. What did you study and did you have an idea of being an engineer in the chemical industry?

Myers: My study was in chemical engineering with a minor and some graduate work in nuclear reactor engineering. And I went to work for Monsanto because I knew it was a pretty famous chemical company at the time. But they were getting into this brand new field called semiconductors. And within a year I migrated to the silicon plant, which was the basic raw materials for semiconductors.

Addison: Where was this?

Myers: I first started in St. Louis, Missouri with Monsanto. And just west of there, about 50 miles, there was a little town called St. Peters, Missouri. That's still the home of MEMC.

Addison: At the time were you single, living alone or with family?

Myers: No, no. I was married. My wife put me through the last part of my college at the University of Kansas. So we both moved to St. Louis from there.

Addison: Now, the first period when you were in the detergent business, did you want to move over to semiconductors or you were happy at the time?

Myers: Well, I was happy at the time, but I did in fact have a high, keen interest in this new Siemens process that Monsanto had licensed to grow single crystal...actually it was float zone crystal at the time. That was before we got into Czochralski grown crystals.

Addison: How did you move over to the semiconductor side? Can you tell the story?

Myers: It was by accident, actually. Monsanto had hired about 98 engineers in that year that I came in. And a downturn happened right after that and there was only five of us left that they hadn't laid off. And of the five, three of us were given an option to go into the silicon business or to be transferred to another location in Monsanto. I opted for the silicon business.

Addison: Was it a general economic downturn, not a silicon one?

Myers: Yes, a general economic downturn and they had over-hired engineers at the time. So about 93 of them found other jobs. Five of us ended up staying with Monsanto.

Addison: So your first downturn was not in the semiconductor business. But you've had many since then.

Myers: Yes. Actually it was not a silicon cycle that caught us there. It was probably some other kind of cycle.

Addison: What were you doing when you first moved over to the semiconductor side of the business?

Myers: I went out as an assistant shift supervisor doing rotating shifts in the plant. It was running seven days a week, 24 hours a day. And I quickly became the shift supervisor and then moved up into other management positions over my 17 years with Monsanto.

Addison: What was the end product coming off that line?

Myers: Well, initially it was vacuum zone refined material. Pretty much intrinsic kind of material used by Westinghouse and General Electric at the time.

Addison: And that was for semiconductor manufacturing?

Myers: Yes, it was for power products. Thyristors, that kind of thing.

Addison: And in terms of the diameters of the wafers?

Myers: We started out with diameters of about a half inch. That was the maximum we could do. We got the float zone crystals up to about one inch diameter within three years. But about that time crystal growing was taking shape. You could grow much larger diameters with crystal growers.

Addison: You mentioned you used the Siemens process. Can you talk about how Monsanto acquired that technology?

Myers: Well, it was not just Monsanto. Actually, Dupont, Merck, Dow-Corning, Texas Instruments, and Monsanto all licensed the Siemens process. So we were just one of a number of companies that took a license.

Addison: Was Siemens the world leader in that area at the time?

Myers: Oh, definitely they were the leader in the technology of growing the crystal and making the power products.

Addison: At that stage was there anything happening in Japan in terms of the crystal growing or silicon wafers?

Myers: Not to my knowledge at that stage. That would have been in the late '50s, early '60s.

Addison: What about your progression at Monsanto. Can you talk about the first two or three years, what kind of jobs you did and projects.

Myers: Well, mostly I was in manufacturing at the time. And my progression was much like, I guess, many young engineers. I took over the maintenance and the facilities and from there [progressed] to the plant supervision, plant superintendent. And when I started there the plant had, I think, about 20 employees. When I left and moved to California in 1975 it was up to about 3,000 employees. So we had significant growth.

Addison: During that period were there any challenges that you recall, difficult moments?

Myers: Oh, of course. As I explained to Jim Morgan one time, we were all a bunch of cowboys. We were shooting from the hip. We certainly did not know many of the problems that exist now in manufacturing in the silicon wafer and eventually the chip. But just coming to mind, what we used to wash our hands in [was] trichloroethylene and then we'd go have lunch. To get the grease off our hands we used trichloroethylene. But today that is considered very much a carcinogen.

Addison: Now, after the invention of the integrated circuit in '59, you were at Monsanto at that stage?

Myers: I'd joined Monsanto in 1960. But that IC development activity was going on and certainly it was the activity that changed the way we grew crystals and the way we made the products. And that change really came in the late '60s.

Addison: With the invention of the IC, do you remember hearing about that or thinking that it would have any significance?

Myers: Oh, absolutely. In the early '60s we knew that would have a significant impact. Not only on growing the crystal, but also polishing the wafer. Slicing, polishing, and modifying the crystal and putting the EPI layers on the wafer. All of these things became much more prominent as soon as IC applications took hold and the market began to develop.

Addison: Stan, what about the equipment that was used to grow crystals and polish the silicon. Was that all homegrown at Monsanto?

Myers: The float zoning equipment was a mock-up of what we received from Siemens. The crystal growing was all hand-grown equipment. [We] hand developed and designed the equipment for a considerable period of time...about 10 years.

Addison: Did you have any involvement in this?

Myers: Oh, yes. My first crystal growing piece of equipment was a converted drill press, if you can imagine. The chamber was made up of a quartz inner tube and then an outer tube was Pyrex. We circulated water between the quartz and the Pyrex to remove the heat, and the crystal was inside the

quartz tube. You wouldn't do that today for anything because it would blow up on you if you got a crack in the glass. [If] the water hit the crystal, it wasn't a pretty picture. And that happened a few times, but nobody was injured.

Addison: Were you aware of any other activities in crystal growing or silicon production?

Myers: Absolutely. We knew there were some small companies out here [in California] growing the crystal. In fact, that's how I met Bob Lorenzini, who I think you've interviewed before. He was developing crystal growing of his own. And eventually I went to work for Bob and left Monsanto.

Addison: Just to finish up the story at Monsanto. You started in 1960. When did you leave?

Myers: I left Monsanto in 1978, after about 18 years. And so I progressed through a number of different things. All the way to plant manager, developing a twin plant concept in El Paso, Texas, and Juarez, Mexico. Later I moved up to where I took over the silicon business at Monsanto.

Addison: I had heard that you did a lot of overseas travel...can you talk about the offshore activities?

Myers: At first we started up a plant in South Wales in the UK and eventually moved that plant to Ghent, Belgium where we did all the slicing and polishing for Europe. In the meantime we built a silicon slicing/polishing plant in Kuala Lumpur, Malaysia. And at the same time we built an assembly plant for light emitting diodes (LED) in Jakarta, Indonesia and Kuala Lumpur. And that was all done in the late '60s early '70 time frame.

Addison: Since offshoring or outsourcing is a hot topic now, back then, going offshore with a factory, was that a political hot potato?

Myers: Not so much. It was political to some extent, probably not as political as it is today. Monsanto's first approach was to do it on the Mexican border in El Paso and Juarez. But then another downturn came and they pulled the plug on the project. That's about the time I went back to St. Louis and George MacLoud was running the division at that point in time and he promoted me up about three levels in the organization. And that was kind of fun times during that period of time. But quickly, George had me on the west coast and wanted me to move the Texas border operation into Southeast Asia. That's how it went to Malaysia and Indonesia.

Addison: There must be some interesting stories you can tell about setting up a plant in Malaysia and Jakarta. Is there anything you'd like to share?

Myers: Well, there are two or three interesting stories. Certainly one that comes to mind is I was in my hotel room at about 2:00 in the morning in Kuala Lumpur, Malaysia and I got a call from the plant. At that time we had about 1,200 employees. The plant [manager] said all of the employees are outside of the plant. One of the ladies had seen a headless ghost in the ladies room. And I didn't really know how to handle that. But the conclusion of a long story was I had to hire a witch doctor to purify the plant before all the employees would go back to work. So by about 10 o'clock that morning I was pretty tired but we got every employee back in...with the sprinkling of the rice and a few bones over the door and got rid of that

headless ghost and we were back to work right away. Back in those times in Malaysia there was the Chinese communist insurgence in the hills. We had to go through sand bunkers and had our car searched every morning on the way to work, that kind of thing. So it's kind of interesting. Very different than just driving to work. Well, maybe not. Maybe it's just as dangerous to drive down [Highway] 101. I don't know. [Laughter] But it was kind of an unusual and unique experience.

Addison: Did you spend a lot of time there?

Myers: I did not live there. I was shuttling between Indonesia, Singapore and Malaysia, Ghent, Belgium, and St. Louis.

Addison: So the reason that Monsanto set up plants in those countries was pretty much the low labor cost?

Myers: Low labor cost, that's correct.

Addison: So there was a significant saving?

Myers: Significant savings on the labor at that time. However, it was offset by the inability or the lack of availability of the chemicals, supplies, parts and things you needed to run the plant. So to some extent it was only about a 15 percent savings. Labor savings was much greater, but the other costs were much, much higher.

Addison: So what happened to all those facilities?

Myers: Oh, they're still running today. The facility in Malaysia is, I think, one of MEMC's larger slicing and polishing operations.

Addison: So now we're up to about mid '70s. And then you left Monsanto in '79.

Myers: Well, I moved to California in '75. And I was out here for four years with Monsanto before I left.

Addison: Can you talk about the last period with Monsanto. You said you moved to California in 1975. So what did you do from '75 to '79?

Myers: I was promoted, as I mentioned. George MacLoud promoted me up four or five levels. So I took over the silicon business group at that time. At that time he wanted me to move to California, where he was based in Cupertino. So I moved there in 1975. Between 1975 and when I left Monsanto a number of things happened. We dissolved the silicon business group, and Monsanto established a global group combining the LED operation of Monsanto and the silicon operation. At that point I took over the operations of both, which included global responsibility for Europe, Japan and North America. We had a venture with Mitsubishi Chemical Company...and had the operations in Kuala Lumpur and in Jakarta, Indonesia as well as in Ghent, Belgium.

Addison: So what was your title?

Myers: I was VP and director of operations for Monsanto Electronics Division. During that period of time we fully expanded the plants in Southeast Asia and got up to, probably, over 3,000 employees in the plants in Malaysia and a couple of thousand in Jakarta. In the headquarters, St. Peters, Missouri we had another 2,000 people.

Addison: Was there any synergy between the LED and silicon?

Myers: Not a lot of synergy except that in the LED area we were growing at that time gallium phosphide as well as gallium arsenide with epitaxial layers. We did that all in the St. Peters operation. We did the assembly and packaging of those LED products in Southeast Asia.

Addison: You talked about Japan a little while ago. Can you continue to talk about your experiences going there?

Myers: We had actually a joint activity venture with Mitsubishi Chemical Corporation and Monsanto had many things going on. One of those was trying to find a way to consolidate what they were doing on crystal growth in Japan at the time and there was some technology transfer from St. Peters, Missouri, to Japan with Mitsubishi Chemical.

Addison: How involved were you with what was happening in Japan?

Myers: Well, I wasn't involved at that time technically. I was involved in business relationships at that time. I think the old company, Jemco, and Mitsubishi Materials -- at that time it was called Mitsubishi Metal -- and Cheeso all came together. Because all these little operations just didn't have critical mass so we combined all of them.

Addison: But you did go to Japan quite a lot?

Myers: Yeah, in those days I probably went to Japan four or five times a year.

Addison: What was your impression of the Japanese industry?

Myers: They were probably two generations behind the U.S. at that time.

Addison: Did you visit any device makers?

Myers: Only NEC.

Addison: What was your impression of NEC?

Myers: NEC really wanted to work together with Monsanto, understanding and learning the technology and securing a wafer supply base at that time. Because it didn't exist really at the volumes they needed in Japan.

Addison: By this time what was the situation in Japan in regard to silicon?

Myers: In Japan they were on a very, very rapid learning curve. They knew that they would need to grow [silicon]... they needed the silicon volume by the mid '80s. They were looking for partners in the U.S. to help them secure the raw material base for the products that they were designing. So I would say they understood they had catch up to do and they began to catch up very, very rapidly.

Addison: Was it a case of the Japanese approaching Monsanto or Monsanto wanting to get into Japan?

Myers: In this case they approached Monsanto, because we were the raw material leader at the time in the world.

Addison: Could you talk a little bit about the wafer diameter sizes, what size they were, and were they difficult transitions or relatively easy?

Myers: They were relatively hard, but evolutionary transitions from one inch diameter to inch and a half then to two inch and then finally went on up to the four inch diameter [which] became the standard, [and] had a long life in the cycle. And then, as you know, from there on it moved to the six inch, eight inch, and now 12 inch.

Addison: These days there's talk about silicon being a loss-making business. What was the situation back then? Did Monsanto get its return?

Myers: We did fairly well in the mid '70s. But then as the diameters began to increase the return became less and less. The wafers got thicker and it took more crystal and the loss of sawdust, if you will, slicing up the crystal into a wafer. The efficiencies just weren't going down a learning curve like we were in the chip area.

Addison: During the '70s were you still doing a lot of the effort internally?

Myers: By the end of the '70s there was an infrastructure developing outside where you could buy crystal growers. It was kind of a mutual spec development, mutual equipment development between us and the supplier.

Addison: Were there any particular company names you remember?

Myers: We were buying from KX Hamco which later became part of General Signal. We were also buying crystal growers from Leybold and from Siltec, which was making a crystal grower at the time.

Addison: OK, now we're up to the end of the '70s and the time that you're leaving Monsanto. Can you tell the story of how and why you left?

Myers: Well, there are two particular reasons. I like Bob Lorenzini very much. And Bob had started this company called Siltec. He'd started a couple of other companies before then. And I knew Bob from industry connections. Monsanto at that time was telling me I'd have to move back to St. Louis. My family liked it pretty well in California and had no real desire to move back to St. Louis. So Bob and I talked for about six or eight months and I decided to join Bob as an executive vice president at Siltec -- a small,

growing company, private at the time, and [there] was the opportunity of going public later. All of these things interested me and that's why I moved from Monsanto to Siltec.

Addison: Was Monsanto still having difficulties?

Myers: No, it was very strong at that point in time. And there weren't any signs of weakening. However, all silicon operations were having trouble making money.

Addison: Was it a risk for you, moving from Monsanto to Siltec?

Myers: Oh, absolutely. There's always a great risk when you move from a large company like that, that has all the infrastructure. So if you have a big problem in this area you go to this expert and in this area you go to another expert. But the bottom line is I wanted that challenge. Because I didn't want to get pocketed as an expert within a big company. So it was a large challenge for me to go to a small company where you had to do a lot of different things. It was a real learning experience.

Addison: Can you talk about the first few months at Siltec? What were you doing, the challenges?

Myers: The basic challenge was that silicon was in real demand. It was the early '80s, just prior to the '85 downturn, the big downturn up until this last one [in 2001]. And so my big job was expanding the capacity and putting together relationships in Europe and in Asia. Because we weren't big enough to do our own thing in those areas so we had to get joint partnerships. So we set up a partnership in France, another one in Korea, and we set up a partnership in China at that time. It was on old generation equipment, but we set that up with Shanghai 2nd Smelters. That was pretty early in the game to set something up with China.

Addison: Let's talk about that a little more. When was your first trip to China?

Myers: First trip, I think, was in 1984 or 1985, something like that.

Addison: That was for this joint venture?

Myers: Yes. And to begin to build relationships.

Addison: What was your impression of China and its technology ambitions?

Myers: I think they were very ambitious, but their fundamental baseline was very, very low. I was impressed with what came out of academia. Certainly the technology was understood by the people in the universities and colleges. But translating that down to a workable operation... At the first clean room I witnessed, we went out the back door so the guy touring me could have a smoke. And there were chickens in the back yard of the plant. And then we just came back in and closed the door. This was the clean room. Well, obviously the perception wasn't there at the time. It certainly is today. But the operation in Korea went very, very well. That was a joint venture with Lucky Goldstar and they were pretty sophisticated by that time.

Addison: What were your impressions of the Korean chip industry at that time?

Myers: I thought they were on fire. They knew what they were doing. They were working seven days a week. Very dedicated. High productivity. It was an impressive place. Samsung was probably doing DRAMs at that time, but they were also very heavy into power products. The IGBTs, thick epi operations, which I don't think they do much of now. I think Fairchild took that from them. But they were very full of energy. They were driven. They had an urgency. And that was all very refreshing. They picked up our technology very fast and were growing crystals, slicing and polishing at a very rapid pace.

Addison: So the joint venture with Lucky Goldstar, was that a 50-50 arrangement?

Myers: Yes, it was basically a 50-50 joint venture.

Addison: And what happened to that venture?

Myers: Well, that venture was called Lucky Advanced Materials. Later that was combined with Monsanto's Korean operation called Korsil. I had since left that operation.

Addison: You also mentioned Europe, some joint ventures there?

Myers: We had a joint venture there and it was primarily with Rohm Poulanc, a big pharmaceutical company that had a small division. They were wanting to get into the electronics area. So we set up a plant over in France, just west of Versailles, west of Paris. The plant was designed to manufacture all the way through crystal growing to slicing, polishing and epitaxial operations. Eventually we got out of that venture after Siltec was bought by Mitsubishi Metal. We had to dissolve that partnership because Mitsubishi wasn't interested in the operation in France.

Addison: So let's move on. At Siltec, you joined in '79?

Myers: I joined Siltec in 1979. Actually, Monsanto held me up on a technical contract [for about three months]. I was held away from going to work for Siltec after they hired me. Monsanto was afraid of the technical transfer that might happen. And fortunately Bob Lorenzini had a lot of patience with that and waited until the three months was over. So I had a three month period where I was dealing with Monsanto lawyers mostly and very little with Siltec. And then I started.

Addison: Can you now talk about the period leading up to when Siltec was bought by Mitsubishi?

Myers: Siltec did pretty well, going public in 1980. Then we went through another secondary offering in 1983. And that was primarily to get capital to build our new plant up in Salem, Oregon. During that period of time Siltec fell on hard times. Long story short, I was made president and CEO of Siltec in 1985. And at that time we were burning cash faster than our bank line could handle. We were being threatened with a qualified opinion by Arthur Andersen. So that's when I began to put together the relationship with Rohm Poulanc, who bought quite a bit of Siltec stock, gave us a \$5 million loan, got Bank of America off my back and Arthur Andersen backed off on the qualified opinion. And then we began to try to sell Siltec. And

at that point I had the great experience of going to the Mitsubishi people and started working with Mitsubishi and spent about nine months negotiating the sale of Siltec to Mitsubishi.

Addison: Let's just fill in some of the detail. That sounds like a pretty overwhelming job.

Myers: It was a very busy period of time.

Addison: Did you sleep well at night?

Myers: No, not really, because a couple of things happened. The Siltec board had kind of bounced Bob Lorenzini up and out and he was my boss. And all of a sudden I was taking over his company, or the company he founded. Those were difficult times. But we kept it operating and kept the cash flowing and employees paid... and finding somebody to buy the company, [it] was a very, very busy time. Very challenging. A great learning experience. And in the end it turned out good. We completed the negotiation with Mitsubishi in late 1985. And they took over the company. It was a reverse triangular merger where they set up a company and we merged them into Siltec and they bought out the stockholders. That happened in late '86. In '87 they took over the company and asked me to stay on as CEO.

Addison: When you took over as president of Siltec, was it with the intention that you would sell the company?

Myers: Well, we didn't know right at first. We had to study and decide what to do with the future. And within about three months the decision was made that we should either find a partner or sell Siltec outright. And the negotiations began in late January, early February of '86 and concluded in the October/November time frame of '86.

Addison: How did things change after Mitsubishi bought Siltec and you were still running the company?

Myers: It changed in a lot of different ways. Certainly Mitsubishi had money. And they had the ability to make the investments we needed. After going public twice we had burned up the cash that Siltec had on hand. So Mitsubishi really became a good banker for us, as well as being an owner. We were actually owned by three Mitsubishi Group companies; Mitsubishi Metal, Mitsubishi Mining and Cement, and Mitsubishi Corporation. Later Mitsubishi Mining and Cement and Mitsubishi Metal went together and formed Mitsubishi Material Corporation. So then that became our primary stockholder and our parent, if you will. They were there with the ability to fund silicon operations for expansion. And it was very patient money. It was not money that had to turn rapidly. But in one respect there's a dichotomy. The Japanese are very, very good at day-to-day operations and details, making sure things happen. On the other hand, they had money that was patient and waiting on us to be successful. Then we became quite successful in the late '80s and we began to make a profit. Before I left in '96 we had paid the dividend, paid out past debts. So I felt good about that. We had a good turnaround at that point. When I took over the company it was \$19 million in silicon sales and \$5 million in equipment sales. When I left we had spun out the equipment to a company called Cybel. We spun that out and silicon had grown to \$250 million sales from \$19 million. So it was a lot of fun, a good learning experience, and it was a profitable experience from about 1989 to 1996.

Addison: What about the customer base? What was happening there; was there consolidation?

Myers: There was always talk of consolidation. In the late '80s there was prediction that the customer base would consolidate to less than ten IC companies. I was just elected to the SEMI board and we had 1,200 global members and everybody felt like our membership would drop. So there was that kind of pessimism that existed in the late '80s. But in fact SEMI actually grew to 2,500 member companies. And the foundries and fabless companies came in and the computer morphed into being a great driver of our industry. Also, the Internet came into use. So the industry really went through a transformation, which I think it will do again in the next ten years.

Addison: Before we move on to the SEMI period, can you talk about the silicon cycles. Do you have any particular stories?

Myers: Well, the first cycle I went through was in 1974 when I was heading up the Monsanto business group. I can remember in April of 1974 I was putting a rationing plan into effect on our customers because we couldn't deliver all the silicon they wanted. And three months later we laid off 300 employees. So in that three-month period, it was the first cycle that I experienced. And then the next really big, big cycle was in the '84-'85 time frame. And that one, as we know, lasted as the biggest cycle until the late '90s. There was a slow down and a minor cycle that happened in the early '90s. And by then I was beginning to get more experience with cycles. I had also gone on the SEMI board [in 1987] so I was beginning to get to a bigger, broader picture of the whole industry -- equipment, materials, silicon. Then of course we went through the Asia flu in the late '90s. And then the Y2K, the "dot-com, dot-gone" problem. That bubble busted and we had the terrible downturn in 2001-2002 and came out of it in 2003.

Addison: Was there any way to predict the cycles?

Myers: I don't think they're predictable. One thing that I've tried to do with Bill McClean [of IC Insights] and others is to try and understand the cycles. We also looked at other industries like the wine industry and their cycle. They have a similar cycle to ours. Unfortunately we can't drink our inventory like they could. They labeled their cycles manic and depressive. I think that we also have manic and depressive cycles. One of the fundamental things that I see changing in these cycles in the frequency and the magnitude. As we saw, the magnitude was horrendous in this last cycle; high peak and deep trough. I do believe that in the future we'll see more frequent cycles maybe with less magnitude or amplitude of the cycle. Certainly, I was beginning to better understand the industry after I did get on the SEMI board in 1987.

Addison: Before we move on to SEMI, is there anything else in the Siltec period?

Myers: Certainly I can tell you a couple of things. As I mentioned, I went on the SEMI board in 1987 and I was made chairman of the SEMI board in 1993-94. I had a unique experience in my first policy and planning meeting where the incoming chairman acts as chairman of the policy and planning meeting. And that was in Annecy, France. And I showed up, flew into there from Salem, Oregon. I was very, very tired and left a wake up call for the meeting the next day. I was sleeping away and the wake up call didn't come. But I did get a phone call at about a quarter to nine in the morning from Ann Cochran, who said, "Stan, are you planning to join our meeting?" And I said, "Oh yes. I'm waiting on my wake up call." And

she said it happens to be 8:45 in the morning now. So I show up to the meeting and here's all these big shots around the table and I'm supposed to chair the meeting and they've been there for an hour. So that was kind of a humiliating and unique experience. And it certainly humbled me at that point, to run the rest of that policy and planning meeting in France. A number of guys bring that to my attention every now and then and let me know that I slept through the first meeting as chairman of the board.

Following that there was the wrap-up of Siltec. Mitsubishi continually wanted to change the name of Siltec to a Mitsubishi name. But they agreed to leave it Siltec until such time that I left. And I did leave in 1996 to join SEMI [as president]. And during that year I helped them change the name and rebrand Siltec to MSA, or Mitsubishi Silicon America. That was a very, very pleasant and friendly parting at that time. At that point in time I went over to SEMI from Siltec.

Addison: Can you tell me more detail of that story, how you were recruited to run SEMI?

Myers: I was approached almost a year and a half before then by Bill Reed, the president of SEMI at the time. At that time Bill told me I should consider replacing him because he was thinking of retiring. And Bill's health, at that time, wasn't that good. Over the course of a little over a year [Bill] and the executive committee of the board began to talk to me about considering retiring from, not really resigning from, Mitsubishi. Because they knew I was very, very fond of Mitsubishi and the people. So I finally decided in September of '95 that I would give my resignation to Mitsubishi and Bill and I scheduled the plan of how that would happen. Then I notified Mitsubishi in March, because that's the end of their fiscal year. It was good timing. I talked to Dr. Nagano, who was president of Mitsubishi Material then, and Dr. Akimoto, who was taking over his position at that time. And they had mixed emotions. They were very glad that I was going to go to SEMI. They had very high regard for SEMI. They were sad to see me leave. And that's when in March we decided to change the name of Siltec to Mitsubishi Silicon America and that I would depart seven months later. So it was a long transition. A very good transition. A very friendly departure. And for the next two years I stayed on as chairman of the board of Mitsubishi Silicon America. And then helped them locate a new president two years later. They brought in an interim Japanese president. By that time then I was full time here at SEMI.

Addison: So when you joined SEMI full time that was as president or CEO?

Myers: As president of SEMI. The board didn't give me the CEO title until about three years later. At that point in time we were about a \$30 million trade association. Today we've grown to about a \$60 million, what we call now, an industry association. Not just primarily focused on shows, but focused on many, many other aspects of the industry. So we've doubled in size in that period of time. I actually joined SEMI in September of 1996.

Addison: What were your immediate challenges on joining SEMI?

Myers: The immediate challenge was to develop a strategic identity, a strategic plan with a long-term vision and mission. Primarily to educate all of us at SEMI about...the changing complexity of our whole industry and our ability to serve our membership better, [to] become more a voice of the industry. Our fundamental acumen is to create value for the industry and add value to our members. And expand our member base...at that time we were about 1,600 members. And as I mentioned we have since grown into

about 2,200 now. We had 3,500 in our peak and the downturn of '01, '02 and '03 really took its toll on a number of our members.

Addison: SEMI is said to be a unique organization. It's a global association. Can you talk about your views on the globalization?

Myers: I think SEMI went through four fundamental transition periods. Just before I became a SEMI board member SEMI was an American association. The "I" [in SEMI] stood for Institute and not International. In the mid to late '80s we changed the Institute to International and began to internationalize SEMI. I would say we went through a period of a few years where we were becoming SEMI International. I think we became more global really in the mid '90s...at that point with offices in Moscow and Brussels in Europe...and in Singapore and Taiwan. And we had established an office in Korea. And a few years before then we had established a Japanese office. In 2001 and 2002, we established our offices in Beijing and Shanghai. Before then we had a secretariat operating in China. We were active in China, but not with our own managed office.

Addison: The shift of semiconductor manufacturing to Asia, what impact do you think that had on SEMI and its membership?

Myers: I think it has a positive impact on SEMI in general and our member companies. If you look at the companies today, a big percentage... over 50 percent and some as high as 70 percent, of their sales today are happening in Asia. That's total Asia; Southeast Asia, China, Korea, Japan. Certainly that's where capital spending is happening today. Much more than in Europe and the U.S.

Addison: You mentioned Bill Reed. Can you talk about what sort of contributions he made to SEMI and the industry?

Myers: Bill is well-liked. Actually Bill Reed worked for me back at Monsanto, so I'd known him for 30 years. Bill was maybe if not the best, one of the best salesmen I had ever known. He used to drag me out on sales calls when I was an engineer at Monsanto before I became his boss. And he would put me up to solve the problems for the customers. So Bill and I had a very long term and close relationship. I think Bill brought an image and a branding to SEMI. I personally played a role in influencing Bob Lorenzini and other board members before I was on the board that Bill ought to be the man that replaced Phil Gregory [as head of SEMI]. But if you look at Phil Gregory and Bill Reed, these two guys really set the foundation and the pattern for SEMI. They both contributed...Phil in the early days of just establishing SEMI. I had a very, very high regard for Phil Gregory. And then Bill coming along, and being sales and marketing oriented, really sold and marketed SEMI in a big way. And then fortunately I came along following these two great guys. And hopefully I can just follow in their footsteps and fill their shoes as time goes on.

Addison: You travel a lot and meet a lot of people. I've seen photos of you with Mikhail Gorbachev. I know you've met some very senior people in China...Of the people that you've met as part of SEMI, any interesting stories to tell?

Myers: Well, I don't know stories, but certainly we had some political issues in China. I'll start at the top and work back. We had some political issues in China where we were accused of not honoring the "one

China", Greater China philosophy. And I did spend three weeks in China and I did meet three vice mayors of Shanghai and two of Beijing. We were trying to get our show license and it was being held up. I had a meeting with Vice Premier Wu. It was a late afternoon meeting. And Mr. Wu, I think, is number three man in China now. I don't know exactly his title, but at that time he was about number six in China. And he told me when I left that they really wanted SEMI in China because they thought we would bring the technology, the companies, the investment that was needed to build the infrastructure in China. And I went back to the hotel and at ten o'clock that night I got a call from a CECC who was handling our show license, and said you've got your license. So that was a very eventful meeting.

Now backtrack to when I first took this job in SEMI. I had been here a little over a month and that's when I met Mikhail Gorbachev. I treasure that meeting. It was a great meeting. Less focused on the industry, but more focused on relationships. Country to country and region to region. In between I've met some really, really great people. I always talk about Sasaki-san, who is chairman of NEC. I frankly can call up and within 24 hours have a meeting with him. So it's become good relationships and good friendships. Certainly I'll always treasure my relationship with Yoshida-san, who is chairman of Nikon. He has been a great supporter of me, a great supporter of SEMI, and a great supporter of the industry. And he truly came through the ranks like I did in Monsanto and Siltec. He came through the ranks in Nikon to finally take the top job. These are super people, super personalities. And I could waste all of your tape today telling you stories of many other people from Hagashi-san to Inoue-san and many more people in Japan. And in the U.S. the same way -- the relationships and the meeting of many people here. The nice thing about this job at SEMI is you meet such great people around the world. And it's not just in one focused place, it's broad and it's global.

Addison: What about Bob Noyce, any personal story to tell?

Myers: I met Bob a number of times and certainly was impressed with him every time. Probably my most unique experience with Bob Noyce was in 1970 when I worked for Monsanto. I don't think it was Bill Reed at that time, but another salesman and I called on Intel. If you take Intel in 1970 you'll know they were, what, a \$100 million company then? And we were waiting to meet the purchasing guy. And Gordon Moore and Bob Noyce came out and joined the meeting. That was one of the times I met Bob...but he was bigger than life to all of us. And still is. I'd also met Jack Kilby a number of times at TI. And he is physically bigger than life. He's a very, very big man. [Editor's Note: Kilby died June 20, 2005, aged 81]. But both these guys [Noyce and Kilby] were down to earth, understood the technology, understood the business. Relating technology to business is sometimes a difficult thing to do...how do you keep technology moving and at the same time take the technologists out to understand the running of a business. And it's happened in this industry. Look at Ken Levy [of KLA-Tencor]. Great engineer and a hell of an entrepreneur and businessman. And you can just go through and see these people who have moved from engineering to doing that. And you admire every one of them.

Addison: On that note we'll finish the interview. Thank you very much Stan.

Myers: Thank you, Craig. This is a great industry. We've had great people and it's a pleasure to work with them. Thank you very much.

END OF INTERVIEW