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**William “Bill” Walker Interview Transcript**

**Narrator 1:** William “Bill” Walker (BW)

**Narrator 2:** Lula “Lu” Fey Walker (LW);

**Interviewer:** Dana Williams (DW).

**Date:** 21 February 2012

**Location:** BW & LW 's Home, 13695 SW Hargis Rd. Beaverton, OR 97008

Transcribed by Dana Williams, 3 March 2012 - 18 March 2012

**Biography/Introduction:**

Bill Walker was born in southern Missouri outside the town of Mountain View on September 28, 1930. He and his wife Lula Walker have two children together, a son and a daughter. They met in Missouri and began dating when they were 16. Mr. Walker volunteered for the Air Force during the Korean War where he was trained in radar technology. He saw his first Tektronix oscilloscope on an Air Force base in Biloxi Mississippi and knew Tektronix was where he wanted to work. He attended The Missouri School of Mines and Metallurgy in Rolla, Missouri and graduated with a degree in engineering. Since landing his first job with Tektronix (TEK) he moved quickly into leadership positions. Mr. Walker has held multiple upper management positions within TEK as well as in Electro Scientific Industries (ESI) and Planar. His main contributions to TEK are those of organizational structure and communications systems.

***Note to auditor: You may notice that audio file WS600013 is not here. WS600013 was a false start due to a telephone call that came in. No audio was lost thus no transcription is included. Names outside brackets are checked, names inside brackets need follow-up with narrators.***

**William “Bill” Walker  
21 February 2012**

*Nine audio files, Combined for a total of 02:23:49; 2 hours, twenty-three minutes.*

<b>Time Code</b>	<b>Transcription</b>
Audio File: WS600008	DW: Today is February 21, 2012 and this interview is for the Washington County Museum. My name is Dana Williams and I am here with Mr. William Walker at his home in Beaverton, Oregon. So, Mr. Walker, um, if you can just start by saying your full name, your date of birth, and place of birth.

Narrator's birth, ect.	#00:00:29-8# BW: I'm William D. Walker. Most people know me as Bill. And I was born, uh, I'm a hillbilly. I was born down in the Ozark Mountains in South Missouri near the Arkansas boarder. And I went to school there. Went to school through grade school in a little one-room schoolhouse in south Missouri. Through high school, a small high school. And, um, Well, How far do you want me to go with all this [laughs]? That sort of takes me through high school. Graduated high school when I was sixteen, and then the question was, what shall I do? Through some contacts I had I found that I could get a few college hours and pass the state teachers examination and could begin to teach in the little rural schools in south Missouri. So, for the next three years I taught in those little small rural schools. All of those I taught in had eight grades and two teachers, so I'd teach either the first through the fourth grade or I'd teach the fifth through the eighth grade during those times. So I did that for three years,
Air Force	found that it was going to be very slow ever getting a college degree going in the summers and teaching in the winters. So, I decided that I would take advantage of going into the Air Force. The Korean War was raging, there was some question over whether I would be eligible for the draft, but I decided that I would go ahead and enlist in the Air Force. Out of that I would get the GI bill and that would help me finish college, and pay my way through college. So, when I went in for some reason I had seen the word somewhere and it listed some interests and I said well, radar sounds interesting. So I wrote that down, and guess what? They sent me off to electronics school. [Laughs] And while I was going to electronics school in Keesler Air Force base, Biloxi,
First encounter with TEK Oscilloscope	Mississippi I saw my first Tektronix oscilloscopes. One of the instructors rolled a scope out and pulled the sides off of it and showed us how it was built, and it was the most beautiful instrument I had ever seen. If you are involved in electronics, or almost anything, you will see that they're made in a very functional way, but this wasn't only made functionally, it was beautiful! Literally beautiful. The components were mounted on ceramic strips with little silver notches, they were laid in beautifully and each strip as they should be. The cables on it were all hand laced and lay in perfect [inaudible]. And the outside of it was anodized. And it was just a beautiful instrument; I couldn't believe it. I found out that that was built in Oregon, and my wife's family had just moved to Oregon. And I said, "When I get out of here. When I finish college. I'm going to work for that company". So that's the way it all
Korean War and	happened.

<p>Oscilloscopes</p>	<p>#00:04:11-4#DW: How were the Tektronix oscilloscopes used in the Korean War?</p> <p>#00:04:22-2# BW: Well they would be used, not only, they weren't used particularly for the war, but they were used for all the back-up electronics. They were used heavily in the television industry and the radio industry, but also, of course in the military you had electronics like radar and things like that so they were used in measurements that had to be made for the military radar. Although the military market was a big market, it was not by any means the primary market. The primary market were companies like IBM and RCA and General Electric and the big companies that were building home electronics. But non-the-less, yes the military did buy a lot of them.</p>
<p>Audio File: WS600009</p> <p>Reiterates birth, early education</p> <p>Education in the Air Force</p>	<p>BW: I was born in the Ozarks in 1930. Which makes me, 81 years old now. At the time of this interview.</p> <p>#00:00:13-1# DW: And where in the Ozarks? What was the town?</p> <p>#00:00:16-9# BW: The town, was near the town, it was actually in the country about five miles from the closest town. The closest town was Mountain View, a little town of about five, seven hundred people at that time. And so, I went through my eight years of grade school there, in a little one-room country school, and then went to high school there for four years and I graduated from high school. Then was when I started looking around to what I wanted to do, and ended up, as I said a little earlier in getting a few college hours, passing the state teachers examination and for three years I taught in a little small rural schools there. Then, because it seemed like I would never get my college education, getting a few hours each summer in the local college, I decided to go into the Air Force and knew that in the long run then I would be able to get a GI bill which would help pay my way through college. Turns out I had the opportunity to select what I was interested in as a, after I volunteered for the Air Force, and I saw the word radar, and that sounded interesting to me, so I went in, went through basic and went immediately to Keesler Air Force base where there was a very good electronics school. It didn't give college degrees, but it was six hours a day, six days a week for over six months. You get an awful lot of classroom hours. I'll have to say I learned, my electronics there better than I really learned it when I finally did go to</p>

Tech in the  
Korean War

college and get a degree in electrical engineering. I found that the education that I got in the Air Force was very thorough. It gave me a very thorough understanding of electrical and electronic products and systems worked.

#00:02:39-0# DW: So were you based in Biloxi for the entire duration of your time in the Air Force?

#00:02:45-0# BW: No, I was based in Biloxi for the six month school, and I took an instructors course in instruction and stayed there for several months beyond that. And then much to my surprise and chagrin, I saw my name posted for an over-seas assignment in Korea and, but it did give me an opportunity to take one more course in New York in airborne electronics. So, my wife and I and little two and a half month old baby moved to New York for about three months and took a special airborne radar course. Then I bid my little two and a half-month old or three month old I guess, three and a half-month old daughter at that, goodbye and my wife goodbye for a full year while I went and kept, helped keep a radar set running on a very high mountain in Korea. [Laughs]

#00:03:51-0# DW: And that was to assist with the airborne operations?

#00:03:54-2# BW: That was to, do two things, it was early warning system so that we could see any planes that would come down from Korea or as China got into the war, Korea or China, we could spot those. We could, at the same time; we could pick up and start conversations with our own pilots as they took off from Tachikawa airbase in Japan, or the airbase in Seoul. We can direct them, our operators, and could give them directions vector them into an intercept pattern for those planes that were coming down, and uh, and uh, dropping bombs on us [laughing]. Down through the main line, along the main line of resistance, in across the center of Korea. So I spent a year there and, [sighs] keeping, helping, many of the people keep their radar sets running. And then that year was over, and I came back and got reassigned to a radar site on the East Coast. On the tip end of Virginia that sticks way down the outside of the Chesapeake Bay. And we were right at the end of the peninsula, and with hundred foot radar towers and guiding the planes and those that were watching for any planes that shouldn't be there. So I stayed there and finished out and had uh, my wife and daughter and then came home, and started college. In Missouri. [pause] And

College

Education

so I picked the college I picked was then called the Missouri School of Mines and Metallurgy. And I knew it was a good school, but I didn't know how good it was, but it was by far the best. It is now called the University of Science and Technology, University of Missouri School of Science and Technology. And it's really, in my opinion the best technical college in the Midwest. It just is, it's a terrific school, and we've had lots of good engineers all here along the west coast that I meet with fairly regularly that are alumni from there. I was in a hurry at this time because I already have a baby daughter and it's time for me to start settling down somewhere and making a living. Four years in the Air Force and now three years of college, so I really hustled. I went summer and winter and every break and I finished my four-year college education in about three and a half years. Because my wife's family were in Oregon and because I knew Tektronix was in Oregon, I tried to get a job at Tektronix, but I couldn't. They were quite small at the time. They wouldn't pay my way out for interviews and moving expenses and all that. I took a job with Boeing in Seattle, and worked for Boeing six months until I could get a chance to interview at Tektronix. Then interviewed at Tektronix and came on down went to work at Tektronix. Which is where I really wanted to end up. I had been associated with them all together for about forty-two years. But that counted not only my period of time working as an engineer, and then in the management chain, and then eventually on the board of directors.

#00:08:06-2# DW: Were there people at your University in Rolla that encouraged you into the Tektronix kind of route, or is that something that you had been set on since the Air Force?

#00:08:22-1# BW: Yes, that's something I had made up my mind about, that I was going to go and get the college education and Missouri School of Mines and Metallurgy was a really good place to do it. I came from Missouri so I had relatives and some support system there. But beyond that, I also knew that Lu's family was out here so there were two things that drew me to Oregon. One was that the company I really wanted to go to work for was Tektronix and her family was out here. So it was about time after about four years in the Air Force and three more years in College to let her be somewhere near her family for a change. [laughs] Let them see our new grandbaby.

Getting hired at  
TEK

#00:09:15-1# LW: Would you like some coffee? (Asking DW)

#00:09:15-9# DW: Yes, that would be lovely, thank you.

#00:09:20-5# LW: Would you like a cup too? (Asking BW)

#00:09:22-8# DW: Was it difficult, you said you were, it was a small company at the time, was it difficult to get that interview? Were you in contact with people before you left?

#00:09:36-9# BW: I had written to the head of engineering, Bill Polits. But he didn't, at first I got a letter back, the first time. I did that when I was a junior and trying to get a summer job here. I thought well maybe I could get a summer job here. I got a letter back, not from him, but by someone in personnel who said that Tektronix didn't pay for transportation to and from and that it wouldn't be worth me trying to come out on my own and work that summer and besides they mostly hired just Oregon boys, and I do mean boys. Weren't many girl engineers in those days. So I didn't get to come out for any of my summer times. Then when I was graduating I wrote again Bill Polits and the personnel people that I, you know, I had gotten some names that I could write to at Tektronix. They didn't even answer my letter, so I took a job at Boeing in Seattle and said that I'm going to interview at Tektronix first chance I get. I came home one night tired and dirty from, not real dirty, but it was in an engineering job at Boeing, but tired and not wanting to do anything else.

#00:11:10-7# LW: Do you take anything in it? (Asking DW about the coffee she is serving)

#00:11:17-4# DW: A little sugar and cream, thank you.

LW: Oh, Ok.

#00:11:17-8# BW: And my wife, who is always looking out for me, said, "Bill there's a recruiter from Tektronix in town, in Seattle, you've got to go down and see him." I said Lu, "I'm tired, I'm too tired, I don't want to mess with it tonight", and she said, "Yes, you've been wanting to do that, yes you've been wanting to do that, so get busy and get down there". So, I went down there tired and not looking my best, and didn't put a tie on or anything like that. Went to the hotel, the Olympic hotel and I went up to the hotel room, and I

	<p>remember it very distinctly because I knocked on the door, and the door swung open, and there's this guy, his name was Earl Scott, said hello to me, and then as I started to step in, he just whirled around and right in my face said, "What is the second integral of acceleration?" [laughs] So I thought quickly and I said, "distance". So we were off and running with the interview, that was the right answer. We were off and running with the interview and so I got a job offer. But, now he was not the head of engineering, he was the head of manufacturing. So instead of coming into engineering, I came into manufacturing. My first job was in pre-production engineering, and it was to look at the new products coming in and make sure that the engineers had done a good job getting them ready to be manufactured. Because it's one thing for an engineer to make one, it's something else to get everything set up so that you can manufacture them by the dozens, or hundreds, or thousands. And frankly, the engineers weren't doing a very good job at that. They sort of, brought it to manufacturing and then the engineer would come over and kind of help him figure out how to do, and set up parts lists and set up pricing lists and all the stuff you had to do to build not one but hundreds.</p> <p>LW: How much would you like? (Asking DW in reference to cream &amp; sugar for the coffee)</p>
<p>Audio File: WS600010</p> <p>Phase System</p>	<p>BW: .....There uh, in that manufacturing vein... I, this was really my first [pause] real contribution to Tek. I, but, this, this is awful. So I got a little bit of permission to do something from the manufacturing manager to do something to help us get those products that were coming, new products that were coming out of, being introduced out of engineering, so that we could build them. I got, hired two other guys. I was kind of the lead guy for this little three-person group. We started taking the new instrument, whenever engineering would bring it over and we would start going through it thoroughly and then we would go back to engineering and say we don't have this and this and this and this and this, and begin to make up the list of stuff. So I said, "You know, we have to have, we need a process that is a consistent process that covers what's needed to bring a product from engineering to manufacturing." So I created, out of my own brain, a thing that we called, ended up calling, the Phase System. We said, ok the first phase is the engineers that design this thing, the second phase is, they bring it over to manufacturing, during that phase we will do an evaluation on it. See whether or no we know how to manufacture, we have all the stuff, all the</p>

	<p>information we need to manufacture it and if not get that information out of engineering and make sure the manufacturing has it. That will be phase B and then phase C will be when we actually introduce it into the manufacturing process. Once we know all that's done. So we had this phase system and now we know, and we set up standards, said ok, well if it's coming out of engineering it has to have all of this kind of stuff. Now we'd take a good look at the manufacturability of it, and say ok now we have to have all of this done before we can manufacture it. And then it would go into manufacturing and we would watch it for a certain period of time and it would be done. So the phase system became the standard thing and they still, [pauses and lowers voice] they still use that phase system over there, they have no idea who started it, but [laughs], but they still call it the phase system, and we'd put out a little publication each month that said where every new product was in the phase system. What had been done, what hadn't been done. We called it the Phase Angle. And they still call that the Phase Angle, they still put that thing out, and they still run, basically run it right through the same processes [laughs] oh thirty, forty years later. But, that was probably my best contribution into the kind of the engineering, manufacturing interface effort. Out of that I did build myself a group, a small manufacturing organization. And then I sort of accumulated the other manufacturing; engineering things that were in existence in the different parts like out in the metals parts or in the unit wiring parts, or over in the components and Tektronix was very integrated. They built literally every part [laughs] that they used practically. So it was very integrated and I [pause] built, I got the system going for all of that and built this fair sized group that simply worked at that whole introduction process all the way through to the pricing. It was a very good group. Eventually the order came down from on-high, what was on-high then, [LW coughs] we're going to have to coordinate these two things that's going on over here because by now we are doing a lot of the engineering, plus the design engineering organization, we'll put them all together, and they did that. They moved my organization over into the engineering, rather than leaving it in manufacturing because I had a bunch of pretty good engineers and we were doing [laughs] all the finish work, finish engineering work, finish up all the engineering work on every product. So I moved over to the engineering group and reported to the vice-president of the engineering Bill Polits. Wonderful guy. And I continued to work for him, but uh</p>
<p>Phase Angle Publication</p>	
<p>Integrated systems, parts manufacturing</p>	



<p>Advanced Products Group</p> <p>Integrated Circuit Group</p>	<p>[pause] as uh, as I did that and as the company grew larger and the processes grew a little bit more complex I sort of just bypassed him and he worked for me instead of me working for him, and as I kept all my old group plus my new, plus all of his group, plus a couple of others that at that time were not so connected. That was one of the, two of the things I had done in the mean time. I had started an advanced products group, which were working on advanced products because they had to get started somewhere and they weren't getting started and I just did that. Well, I can get away with it, and I did. And then in addition to that I [pause] Oh I had started an integrated, what's called an integrated circuit group because I had started hearing about this guy down in Arizona, by the name of [Glenn Madeline?], that knew how and would teach you how to make an integrated circuit. Now that's instead of having, making circuits out of resistors and capacitors and vacuum tubes or transistors and all those things and running wires between them. This was a way to make them all in a process on a little small chip. This seemed to me, has to be the way things are going to be going. So, I went down to Arizona and sat through [Glenn Madeline's?] course and he taught us how to do it. How to cut Rubylith, make out patterns. We'd make out this huge pattern, as big as a wall, which then gets photographically shrunk, and then photographically imposed on a small chip. And you can make things like that beautiful little instrument there [gestures to digital recorder] instead of being that big, or that big [gestures larger and larger with hands in the air]. When I learned how to do it, and I had him come up and teach a group at Tektronix how to do it and we started our own integrated circuit labs to build our own circuits for it. And, in doing these things you just kind of, you know, you get [pause]. I guess you gain a lot of influence in the company. So eventually I gained so much influence that I ran a big piece of Tektronix, still reporting to Earl Wantland, who at that time was CEO. So what came after that? What came after that Lu? I don't know. Um...</p>
<p>Product planning</p>	<p>#00:08:12-8# LW: Howard asked you to run ah, what was that before or after that? That he asked you to take charge of all product planning?</p> <p>#00:08:21-8# BW: Oh yes, I guess that was the next thing. I was so involved in that product planning stuff and I had this system that was working, the phase system that he, Howard asked me to be in charge of product planning. Which was,</p>

<p>Professional relationship with Howard Vollum</p>	<p>you know, like handing me a big club to do the things that I wanted to do. Because by planning the process I could get right into the, to the process, the engineers process and basically force the engineering group and the engineering vice president and all of them to move that product along through a very, consistent process to bring it into manufacturing. As the more I did that and the more I saw which products we really ought to be building, the more I made inputs that said we really ought to be building these new products. Or we ought to be building this or we need to do this or we need to do, and we had these new integrated circuits. And frankly Howard Vollum and I became pretty darn close and he [laughs], liked what I was doing a lot. He was getting done the kinds of things he was really interested in getting done and he was getting that done through me and so I became a kind of the runner of all of the engineering and the new product operation in total when I became Vice President of engineering, then went on to become Chief Operating Officer of the Company, and during that time, I had started a new operation inside of Tektronix called Tek Development Company. We had so many creative people and they were leaving the company to start their own companies and I reasoned that if we would put together a development company, a Tektronix development company and that people that are in Tek that really are wanting to do this, we would help them go out and start their own company. But in order for us to help them and allow them, and make it easy for them to do that, we would own half the company, we wouldn't own quite half, we'd own only forty-nine percent, they would own fifty-one percent. Then we would help finance the new company, we would help get the proper equipment, because we had so much at Tektronix and we'd help them get going. So that feeds into the whole Silicon Forest kind of idea. Tek was just loaded with guys who were creative and who wanted to do things, and who would love to do this sort of thing so now they had a vehicle that they could come to the Tek Development Company and say, here I want to do this. Like Jim Hurd and Chris King. They came to me one day, and said, I remember them specifically because I did a lot of, they became Planar. They said, "We have this idea, we know how to build a flat panel, we know how to address it and we can build instead of an oscilloscope that looks like the picture of the oscilloscope in there. We can build one with a flat panel in it, or we can build displays for other things out of this flat panel and we can address it. And we could like to spin out and we would like to take some of</p>
<p>TEK Development Company</p>	
<p>Start of Planar; Jim Hurd and Chris King</p>	

TEK 'university'	<p>the equipment with us that we've been using in the basement to work on it. "So I sat down with them and said, "Ok, here's the deal, we'll help you spin it out and then you can take the equipment with you, and we will help you with the start up expense, but we'll own forty-nine percent of the company. So whenever you get successful and go public, and sell the company, or let it go public, we'll get our money back." So that's what I did, and we, and that Tektronix Development Company continued and we spun several companies out into the Silicon Forest around here through that. Because our really good creative engineers were going to go somewhere and do something, this gave us a change to have a part in it and make some money out of it, and gave them a lot of help because they didn't have then to go out and get bank loans and do all of the stuff that you would other wise have to do to get a small company started. So that became the Tektronix Development Company and that really helped a lot to seed this valley with the, small companies.</p> <p>#00:13:42-9# DW: How did Tektronix, do you think prepare those individuals for running their own business and for starting their own business?</p> <p>#00:13:54-3# BW: Well Tek didn't do anything overtly for that purpose. They, it was pretty much learn as you go. I think for the people who wanted to start a new business, they had to get busy and make sure they understood enough about business that they had a chance to succeed. But I would put in here, that there were an enormous number of classes at Tektronix of almost every kind that you can think of. We were running at that time at our peak, and at that time we were running a bigger operation than Oregon State in terms of classes. Had an enormous educational program. I wish I still had a book to show you all the courses you could take at Tektronix. Tektronix people, you know, there would be a Tek guy who's very good in some field and he would be, one of his jobs would be to spend a few hours a week teaching classes. We had everything from classes in basic electronics, up to classes on how to make integrated circuits. We even had classes on learning to fly, if you wanted to fly an airplane, I took one of those.</p> <p>#00:15:31-5# DW: Did Mr. Vollum teach that class?</p> <p>#00:15:36-8# BW: No, he didn't teach any classes at all. This was done by engineering guys or technical people or</p>
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<p>Jean Auel</p>	<p>marketing sometimes, marketing people would have a class going in marketing. Sometimes it would be someone, who out of human resources that would have one going on organization management. How you do training, all kind of different things. We had a catalogue that thick that was full of courses. [Indicates about two inches] It was a wonderful opportunity to learn and to move on up the ladder. There were all kinds of people who went there. Do you know who Jean Auel was? [Asking DW]</p>
<p>Early atmosphere at TEK</p>	<p>#00:16:15-6# DW: I don't, no.</p> <p>#00:16:20-5# BW: You don't know who Jean Auel was. Well, she's a writer who wrote a series of books which became best sellers and movies were made of them. The initial book she wrote was Clan of the Cave Bear, and she wrote it while she was working at Tektronix, and she was very very, very bright woman. Classes were available where you could learn a lot of different skills. Tek was a very wide-open company, it was an amazing company. And it started from simple things like, I didn't have an office. Howard Vollum didn't have an office. It was just a wide open floor that just stretched for, you know, for several hundred feet and there were desks out there, and there sat Howard Vollum, and if somebody from way down on this twenty thousand person organization, wanted to talk to Howard Vollum, all they had to do was walk up the stairs and walk out to [laughs] his desk and tap him on the shoulder [laughs]. And do that. People didn't abuse it. We had very good communication system, we had every area, we never had a union. Unions tried many times to come in there, but they could never get anywhere. Our employees didn't need them didn't want them. We had an area rep system. So that every area, I don't remember how often, every three or every six months we would elect a representative from their area and this representative from their area would go to a big area rep meeting every month and all the people in there, if there was anything they didn't like including, "My feet get cold", or, "I don't like the lunches that are served, the coffee is awful" or whatever it was, that area rep would bring that list of issues in and so there would be a big room full fifty or so area reps from all over the company. And someone like me, or Howard Vollum, or Earl Wantland or Bill Polits or whoever's turn it was, would stand up in front of those area reps and take the [pause] take the guff [laughs] they had to give out, and answer their questions in person. And if we didn't have an answer, that they'd ask about, "well why is this done</p>
<p>Area Representative System</p> <p>"An honest company", Howard Vollum</p>	<p>and so there would be a big room full fifty or so area reps from all over the company. And someone like me, or Howard Vollum, or Earl Wantland or Bill Polits or whoever's turn it was, would stand up in front of those area reps and take the [pause] take the guff [laughs] they had to give out, and answer their questions in person. And if we didn't have an answer, that they'd ask about, "well why is this done</p>

<p>Influence of TEK in Silicon Forest</p>	<p>somewhere?" And I'd say, "Well I didn't know it was, I will find out about it." And then we would give them written answers and so every month there would be an area rep sheet that came out that had all of the answers from the management about the issues. So it was a very open company. An honest company. Howard, I have never met anyone more honest than Howard Vollum [laughs]. I mean, he wouldn't, he wouldn't shade anything. On a picture of a, on the front panel [shuffles papers that microphone is resting on] I don't think I have a Tek catalogue up here. Probably everything except that. On the front of a Tek catalogue, if he had a picture of an oscilloscope with a trace that ran across it, like they do. He wouldn't let you touch up that trace. He said, " If people look at that and they think it's a picture, then they ought to see it how it is. If it's a little too dim and you don't like it, that's the way it is, and you'll show it just like it is." Total honesty was [pause] an innate kind of a policy with him. He couldn't be dishonest. What else was there about it? I guess what I'm saying, all of those things that I'm saying about Tektronix [pause] to a very heavy degree moved out into the Silicon Forest. Because those guys that went out and started companies, most of them started companies that ran on those same kind of principles. Open offices, open communication lines, basically operated on a system of trust rather than some other system. So the Silicon Forest became true almost, it truly had the DNA of Tektronix in it and almost any of them would tell you that. After Intel came in there were a few Intel, Intel had a few spin-offs, which were a little different. Sequent I think was an Intel spin-off, and they were a little different. The Tek spin offs, nearly all operated in pretty much the same way that Tek did.</p>
<p>DNA of TEK</p>	<p>#00:21:32-5# DW: So, one of the spin-offs that you spoke about earlier was Planar. How did you personally get involved with Planar, and when did you start working for them, and what was your role?</p>
<p>Planar</p>	<p>#00:21:50-5# BW: Well, the dates would probably escape me; I could make some guesses at it. I told you, we had started this thing called the Tektronix Development Company, and I helped with spin-offs. Chris King and Jim Hurd came and said, we would like to spin-out. So this was maybe not the first one, but the first one that became a really large company like that. So as I said, basically I said the rule was that we would own forty-nine percent of it, and we would help them do it. I don't remember whether they asked me or</p>

<p>Jim Hurd</p>	<p>whether I insisted on, but at any rate, there would be a couple of members from Tektronix on the Board of Directors, immediate as well. That's the way it happened, they started the company and I was on the Board of Directors. As they got rolling and the business decisions that had to be made, questions that came up and all of that, eventually, Jim Hurd, who was the President and Chairman of the Board came to me and asked, he said, "You're on the board Bill, would you become our Chairman? You do that, relieve me of that and I'll go ahead and be the President, Chief Executive Officer of the company, but will you take the role of Chairman? and I said, "Yes, I'll do that". I helped them where I could as they rolled into a very successful company and eventually Jim Hurd [pause] got Leukemia. Because, ah, he asked me to have a drink after work with him, and I did, he said, "Bill I've got Leukemia", and I said, "Well, Jim there are doctors and medications and there are things they can do." and he said, "Not his one, it's not one they can fix". So we talked a lot about it and sure enough it went on and got bad and so I told over running the company then as President until we could get another CEO.</p>
<p>Audio File: WS600011</p> <p>Planar CEO Balaji Krishnamurthy</p> <p>Guernsey Island, UK</p> <p>Heerenveen, Holland</p>	<p>BW: So that was why, Jim's Leukemia was why I came in there as CEO for a year until we could get someone. And we ended up getting Krishnamurthy, Balaji Krishnamurthy, the man behind the, didn't work out as well as it should. I don't care if that's on the record. As well as I had hoped, I should say, just didn't work, didn't fit. So anyway, the other thing about TEK that I think is important is how international it became as a company. We had manufacturing on Guernsey Island in the English Channel, and that was put in because of tax problems that kept us from having a manufacturing tax, and we built and distributed from there to all the British common wealth tax free, because Guernsey was a tax free entity. So we kept that plant for many years. The other one that we did similar to that was, we put one in the Netherlands in Heerenveen Holland. And that was so that we could manufacture within the common [market?] it was called the common [market?] was all the rest of Europe, Western Europe. So we built those two things just purely for tax purposes. Earl Wantland, who later became our CEO, really got his start running the plant in Holland, and then came back over after that and became the President of Tektronix. We also had field operations selling in almost all place, selling and service operations all over the world. Australia and South Africa, Europe, everywhere, just literally all over the world, we had service and sales operations. It was a very</p>

Japan, Sony  
founders Mr.  
Akio Morita and  
Mr. Masaru  
Ibuka

world wide kind of a company in that respect. [Pause] Oh and another one of those that was interesting of that time. Howard Vollum had been to Japan and he found that he liked a lot of things about the Japanese people; he liked the simplicity, the simplicity of life, just a lot of things about them. So in his visit over there he contacted the Sony people and he found that he really liked Mr. Morita and Mr. Ibuka, the people who had started Sony and were running that. They talked about it, and we had a distributor, basically a sales operation in Japan, but he and Morita talked about what they could do together and so basically they decided on a very small, very portable instrument, that Sony seemed very good at doing that kind of thing, and it would be made in Japan. We put together a joint venture operation in Japan, and now it's [inaudible] Tokyo and Japan. So in the course of my career I became the Tektronix Board Member to that group, so I was in and out of Japan a lot. But these guy, I got to know them really well. The two founders of Sony, Mr. Morita and Mr. Ibuka I got to know very well. They were wonderful gentlemen to do business with, they were all business and the were very Japanese. Mr. Ibuka, he always wore a long Japanese robe and what I call [ghost?] slippers, with the little thing between his big toe. He was very traditional Japanese. Mr. Morita had come early to the United States to help Sony get established in this market, so he spent ten years in New York getting Sony off and running with their business in the US. So he was much more Western, American. Confrontive, open personality, kind of person.

Guernsey Island

#00:05:15-0# DW: How did the business climate or relationships within the business change as it grew to be International?

#00:05:30-2# BW: It made the jump to International really really well. We had good people at the head of that. Don [Alby?] became International Manager. He was a British guy and our marketing organization over there, and he became International Manager. He was married to a girl from Guernsey Island, and I think that was the influence probably if we really knew it, the influenced [laughs] us to go put a manufacturing operation on Guernsey. Guernsey isn't very big, it's in the middle of the English Chanel, it's about five miles all around it. The saying over there was that, "Guernsey is nothing but tourists, tomatoes, and Tektronix". Those were the main things, tourists went there first and they had huge [pause], what do you call them, hot beds, with glass

	<p>covers that raised tomatoes. A huge amount of Guernsey was covered with these low glass platform things that they grew tomatoes in. They started them really early, and the furnished the European market with tomatoes, [laughs] so tomatoes and Tektronix. I'm sure we were there because Don [Alaver?] our international manager's wife was from there. But it worked out, it was a good place for tax purposes, they had some practical things. The Sony Tek thing was a very very good way for us to address the Far East and Sony was a very good partner with us. We had operations everywhere.</p> <p>#00:07:39-4# DW: How did your international travel for the company change your perception of Tektronix role in the high tech industry?</p> <p>#00:07:50-1# BW: You know, that's an interesting story. Because it wasn't [sigh] My international travel, I was sitting in a staff meeting, a Bill Polits staff meeting, I was still reporting to Bill Polits who was head of engineering. [Phone rings]</p>
<p>Audio File: WS600012</p> <p>Norm Winningstad</p> <p>International Electrotechnical Commission</p>	<p>BW: Yeah well...[phone tone]</p> <p>#00:00:05-4# LW: Sorry.</p> <p>#00:00:11-0# DW: [laughs] That's ok.</p> <p>#00:00:15-7# BW: Yeah, we were sitting at a staff meeting, Bill Polits's staff meeting and Norm Winningstad started sort of pounding the table and said, "We've got to do something. There is a group that is being put together setting international standards for electronic measurement products. They're going to set these international standards, and they're doing it partially so that they can use non-tariff barriers to keep us out of certain places where they have competitive products. We've got to get in on this and make sure they can't get these standards set so that we can't sell our products in France, Germany and other places." So this was Winningstad, and then he said, "And I'm busy, and I've this and this and this going and I can't do it and someone's going to have to do it!" And nobody said anything so finally I peeped up and said, "Well I'll do it." So that began my [laughs] sub-career as a member of a thing called International Electrotechnical Commission, I, E, C. And it was a group put together to bring about standardization of a lot of things having to do with instrumentation and electronic equipment in general. So they met everywhere in the world.</p>



They met in London, they met in Prague, they met in Helsinki, they met in Leningrad, they met all over the world. So I started because I started going to those meetings and very quickly I became Chairman of the oscilloscope committee, the committee on oscilloscopes. I became chairman eventually of the, oh, electronic instrument piece of it, but that caused me to have to go to these meetings which were held in all of the different parts of the world. Which was a great thing for me, it was wonderful to go to Prague and have someone, people who were on the committee from Prague there to take you to dinner, tell you where to eat, tell you where to stay and be the host and so forth. And I did that in Helsinki, and Prague, and Rome, and Leningrad, and Paris several times, London, and Tokyo. It was a good thing to do and it was a good thing I was on it and eventually as I said I became chairman of all the committees that had anything to do with our type of instrumentation and we could make sure that we were not barred from places that we didn't want to be and on top of that push for standards which were the way we did things, which made it easier for us all around. It was a good thing for Tektronix and I think across, I think it was a really good thing all the way around. Good standardization of things that needed some standards. It was a very good, you know, I always told people; this is my best, boondoggle I've ever gotten in my whole working career. That I took that job because Winningstad said that he was [laughs] too busy. I really got to influence a lot of things, so it was a good thing, but also it was a lot of fun. I met a lot of people from a lot of different countries that worked in the high tech industry.  
[Phone rings]