

## Bill Terry Interview 2, November 6, 1995

KIRBY: This is Dave Kirby. I'm conducting a second interview with Bill Terry. Today's date is November 6, 1995 and we are in HP's offices at 1501 Page Mill Road, Palo Alto. Last time, Bill, you said you HP in October 1957. Do you remember how big the company was then? What was the sales volume? How many people? And so forth.

TERRY: Oh, I'd say it was under a thousand....

KIRBY: I can get it after ....

TERRY: Yeah, you can get it after the fact. It was under a thousand people and I'd guess the sales volume was around \$10 million at the time, maybe a little more or less.

KIRBY: All right. Can you remember who some of your early friends were in the company?

TERRY: Well, they were heavily concentrated in the Sales & Marketing Department because that's where I worked. So people like Carl Cottrell and Dick Reynolds were two of the people I worked directly with and then, of course, Cort Van Rennselaer, he was the boss. He was the sales manager. Noel Eldred was the big boss; he was the VP of Marketing. And then there were people in the lab that I got to know because there was a lot of liaison between Marketing and the lab, as well as manufacturing people—Ray Demere, Ed Porter; people in the lab—Barney was always very helpful with customers or technical questions, he'd go out of his way to help young salespeople solve customer problems. Those were some of them.

KIRBY: Okay. When you joined the company, you had only one car. Did that mean that your wife, Martha, drove you to work?

TERRY: Yeah, yeah, that's right. We shared one car and that went on for probably a couple of years before I bought a second used car, or I guess even between then, I carpooled. There were a group of HP employees that lived in Mountain View in the same general area that I did: Bob Stevenson and Horace Mockett, Duke Madsen, were three that I remember. So we carpooled; we did take turns. I think each one of us would drive for a week. Maybe we drove for every other day. I can't remember, but all of us only had one car and that was a way of solving the problem of the wives and the car.

KIRBY: Right. How many children did you have then?

TERRY: Let's see, we had two children—Cathy and Carol—and then we had two boys that came along later when I worked at HP.

KIRBY: Okay, let's talk a bit about—excuse me just a minute. 1957 was an important year for HP: the company went public; the first corporate objectives came into being; the labs were divisionalized; the first management meeting was held in Sonoma; and so on. Were you aware of these events?

TERRY: Oh, yeah....

KIRBY: They probably occurred before you or ....

TERRY: No, I was aware of them. I remember the company went public, I think it was in the same month that I went to work. In fact, I think....

KIRBY: That's probably right....

TERRY: ...There was a press clipping I had that I gave to Karen Lewis in the archives, so I was certainly aware of that. I was aware of the writing of the objectives. I was aware of the management meeting at the Mission Inn; I didn't go to that, of course. I was a pretty young member of the organization, but yeah, I remember those events transpiring and the divisionalization of the labs, I remember also. That was a precursor to... It was actually a

splitting of the labs into sections or divisions and it was a precursor to the further divisionalization which came later but I remember being aware of that because it made it real clear who, those of us in the Marketing Department, that needed to get information, it made it real clear where we should go in the organization. It was all set out by products.

KIRBY: Right. After a while, you settled into the Marketing Department providing support to the field sales representatives, or maybe we should say manufacturers' representatives....

TERRY: That's right.

KIRBY: Can you describe the rep structure at that time and talk about some of the rep firms and how they were chosen and compensated?

TERRY: Ha-ha-hah! This is going to take up the rest of the tape! Yeah, when I started, I worked in this training job, helping to put on seminars, you know, either doing the teaching or organizing and it was for the reps themselves, so they came in. And then after a while, my next assignment was to be a "sales engineer", we called it, and it was for the eastern sales region and it was a two-man team, and I, I think my boss was Dick Reynolds—I'm a little fuzzy on that—but we were...he was the boss and I was the second-in-command and we supported a number of reps. The Marketing Department was kind of divided up into two two-person teams in support of regions of manufacturers reps but the manufacturers reps system of selling at HP started long before I got there. It started, as I understand it, sometime after the Second World War, when business started to pick up and it was initially, three firms in the United States—Norm Neeley covered California, a fellow named A1 Crossley (Crossley Associates) covered the Midwest out of Chicago, and Burlingame Associates covered the east coast out of I believe New York City area—and at that time, most of the electronics business in the country was pretty much on the east coast—GE, Raytheon and the big boys. There was some in Chicago; this was the burgeoning consumer electronics industry—Motorola, Zenith; A1 Crossley covered that. And then Norm Neely in Los Angeles started covering what eventually became the aerospace industry, and the rest of the country was sort of not represented at all or just very thinly represented—in Texas, Washington and Florida—and that didn't make any difference in those days. This is in the late '40s, early '50s because there wasn't any industry there so HP had their flag in the ground. Oh, incidentally, Crossley also covered Canada, out of Chicago, which is a bit of a stretch!

KIRBY: I didn't know that!

TERRY: That went on for a number of years as the, as the business grew and again, you'll have to look in the archives. This happened before 1957, shortly before '57, probably in about '55. Business was growing, the reps were growing, the industry was spreading out in the United States. Florida, for example, was beginning to show signs of a place where east coast companies would move to. Burlingame was run by a real character named Bruce Burlingame—he was referred to as "Colonel" Bruce Burlingame. You remember after the Second World War, a number of men who came home liked to retain their titles—General Sarnoff (RCA), Colonel Burlingame and others. But there were no characters like that at HP! Although there were a few that came in later on who wanted to be called "Admiral" and of course, nobody around here would call them "Admiral"! Anyway, Colonel Burlingame, who I never met, was evidently a real character. He had this organization that covered essentially all of the east coast. He'd hired some good young people with HP's help, at least with HP's direction. HP felt that the people that sold products ought to be engineers and yes, they had to understand something selling but they really had to be engineers. And these firms also represented non-competing, manufacturers of a whole variety of instrumentation and components and so forth, and I'll mention some of those companies in a little while. One fateful day, Bruce Burlingame, Col. Bruce Burlingame died of a heart attack and there was no successor apparent within the organization. There was a strong

finance guy but the rest of the people were all about the same age—they were pretty young sales engineers spread across the east coast—and so there was a real crises about what was going to happen to this firm and HP's representation because a big chunk of the business, of the company's business, was out of that east coast territory. So Bill...no, no, no, Noel Eldred and Dave Packard went back there and they sat down with the people who—the employees, essentially—and they made an agreement to help set them up in business as independent firms within the geographic areas in which they resided and this was done by loaning them some money, a modest amount of money, or just assuring them that they were going to continue to represent HP. So these fellows went back to their home offices and established territorial lines, geographic territorial lines, names of companies and set up their own businesses and this group became known as the "9 Old Men". The famous "9 Old Men" of Burlingame Associates. I wrote their names down and I'll tell you who they were. The young guy that went off to Boston, or was living in Boston, was Tiny Yewell, and he set up a firm called Yewell Associates.

TERRY: Paul G. "Tiny" Yewell and he was called Tiny 'cuz he was about 240 pounds and acted like it! A fella named Pete Lahaua was in Bridgeport, Connecticut and he set up a firm that frankly didn't last very long and I'm not even sure it had a name; I don't remember its name. There were three individuals in the New York City area: Bob Asen, Milt Lichenstein and Charlie Sargent. And they set up their firm in the greater New York area and it was named after their initials—RMC...

KIRBY: RMC...

TERRY: Robert, Milt and Charlie. A fellow named Fred Horman was in or went to Washington, D.C. and he set up what was called Horman Associates. A guy named Ivan Robinson went off to Philadelphia, the Philadelphia area, with another guy named Leon Levy. That became I.E. Robinson Associates. And a character named Rube Ryerson went off to or was in, I believe, Syracuse, New York and he set up Ryerson Associates.

TERRY: Rueb Ryerson. I don't remember his actual first name. So that's 1-2-3-4-5- 6...Six firms and nine old men set up these six firms.

KIRBY: And they all came from Burlingame?

TERRY: They all came from Burlingame Associates. They were all employees there. There were other employees—Bob MacVeety, who joined RMC. He was not one of the "Original 9 Old Men" but the 9 Old Men were the owners of the firms and again, they got started in business because HP thought they were good. HP—Noel Eldred and Dave Packard were worried about the company's sales program continuing and they were.... There were some modest loans made. Probably some equipment loans were made to them and they were encouraged to get their business going and get set up, which they did quite successfully. The rest of the country, Al Crossley, had all of the, all of the country between the east and west coast, and as business grew, Al was very amenable to the fact that HP needed different representation, geographical representation, so a firm was signed up in Canada called Atlas Radio.

KIRBY: Atlas?

TERRY: Atlas Radio. A fellow named D. Lou Harris, who was the owner of that firm—a nice gentleman, a pillar of the Jewish community in Canada, a fairly famous guy in Canada in that regard—so Al Crossly didn't represent HP in Canada anymore. A firm was set up in St. Louis area; it was called...let's see, the fellow's name was Harold Hansen. It was called Hansen & Associates, I believe. A firm was set up in Texas. Again, as the electronics industry spread out around the United States, they started to grow, it made sense to have a local firm and not try and cover Dallas out of Chicago. So a guy named Earl Lipscomb was put on the team, Lipscomb & Associates. Two individuals in the south, John Bivins and

Dave Caldwell, set up a company called Bivins & Caldwell. There was one set up in Florida; I'll have to think about the guy's name for a minute, that was a real character, but anyway there was a new firm set up in Florida. Neely's territory expanded to cover most of the west coast, well, it expanded into the southwest. We had a boundary line between Texas and New Mexico. There was a firm set up in Denver that was set up by Pete Lahana, who was one of the original 9 old men that came from Bridgeport, Connecticut but Pete wanted to live in Colorado and it looked like a good opportunity, and so Tiny Yewell took over Connecticut and he had all of New England instead of splitting it into two pieces, but Pete was one of the original 9 old men. And a guy named Ron Merritt was set up in or set up his own firm and HP signed him up the Washington... Seattle, Washington area....

KIRBY: To cover the northwest...

TERRY: ...to cover the northwest. So we had pretty good coverage of all the areas of the United States with this, I haven't counted them, rep firms.

KIRBY: Okay, how were these people compensated? Did they all have a straight commission?

TERRY: They were paid a commission. At one time, it was as high as 15%, as memory serves me. Yes, they were independent businessmen. They owned their own assets. They ran their own business. They represented other firms. They would go out and solicit an order and when we would get the order into the factory, we would pay them a commission on receipt of the order, not at the time of shipment because they spent all the energy in getting the order and it was 15% as I recall at the height. We had a reduced commission schedule for large orders. We recognized and they agreed that every once in a while, you could get a very large order for multiple products and it didn't take the same amount of selling effort as selling them one at a time throughout all of the territories. So we had a roll-off curve that was published and they were paid reduced commissions. And then as time went on, their volume kept growing and growing and growing, and they got more and more critical mass so they could be more efficient, and this commission schedule was reduced from 15% down to around 10% as I recall in a series of reductions and you can imagine each one of those was a big semi-arm waving negotiation but we were becoming a very much more important part of their lives and on each one of those occasions, they had to make a decision about whether they wanted to continue to represent HP with growing volume but a lower commission rate or whether they just wanted to drop HP and go off and represent their other people that they had on their team.

KIRBY: Yeah, I'm going to get into the acquisition of those firms. I know the territories were really respected. I recall, I guess it was Norm Neely or Bob Boniface told me once that Norm, Norm got a check from HP for something that was sold up here and he didn't know what it was and it turned out that Packard had provided Stanford University with some instrument and because he was well-known over there and so forth, but he insisted that the commission go to Norm Neely.

TERRY: Yeah, yeah, I can remember those kinds of stories and yeah, it was a matter of kind of integrity, and keeping, you know, keeping these people highly motivated. This guy, Earl Lipscomb, in Dallas, he used to prowl around his customers and find an HP product and write a letter—usually I ended up with the letter—and it said, "Dear Somebody, I found an HP oscillator Model 200—something or other with serial number something or other and my commission records say I haven't been paid a commission on that product. What about it?"

KIRBY: Oh, really?

TERRY: Yeah, and we would...I would take on the assignment of trying to figure out how to plow through the records—we didn't really keep the records organized that way—to see if I could identify where this product had originally been shipped. It obviously had been shipped to some large customer and the customer transferred it to some other location and I remember we cut a couple of checks for Earl Lipscomb. I mean, this was, you know, this...it was a

check for \$62.20 or something like that, and after a while, Noel Eldred put his foot down and simply told Earl we weren't going to do that anymore. But yeah, there was a great deal of feeling of integrity about compensating these people fairly. They in turn compensated their people in different ways. Most of them had pretty highly leveraged commission systems. The individual salesperson got paid a commission on what they sold, so they were very interested in sort of keeping track of all this and motivate their own people besides enhancing their own pockets.

KIRBY: Now, now, what were some of your specific duties in supporting the rep firms? Had you enough product knowledge by then to be effective?

TERRY: Yeah, I did and I used to think, well, I used to take the manuals home and I'd really study them, and I would really learn how to use the product. I would sometimes take the products home or I'd use them at work and it was really expected that you knew as much about the product, not quite as much as the people that designed it, but certainly as much about as you could. And you could answer a lot of questions just on the telephone or directly by letter. There were no faxes or we didn't use faxes in those days; it was all strictly done by mail or on the telephone. And then, what you didn't know, you went back to the lab. Somebody would ask you a question or you'd get a letter of some... usually something a customer wanted to do and they wanted to make a certain kind of measurement or they would want to know why this product acted the way it did under these circumstances and if you didn't...if you weren't able to figure it out, you went back to lab, you found the engineer that designed the product, you sat down with the product and you kind of researched the problem and came up with some kind of an answer. That was a lot of the job. Also part of the job was, customers would want something a little different and this led to a series of what were called specials. These were minor modifications of the product, an example was they wanted to paint them a different color than the standard HP colors or they wanted a slightly different electrical change and if we could do that, without a lot of engineering, that was kind of the ground rule—we couldn't put a lot of engineering into these things—we were quite interested in, HP was quite interested in, doing it and we had a department in Manufacturing who handled specials and so, one of the parts of the job was some customers would say, "I want to have this modification on this product" and we'd go to the lab and ask them what they think and they'd say, "Oh, yeah, that's easy to do" and they'd make a little sketch and just change this resistor or do this or that, and then we'd take it up to Manufacturing, a guy named Al Ennor and we'd go see Al and we'd explain to him what it is we wanted to do and show him the sketch from the lab and say, "How much is that going to cost?" And Al would say, "Well, we can do that for \$75.00". So we would then go back to the salesperson who would go back to the customer and we'd say, "Hey, we're going... we can do your special and it's going to cost \$75.00 and it's going to take six weeks" or something like that. So those were some of the other, some of the things that we did. Incidentally, we decided—I think it was Carl Cottrell who started this—that some of these questions were repetitive and there'd be certain characteristics of a product, that all the products had the same characteristic and I think it was Carl that decided that as we answered these questions, we ought to keep a copy of the answers in a file so that as the questions came up, the repetitive questions, we'd just go over this file and we didn't have to go back in the lab and Carl set up what was called the "Blue Lab." It was named after the rad lab series, which is a series of famous textbooks that came out of MIT shortly after the war. We didn't have a rad lab library; we had the "blue lab" library and it was blue because it was in blue binders! Okay? We had a shelf of blue binders. It was about three foot, I guess, and it must've been 20 binders in it and they were organized by model number and you would go over...you had a question on a model 610 signal generator, you'd go over to the blue lab and grab the 600 binder and look under 610, and in there, you'd find a series of memos from me and other people that answered a series of questions about the 610 and

many times you'd find the answer to the question 'cuz it was a common question right there and you could very efficiently answer it. Incidentally, in answering these things, I made it a habit—several of us did—we had these multi-part forms? They were half the size of 8-1/2" x 11" and they came in three carbon-less copies and we would write all the answers in longhand. We didn't have secretaries; we had secretaries, but they were busy! So you found yourself writing these things, these little bulletins, these answers to these questions and you'd put a copy in the blue lab and you'd keep a copy for a follow-up and somebody'd get this handwritten thing with a sketch on it about "Here's the answer to your particular problem."

KIRBY: Did you have anyone working for you? I assume you had a secretary.

TERRY: we had a secretary, Marilyn McVey her name was—M-C-V-E-Y—and she was shared between at least six people.

KIRBY: God!

TERRY: At least six people. She was very good; she was fast, telephones, typing, travel arrangements, doing things like that and she got to know the people that we supported and they got to know her and so, it was a kind of a camaraderie built up over that period of time.

KIRBY: Did you travel out into the field very often?

TERRY: Yeah, I did and I always thought my job was probably the best job at HP, and I've said that to young people coming into HP and other companies, because I was forced to learn the products so I could be effective and I got to deal with customers and directly or indirectly through the sales representatives, so, you know, I got a real feeling for the business and the technology, very early and that was great training. And I also had an opportunity to go out and see these people and talk to customers face-to-face. This was done in a fairly organized way. We didn't make very many emergency trips out to solve a customer problem. There were a few of those but not very many. It was done mostly in support of the reps, at least in the beginning; it was a combination of training and promotion in what were called "road shows." These reps would organize a, an event or series of events for customers. It was all product focus, it was heavily new product oriented. It sometimes included a lecture and somebody from the lab would go with us or with me, to put on a 40-minute talk but usually it was just a demonstration of a series of tables with a bunch of products on it and your job was to help organize these things to get some of the new equipment out and to get it...help get it set up and then to stand there with your suit on and talk to customers as they came along and show 'em this new product and how it worked and why it would benefit them if they were to put it to work in their organization, and that was a, that was a great experience for me and I think everybody in the sales department, 'cuz you were out there and, incidentally, given the cost of the airfare, you'd stay for at least two weeks—sometimes it was three weeks long—and that got to be a little tiresome but you'd go out for at least two weeks and go to these events that the people put on. An organization in the centralized place like Washington, D.C., for example, or even New York, there'd only be one event and it might go on for three or four days, maybe even five days. So you just had it in one place and you had the customers coming in and the sales people invited the customers and organized all this and they were usually in late afternoon, when the customers could get off from work. They usually included some refreshments of some kind, not a dinner, just drinks and they usually wound...they'd go from 3 to 6 or 7 pm, something like that, and they'd go on for a series of days but because you were bringing new products with you from the factory, it also became a kind of de facto training program for the sales engineers out there. You got this new product set up and before you put on a demonstration before 3:00 in the afternoon, you'd sit down with the sales engineers and you'd show them a product and give 'em a little training session on the product so they could, they could show the customers when they came in and it was a product they were going to get their

own demos for within the next month, so they had to get associated with it. But the road shows were all different. They were a precursor to what later came along where the reps moved the products to the customers through what were called travel labs—big buses full of products. This was before that and the customers moved to the products. In the sparse territories where things were really spread out—the Midwest and Neely being two good examples—you moved your products from place to place and that was a real experience. It was really hard work. Neely moved products in a truck, and they moved the personnel in a hired bus. Crossly wasn't quite as organized. They moved products by station wagons. Frank Waterfall, who was the second in command—A1 Crossley passed away; oh, I can't remember, Dave, probably in the '60s, early '60s—he was a fairly old man at the time but Frank Waterfall was the second in command and he would...he had a giant Chrysler station wagon full of these products. The darn thing must've weighed, I dunno, 6 or 7,000 pounds and on the back of this Chrysler station wagon he had a trailer that he had built. The darn thing was made out of sheet steel! And this steel trailer was full of products and the whole entourage, I'll bet they weighed 15,000 pounds...

KIRBY: It probably went 10 miles an hour!

TERRY: Oh, it went like about 70 miles an hour! [Laughter] And I think if you took your foot off...I used to ride with Frank 'cuz he'd want to talk to me about some factory matter and we'd be cruising across the Midwest drinking beer at 2:00 in the afternoon. I think if he took his foot off the accelerator, this thing would've coasted for 10 miles! We were relatively accident free but the drill was, you know, you'd get up really early in the morning and you'd get this entire thing packed up in these station wagons and you'd get on the road by 9:00 and you'd drive hell-bent for election to some exotic spot like Cedar Rapids, Iowa and you'd arrive there around Noon and then you'd unpack the whole thing, and you'd get it set up in a motel conference room, tables and tablecloths, get all the products put together, cabled and turned on so they worked, and then you'd rush back to your room and take a shower and put on your suit and arrive bright and shiny by 3:00 or 4:00 when all the customers showed up and the customers would come in and the Crossly one was always famous 'cuz A1Crossley...well, A1 Crossley was a man in his probably late sixties, early seventies at the time, and he wasn't expected to nor was he interested in hauling these instruments around. They were heavy. So he organized the literature while all the rest of us put all these products together and when the customers came in, A1 Crossley would greet them warmly and point out the literature that he had organized and then Frank Waterfall would be the next guy in kind of a receiving line and he'd introduce himself, and they usually had a little favor that they'd hand out, like a plastic ruler with the name of the reps on it, and I remember a famous story where somebody came in and Frank said, "Come on in, Charlie. It's really good to see you. Why don't you come in and have a belt?" And of course, he meant have a drink. And later on when Charlie left, he said, "Mr. Waterfall, I really had a wonderful time but I haven't received my belt." Anyway, that would go on from 3 to 6:30 or 7:00, maybe a few hangers-on. There were drinks served; the people were well-behaved. There was a typical stop in Cedar Rapids, Iowa. You'd maybe get a 100 customers from Collins Radio, and the customers were really interested. Here was their chance to talk to somebody from the factory, to look at the brand new stuff, maybe to talk to their local sales rep about something that was going on. So it was a good turnout, it was very productive. But the customers would leave about 7:00 and since we had to be on the road the next morning at 6 or 7 in the morning, we'd pack the whole shebang up that night....

KIRBY: That night!

KIRBY: You were talking about these road shows and so forth.

TERRY: Yeah, we packed the whole thing up and by then it was 8 or 9 o'clock and you hadn't eaten anything since, well, you probably bolted down half a sandwich at lunch. The crew

was pretty hungry! So the crew, with their suits on, slightly sweaty, would go off and have dinner somewhere. In the Midwest, the name of the restaurant was almost inevitably "The Flame" [laughter] and we'd go off to "The Flame". These were places that were known to the local reps, of course, and we'd go off to "The Flame". This would be a group of about, oh, 10 people, 12 people. There might be one or more people from the factory, myself from Hewlett Packard and then somebody one of the other firms that the representatives represented, non-competing firms, so there might be somebody there from Sanborn or Varian or one of the other firms. And we'd all go out to the restaurant and have a couple of drinks and, A1 Crossley would sit at the head of the table, 'cuz the Crossley one was a real ritual. It always happened exactly the same way, and A1 Crossley would sit at the head of the table and the waiter would come and A1 Crossley would look to the group and he would say, "Gentlemen, I really recommend the Lake Superior white fish at this restaurant" and that was because the Lake Superior white fish was the cheapest thing on the menu! So then the waiter would start around the table and everybody ordered a great big steak. Everybody was really hungry and then the guy would finally come back to A1 Crossley and A1 would say, "Well, I guess I'll have the steak also." This got to be a ritual! It happened exactly the same way at every restaurant—Lake Superior white fish and everybody would have a steak! And you got to bed by, oh, 11 or 11:30. Some of the members of the group wanted to go out and chase around the local wild life to see what they could see, but the rest of us were so dog-gone tired by that point, we just fell into bed, so you managed to get about 4 hours, 5 hours sleep....

KIRBY: And then you had to get up at dawn?

TERRY: And then you get up at dawn and you do the same thing all over again! And you'd beat your way from Cedar Rapids to somewhere else in the Midwest. It was a, it was fairly trying.

KIRBY: In those days, how did they ship products to remote areas?

TERRY: They were shipped by truck. They were packed up in cardboard boxes. They were shipped by truck. There wasn't very much air shipments so you had to anticipate pretty good lead times to get stuff moved around and it was, you could carry it as carry-on baggage on airplanes but it was awkward and it was difficult, it was large and it was bulky, so you just had to kind of plan ahead to get this stuff shipped. The Neely road shows were, were a different breed of cat. They used this big bus that everybody got into. They worked essentially the same way. You'd get up early in the morning and move off, get set up. They tended to have more stuff—I don't know why—but they'd go off to obscure places like El Paso and Las Cruces. Norm Neely was an absolute stickler for leaving on time and, and us factory folks who were kinda new to the Neely team, we soon learned that Neely time meant approximately 10 minutes before the announced time. Norm would say, "The bus is going to leave at 7:00 am" and that meant it's leaving at about 6:50 or 6:55, so you'd better get yourself out on that bus!

KIRBY: And if you weren't there, then he'd leave?

TERRY: And one day in El Paso, Earl Davis was not there and we left and Norm knew he was not there but Norm, by God, was gonna leave on time, which was about 10 minutes to 7! And Earl Davis some way, somehow, caught up with us somewhere along the line. And Earl had been out, I think, over in Juarez looking around that evening and he didn't make that particular bus but Norm was a real stickler for a lot of different things and then one of them was timeliness, punctuality. Neely also had some very adventurous characters. We would go off, as I said, they seemed to have more equipment. They just put on a bigger show. We'd go off to a place like Las Cruces, New Mexico, and we would settle into a local motel and it would turn out there was not enough power in the motel to run all the stuff that we had set up. So there were two guys—Rudy Poucher was one fellow, he was relatively short, pretty heavy. He had a—I think it was a birth defect—one of his legs was shorter than the



other, so he walked with a plate on his heel—a real character! And a guy named Ron Gieson who was kind of a facilities manager for Neely. But I remember that one would go to one of these places where there wasn't enough power in the motel to run all this equipment. These guys had pole-climbers like electrical linemen used and rubber gloves and these great big clip-ons so they'd go out and find the local power pole. They'd climb up the power pole....

KIRBY: Power pole?

TERRY: Yeah! This is as dangerous as hell! They'd go up the local power pole and they'd clip in directly to 220 or 440 lines right off the local feed because the transformer in the motel didn't have enough power to run all this stuff. So they, they were really innovative!! Fortunately nobody got electrocuted or we didn't bum down anybody's motel either, but it was, it was kind of a ritual—getting the products out in front of the customer, bringing some factory people along. It was usually done once a year, you know. Many times it was done in the Spring but also, as I said, it was a wonderful opportunity for young people in the company—I wasn't the only one who'd go out on these road shows and really see what salespeople did, talk to real customers. You know, it really kinda, kinda added to your education, brought it, put it together.

KIRBY: It must've been about 1960 that you and others in Marketing decided to publish a newsletter for the reps.

TERRY: Yeah....

KIRBY: I was with HP's advertising agency in San Francisco at that point and was asked to help you with a newsletter. Do you remember that?

TERRY: I sure do and, in fact, I gave Karen Lewis when I retired a complete copy of what was called "The Intercon" from volume 1 on. I had happened to keep it in a binder, so there is in the archives a complete set of these newsletters.

KIRBY: That's great. I think it was a monthly, was it? public relations....

TERRY: L.C. Cole & Company. Bob Orr was the principal, or at least the principal that I knew, and you worked there. I think you guys came up with the name, "The Intercon". I don't remember that we came up with ...

KIRBY: I think so....

TERRY: I don't remember that we came up with the name and Cort Van Rensseleer was the original editor of it. And then Cort went on to head the oscilloscope division. Dick Reynolds followed him as the editor, and then I was the editor, the ..., yeah, the editor, the person that put it together for much of its life and its mid-span. But it was, it was our effort to communicate with the salespeople, the reps, because our product lines were growing. We kept adding other kinds of instruments to our product line and, frankly, we were a little jealous of the reps' time was spent on non-HP products. They sold Varian Klystrons and they sold Emcor cabinets and Cohu television cameras and a variety of electronics equipment, but, of course, our objective was to get 'em to spend the maximum amount of time on our products and we did that in a lot of different ways.

TERRY: It was a monthly newsletter.

KIRBY: Now, I believe it was in 1962 or '63 that HP wanted to set up its own sales organization and I want you to talk a little bit about that. Among other things, were the representative firms getting nervous about the future? Because HP was sort of a dominant part of their product offerings.

TERRY: Yup. Well, let's see. Prior to that, I mentioned the Burlingame break-up. We had the 9 Old Men and we had firms pretty stable, pretty well run, pretty good people covering all of the United States. But our product lines kept getting bigger and bigger and along the line,

earlier to this, these folks had to make decisions. HP would announce, "We're going to start making electronic counters" or "We're going to start making an oscilloscopes" or some other new product and they had to decide whether they were—and that presented a competitive conflict for them—and they had to decide whether they were gonna stay with HP or whether they were gonna bail out and keep this other firm. And in all these cases, they decided to stay with HP and they dropped other lines as we became competitive with them. They also represented, as I said, noncompeting electronic manufacturers and we got to know these manufacturers through the reps. We got to know their products because we'd see 'em on these road shows, we'd talk to the reps about them, about the products and this, in many ways, is what led to acquisition of a number of these companies. So we acquired companies like F.L. Moseley that made recorders, Sanborn who also made industrial recorders, Boonton Radio, Harrison Labs, and probably some others that I'll remember. But these were firms that were also represented by pretty much the same group of reps so not only did our product line grow, but, in acquiring these firms, we arrived at the point in the '60s where we represented 60, 70, 80 percent or even more their total income and influence. We represented that much of their income. I think we represented a higher degree of influence because I think we were just more aggressive and better in servicing them. So they...and they made a lot of money out of selling HP products. So they would...many of them represented Varian and when they'd come here to Palo Alto for meetings, they would split their time between HP and Varian, and of course, we wanted more than our fair share of the time and made the Varian executives mad because we'd have the reps here for 4 days and they'd spend 1 day at Varian. But that was kinda proportional to their income. But it was this natural growth of the product line plus these acquisitions that ended up with, "Hey! We were such a big part of your business, maybe we ought to really make it an official and legal fact" that was the driving point behind this rather than, "Gee, we gotta have control of our own sales force." We just grew into owning these people and we just made it a legal and financial fact along the way. KIRBY: So, you can't really say.... I was about to ask you whose decision was it to acquire these firms? I guess it sort of evolved. I, I heard somewhere along the way that Earl Lipscomb was the instigator of this.

TERRY: He, he was the first to move. Yeah, the evolution was underway. It was plain as the nose on your face! There were no secrets. I mean, when somebody would drop a product line or when HP would acquire Booten Radio, it became real clear what was gonna happen. Incidentally, there were, there were little or no written contracts with these reps. This is a kind of a famous thing in the HP folklore. This is when Dave Packard and Noel Eldred set many of these people up in business, it was down with a handshake, so there were no, there were no, or very few legal documents about representation. There were a few letters of agreement on commission schedules and reduced commission rates for large orders but there were no real binding contracts so when HP acquired Boonton Radio or F.L. Moseley, you simply called up the reps and told them that was what was happening and just like went on. They still sold Moseley products but now HP owned Moseley but I think it was in the back of everybody's mind, it was becoming more apparent. I think I was not privy to this. There were probably some discussions about this trend among some of the more enlightened reps, probably people like Norm Neely and Dave Packard and Noel Eldred. But Earl Lipscomb, you're correct, was the first one to move. Earl, I think, really saw the handwriting on the wall and he approached HP, Noel Eldred and said, "Look, I think this is...you guys are headed toward having your own national sales force and I'd like to be part of that, and I'd like to sell you my company." And that's how negotiations started. So Earl, Earl was kinda the instigator. Now, he was not the first. I think—and we'd have to check the archives exactly. While this was going on with Earl, we had a problem in Canada. This Atlas Radio was a real conglomerate and I can't blame anybody for that. Al Rosenthal was the

sales manager; D. Lou Harris was the owner. And it was a conglomerate because there wasn't that much electronics business in Canada and they had to represent a lot of different people, so the sales reps were spread very thin, plus Canada is a huge place! So you've got this very thin electronics industry spread over this huge geography, and things were growing and we were not very happy with what was going on in HP-Canada and we talked about...Tom Christianson and I went up to Canada. We spent a week. Noel Eldred asked us to go up there. We spent a week with Harris and Rosenthal and the firm, tried to evaluate their skills and capabilities and their people with the idea in the back of our heads—I'm not sure we told them this—whether we ought to acquire Atlas Radio or not and try to improve the situation. And we came home with and recommended to Noel that we not acquire Atlas Radio, so we announced the termination of Atlas Radio on reasonably good terms and announced the formation of HP-Canada, that we were going to set up our own organization and that preceded the announcement of the acquisition of Lipscomb by just a few months.

TERRY: So, technically the ball kinda got rolling with HP-Canada and then when Earl Lipscomb and, and that was because we weren't too happy and, and the reps, I think, in the U.S. recognized that that was the case but when Lipscomb threw his hat in the ring about acquisition, then it became pretty obvious to the rest of the people that HP was gonna start moving towards its own sales organization.

KIRBY: Who was sent up to Canada to run that? Or did somebody from Atlas...?

TERRY: I knew you were going to ask me that! And I'm going to have to...I think it was Ralph Haywood, and I be.... Yes, he was an employee of Atlas. I, I think it was Ralph Haywood, Dave, I don't think anybody preceded him and he set up the HP organization up there.

KIRBY: So that got the Lipscomb overture, got the ball rolling. So, were there any rep firms in the country that HP did not want to acquire?

TERRY: Yeah, there were several that they did. Let me precede that by another story and, again, we can check the archives. It's not important for an exact date but the Lipscomb thing became known. We did not announce a price. In fact, we didn't pay very much money for these firms. We acquired all the assets and we paid them so much for the goodwill. But the Lipscomb thing was known and we had a meeting here in Palo Alto and it was....

KIRBY: Excuse me. I bet once that was announced, the other firms got on, got on the telephone!

TERRY: Oh, they were on the telephone real quick!! They didn't talk to the likes of me. They would kinda talk around the edges about "What'd ya know?" You know, but of course, it was pretty obvious that Noel Eldred and Dave Packard were running the show and there were a lot of phone calls to Noel particularly, who was a pretty good diplomat about these things. But we had a meeting here in Palo Alto which was our annual gathering of the clan. It was a 3,4-day meeting which was a combination of quota-setting. These were the so-called principals, the owners of the rep firms. It was quota-setting, it was new product training, it was a little bit of hoopla—we'd have a nice dinner. We had this conference this particular year at the conference room at Rickey's in Palo Alto and I somehow was involved...I was at the meeting and I was helping, my training background, I guess. I was helping put the schedule together and do some of the new product training. But the meeting opened up at about 8 o'clock in the morning with all these reps sitting in this room. It must've been 30 people in the room. Dave Packard stood up on the podium and he says, "Gentlemen"—there were no ladies—he says, "Gentlemen, I have a very important announcement to make." God, every jaw in the room dropped open! I mean, these guys weren't quite sure what was...he was gonna say!! I think they probably suspected he was going to say, "We're setting up our own direct sales force and you're all fired" or something like that. Anyway, he says, "Gentlemen, I have a very important announcement to make." Silence. He says, "This is the first day of hay fever season and I feel like hell!" And of course, that put the comic

relief into the crowd; everybody roared! And we went on with the meeting and Bill and Dave...not Bill, Bill wasn't involved; Dave and then Noel Eldred, who had been having private talks, simply stood up there and said—and there was a letter that was drafted, that I helped with—simply said that HP is going to be moving in this direction and we would like to discuss with each of you arrangements if you're interested in it, of becoming officially a part of HP. So that meeting and that letter, you know, kind of kicked off the...kicked off the acquisition of reps. But the question you asked, I think, Dave, was, you know, the ones we wanted and the ones that we didn't want....

TERRY: And let me start in across the country. The Burlingame, the 9 Old Men, were running pretty good operations. They were pretty close to HP and we were pretty sure or we intended to acquire them. Now, there was one exception to that. New York state was covered by a fellow named Rube Ryerson, Ryerson & Associates, and I frankly can't remember whether he...I think he was doing an adequate job. He was okay, but Rube was a real character! He was, he was probably in his mid-sixties about that point. His people weren't real good but they were adequate. He was a wiry, short, little guy and very excitable and he decided that he didn't want to have anything to do with this, and he told Dave Packard in no uncertain terms—I think he wrote a nasty memo or letter.

TERRY: ...as I recall. He told Dave that, no, he wasn't gonna go along with this, he just, he just plain liked the independent life! He didn't want to be part of HP. As I say, he was a real character. He had an office in Syracuse, New York, that we would visit occasionally. One of the unusual things in this office—I'll never forget—is that it had a vault, and that was pretty...a walk-in vault.

TERRY: That was a little unusual to have a walk-in vault. We and the reps never really handled any national security information but he had this walk-in vault. And I found out one day that you walked into this vault and in the back of the vault, there was a door, a plain wooden door, and behind the plain wooden door, there was a bedroom.

TERRY: And what went on in his vaulted bedroom, I'm not privy to!! But he was a real character, that Rube Ryerson! He announced that he was not gonna go along with this and in fact, he kinda threw down the gauntlet in a way that became obvious we'd better start doing something or we were going to have a problem in upstate New York. Ryerson wasn't going to be acquired and his enthusiasm was gonna wane but let me come back to that. Ron Merritt in Washington state, ARVA, who's a real classy guy, a real gentleman, he said he didn't want to do this either; he would rather stay an independent rep....

KIRBY: Oh, the name of his firm was ARVA?

TERRY: I'm not sure I know where that name came from.

TERRY: But he simply said, "I don't want to go along with this. I'd rather stay an independent businessman." And in that case, it...the...today we call it a strategy, but the idea was that that wasn't too big a deal because it Neely had a really strong organization and we could just expand the Neely organization and ask Norm to represent HP in Washington and Oregon. And a fellow named Bill Saxton, who was an old-timer Neely guy from Arizona, went up and ran a very successful organization. A fellow I didn't mention before, Sy Sterling in Detroit, also he represented a large number of firms and he had some kind of what we call "assembly businesses", making special sub-assemblies and products for the automobile industry. He had his fingers in a lot of pies, and Sy said, "I don't really wanna be a part of HP. I want to run this kind of conglomerate in Detroit" and in that case, that wasn't that big a problem either because Crossley was pretty strong. Frank Waterfall was running the place. They had some good people. They were in Ohio and Indiana, adjacent to the Detroit area, so expanding Crossley's territory into what used to be Sterling's wasn't that big a deal. We had a fellow named Art Meyers, that represented HP in Florida. He was a real

character, also! He flew his own airplane. I didn't fly with him. I remember Dick Reynolds told me one time he went on a flight with Art and across Florida in his airplane where Art was balancing a bottle of bourbon between his knees while he was flying this airplane around there! He ran an okay sales organization but we didn't really necessarily want to have anything to do with him long term. He also had a huge conglomeration of product lines, the growing business in... In order to make a buck and being a manufacturer's rep in an infant industry in Florida, it meant you had to represent a whole lot of people. His organization was strengthened by a fellow named Gene Stiles, who worked in the Midwest, who was sent down to strengthen Art's organization. He went to work for Art. He later set up the HP-Florida sales organization in Florida but at the time, he was an employee of Art's. He and Art Meyer used to come to the IEEE show—Institute of Electrical and Electronic Engineers—in New York and the famous story I remember was he and...Gene Stiles and Art Meyer use to walk around the IEEE show looking for new manufacturers to represent in Florida so they could make this conglomerate even bigger!

TERRY: And they went into somebody's booth and they gave 'em a big pitch about how good they were in Florida and how they could represent him, and the guy looked at Art and said, "Well, you bastard, you already represent me!" [Laughter] He had kinda lost track who he represented. But we didn't really want to have too much to do with that organization. Art was getting along and it became pretty obvious that we could get Gene Stiles and make an amicable deal with Art to buy him out and set up Gene as his ex-employee in the Florida area. The one upstate New York was a bit of a dilemma. The Robinson organization in Pennsylvania was okay but it would be a big reach for them. Tiny Yewell was on the other side of the Hudson River. We had some concerns about and so expanding that one wasn't really very practical, so we went out and we hired a new rep firm. This is even though we had this idea of acquiring firms in our mind, called E. A. Ossman & Associates. They were in business in upstate New York. They had to drop some product lines to take on HP. They were run by a real character again named Eddie Ossmann. He was a power of energy, a really good salesman, pretty good engineer. He had some pretty good employees and we were pretty impressed with him. We had he and his team out here—I remember organizing a special training program for a week or two, where we kinda gave him a crash course on HP and HP products to kinda get him up on the learning curve. And they became our rep in upstate New York replacing Ryerson, and that went on, I guess, for only about nine months and Eddie Ossmann was killed in an automobile accident, and here we'd gone to all the trouble of setting this thing up and Ed's gone from the scene and we started looking around at the alternatives, and there were no other manufacturing rep firms; he was the only game in town. But he had some pretty good people and so we got together with his widow, Jeanette Ossmann, and we agreed to buy the business and discussions were going on with the other reps about potential acquisition but this became, actually after... this was a little bit after Lipscomb, this became the first HP set-up owned and organized sales organization. We decided we would go in, we'd buy the business from them and we would make it what we called the Syracuse Sales Division of Hewlett Packard and we hired most of the employees, not all of them. We hired most of the salespeople, not all the administrative employees 'cuz we didn't need them all. And we set up our own sales organization in upstate New York. And that's what I did for about a year. DK; Yeah, I was going to get to that, and we will. Now, acquiring the reps was a good move for several reasons but was there any down side to it?

TERRY: Well, I don't think so.

KIRBY: How did the other firms take this that they were representing? Like Varian, Tektronix and so forth.

TERRY: They didn't take it very well but again, they all could see the handwriting on the wall.

Again, this thing had evolved to the point, I mean, the Varian people could see that the reps were more and more not only representing HP but they were concentrating on instrumentation not Klystron tubes. So I don't think there were any hard feelings that I can remember. There might have been a little grumbling but it kinda forced them to make decisions that they knew they were going to have to make somewhere along the line anyway and there were no lawsuits or anything like that at the time.

KIRBY: Yeah, right, right, so, so but they did have to make other arrangements.

TERRY: They did and HP was generous in time. Take as much time as you want, a year. Most of them got it done fairly quickly. Most of them, well, the big ones like Varian, set up their own direct sales organization. They hired some of the same people away from the reps.

KIRBY: They felt that that was the time to do it.

TERRY: They did. Some of the smaller ones simply went off to the second rep firm in the territory that happened to be the second largest one in the territory. The HP firms were the largest at the time.

KIRBY: Were these acquisitions were consummated through an exchange of stock or cash?

TERRY: Both. They were done with heavy influence by Dave Packard personally and Noel Eldred and Ed Van Bronkhorst, and the rest of us really weren't involved very much. John Young was involved a little bit, so he could tell you some stories about that, but the rest of us... Wisely, the bosses sort of kept us out of the scene. They decided they were going to do the negotiations themselves and they were for stock and cash both, as I recall, and there were legal agreements, simple legal agreements, written about these acquisitions and they are still around here somewhere. I found one. Ivan Robinson asked me about one a couple years ago and I found the original acquisition agreement in our financial archives around here somewhere, and I remember the Yewell one was done heavily for stock and we used to kid Tiny Yewell 20 years later about why he didn't hang onto that stock because, of course, 20 years later it was a lot more valuable than it was at the time.

KIRBY: Well, I think it was Bivins & Caldwell in North Carolina that was acquired by cash.

TERRY: It could've been.

KIRBY: Then I think later on, when they saw HP stock going through the roof, that they sort of regretted that.

TERRY: Yeah, yup, yup. That's probably true but these were small businessmen, you know, and none of them were wealthy or lived a lavish lifestyle and I don't think they had a lot of cash flow in their businesses and I don't believe they paid themselves very lavish salaries, so you know, it was a chance for them to make a little money while the opportunity was there.

KIRBY: Now, in exchange of stock, let's say that HP stock was given to these firms. I guess it was up to the principal of the firm to distribute the stock among his key people.

TERRY: That's correct, and they all had different ownership, legal ownership, agreements among their key people or if they didn't have that, they did it as some kind of a bonus program, I guess, but I know some of them, I know, legally

KIRBY: Bill, we were talking about the granting of stock to the representative firms and they distributed the stock, I guess, according to their own feelings about this.

TERRY: Yeah, their own feelings and, plus the legal ownership. I know in the case of Neely, there was already agreements. Legal agreements were... or stock. I don't what it was granting certain ownership rights to certain key individuals. Leon Levy, who was a partnership with Ivan Robinson, had had an ownership position. Robert Milton Charlie—RMC—each one of them had a, I believe, they each owned a third of the company, so some of them were kind of parceled out. The others were, if anything, was done on—and I'm not

sure anything was done—it was just a manner of bonus, where they passed on some of the benefits and their ownership to their employees.

KIRBY: Okay. Do you recall, when all this was over, how much it cost HP in stock and cash?

TERRY: No, no I don't, Dave, I don't really remember. And I don't think it's a number that we published and somebody would really have to dig back. Ed Van Bronkhorst would be the best one to kind of give you a.... Neely was the most expensive because it was the biggest. It had more employees and more business. Probably Crossley and Horman in Washington D.C. would be next, and then the others were relatively small deals.

KIRBY: Okay. Now, it must've been a big job to integrate these firms into the HP company. Were you involved in this? And what kind of challenges and problems were there?

TERRY: Yeah, there were problems but before I answer that one, let me tell you a.... Let me answer a question you didn't ask about the negotiations for the acquisitions I mentioned....

KIRBY: Okay.

TERRY: As I mentioned, they were conducted by Dave. Dave got involved in all of these, I know, and Noel Eldred. There were supporting characters in the cast. John Young was working in the Finance Department for Ed Van Bronkhorst at the time, so he was kind of assisting Ed in, you know, the financial analysis numbers and I was working—I think I was working directly for Noel. Noel would ask me questions about the quality of the people, so I was kind of scurrying around doing inventories on how good the people were and maybe how much demo equipment and how well-managed they were. So there were some supporting people but the actual negotiations were done very much by Dave Packard and Noel Eldred. Ed Van Bronkhorst got involved in some of them and he can tell you these stories much better than I but I know one particularly that took place in the acquisition of RMC. The IEEE show previously—previously known as the IRE show—in New York (it was held in March), it always seemed to be a kind of cardinal point because this is when the whole group got together. They got together here in Palo Alto but they also got together in New York. And the way the calendar worked out, the acquisition of RMC and negotiation took place during this occasion in March. And at this time-frame, I would go back to the IEEE show with Noel Eldred. Noel and I would share a room; there was no such thing as single rooms in those days—everybody shared rooms, trying to save a little money in New York City—and Noel would have me, both of us, would trot the street to the local liquor store and get a handful of bottles and bring 'em up to our room and get the larder stacked up 'cuz people would be dropping by and we'd go to the Stage Delicatessen and get some sandwiches and so forth. But I remember helping Noel get the room set up for the acquisition and the discussion of RMC and then I exited. I was not included in this but Van Bronkhorst was, and evidently there was not a good agreement on what to ... this company was worth, and Van got fairly excited and Dave simply told Van to shut up and get out! And so Van was kicked out of the negotiation and went for a walk in Central Park, and I think he probably resented that and I think he probably didn't think that the acquisition price a fair price but Dave was gonna get it done Dave's way! But the rest of them were really quite amenable.

KIRBY: That's a great story. I think I remember some time ago, I interviewed Bob Brown, who was our attorney in San Francisco, and he said in his career, Bob Asen was the most difficult guy he ever encountered.

TERRY: I think that was certainly related to the stubborn.... It was related to that acquisition! I don't recall that Bob was physically there and I know Nate Finch was involved in some of these also. He was HP's local attorney, but I'm sure he's referring to that acquisition and negotiations.

KIRBY: That's right, right.

TERRY: Well, you asked about integration. Yeah, we acquired these firms. We'd got this one about to get going in upper state New York and it was kinda poking along and the rest of them were acquired. We wisely—and Noel was very careful about this—decided that we would go very easily on "integrating" these firms. Now, they were pretty well integrated from an operations sense. I mean, life went on. They sold the products and so forth. There was some integration of the order processing system but this was a fairly simple thing to do. They just kept sending in orders and we kept shipping products and, of course, we didn't pay 'em a commission anymore. We had to set up bank accounts for them to draw on and there was a fair amount of integration that had to be done in the accounting and that's what John Young helped with when he was working for Van Bronkhorst. So they had to get their accounting, representation of expenses, and so forth. It strictly a cost center, there was an expense center. They had to get onto the HP chart of accounts and be able to report their expenses so they could be consolidated. But it was a fairly straightforward....

KIRBY: But there were personnel policies, for example, like, you know, vacations and all that.

TERRY: I guess so but again, we went real easy. We went real slow and real easy and, you know, tried to bring them up to those benefits....

KIRBY: Okay, but over a period of time....

TERRY: ...over a period of time. Nobody was jamming anything down anybody's throat. Critics around the edges for years, at that time, wanted to know why we didn't eliminate their names? We kept all their names: Neely, Yewell, Crossley. Why don't you call it the Midwest Sales Region of Hewlett Packard? And I know Noel felt very strongly about this—that these names had value. They had 20 years of recognition in the local electronics community! So we were going to move very slowly about any name changes and we did. I mean, it took almost 20 or 30 years before these names faded away in people's memories and it became known as Hewlett Packard Midwest Sales Region.

KIRBY: And the one that lingered the longest was Neely and I'm not sure ... that's now the Western...?

TERRY: I don't even know what it is today!

KIRBY: I don't know either!

TERRY: I don't know whether it is or not, but it....

KIRBY: Norm died fairly recently, and I don't know whether....

TERRY: Right. I have not noticed anything in writing, so it still may be there, although today it gets a little hard. You get customers that are 25 years old; they never heard of Neely or they don't know anything about it. So it's ... we're probably in the transition now of changing it to some other name but Neely's name had very strong recognition on the West coast and we were wise to know that. I mean, Norm would talk about the Neely man and what that meant: well-trained, technically competent kind of person. So we kept all of these names. The one in upstate New York, Ossmann had only been there for about nine months so that had no value at all.... We just picked ... I just picked a name out of the hat, "We'll call it the Syracuse Sales Region of Hewlett Packard Company."

KIRBY: Now, we talked about the compensation of sales people and after they were acquired, of course, that changed. Can we talk about compensation of sales people down through the years? What kind of....

TERRY: You said it changed. I don't think it really did change, Dave. Again, we were very careful. These people were run good organizations and we wanted to be, you know, we wanted to keep the principals in place, so what we thought were really important technically-trained people, commitment to understanding the product, efficiency at this and



that—and we were very concerned about meddling. You know, just sticking our will down their throats, so we didn't change the compensation system to the sales reps. If they wanted to pay 'em on straight salary, fine. If they wanted to pay 'em on commission, fine.

KIRBY: It was up to them?

TERRY: It was up to them and we started doing things like encouraging them to get local competitive data on what sales people were being paid, and in many cases they'd say, "Well, gee, we don't have a way of getting that." Okay, we'll help you; we'll go get some competitive sales data and, you know, that suggested, "Okay, you ought to have some standards for sales reps." Well, how do you do that? Well, you have curves or rate ranges and you've got a junior sales rep and a senior sales rep, and here's the local data. So we, you know, we were very interesting in helping them run their organizations but we were very concerned about jamming things down their throat, and that's one of the jobs I did working for Noel. There were certain elements in the company that said, "Well, these damn reps, they're gonna have to do it this way!" And, you know, I'd use Noel's name or Dave Packard's name and say, "I'm sorry. We're not going to do that. These people are running a good organization and we're not going to make just an arbitrary change—whether it's their name or how they do this or that"—except for a few basic things, like the accounting. But I know the personnel policies and the benefits, it took us a while to get a, you know, a sense of uniformity but we were not gonna jam this thing down their throat to be "uniform"! It took a long time in some cases. These people were proud and had good systems.

KIRBY: When it did become uniform, let's say, throughout the U.S., what was the method?

TERRY: Well, we had a commission of something....

KIRBY: It was a commission?

TERRY: It was always a commission. People here felt strongly—Noel felt very strongly; I think Dave Packard did—all of us did—that this idea of getting the salesperson up in the morning and working hard all day long and getting paid proportional to their efforts was a very important deal, so there's always an incentive compensation element. We invented some programs here. We had to invent one for the Syracuse Sales Division because it was our organization and we were running it and I invented one with the help of a guy from Stanford. It was a simple-minded, you know, you got paid so much commission. We set in targets, we put caps on it so it wouldn't go over a certain amount, you know. I learned a lot; we all learned a lot about things of that nature, particularly in terms of keeping them simple. Boy, the five best rules about compensation systems are all the same: they've gotta be simple! Understandable! We tried some things that didn't work and got too darn complicated but it was always an incentive compensation element. The philosophy I don't think has changed a heck of a lot. It varies across HP today but we wanted to see maybe 30, 40 or even 50 percent of their total income be compensation... incentive compensation.

KIRBY: Okay. So that's the case still today, I assume.

TERRY: I believe so, in many cases. Now, there were some corner cases where people were calling on Air Force depots where a lot of it was really servicing more than it was selling and there were a few cases where we had people on straight salary. I think Earl Davis in San Antonio, working with the Air Force, was on straight salary with maybe a small bonus at the end of the year or something like that. So there were some corner cases in this aerospace industry. There was a lot of fluctuation and large orders followed by no orders, where we kind of accommodated the system with adaptment.

KIRBY: And now that we're selling computer systems, big orders, I assume the commission, of course, varies.

TERRY: I'm out of touch today, Dave, but yeah, they're probably roll off provisions where you get over a certain amount. And there's a little, there's always some concern about caps. Not

so much that the money isn't worth spending but it's the disruption factor within the organization. There are people in the Finance community here today I'm sure, and there were then, who would be absolutely aghast—I mean, they'd go nonlinear!—that some sales rep could be paid more than the vice president of marketing of the Hewlett Packard Company!! Now, the vice president of marketing and the rest of us thought that would be a wonderful idea if that could happen because if we could get all that extra business, we could make a heck of a lot of money on it. And we didn't want that to happen every year, and we wanted it to happen in proportion to effort as best as we could set up the systems. But it really was the name of the game.

KIRBY: You mentioned John Young was involved in this because he was given varying assignments when he joined HP and I guess at that point, he was with the Financial Department.

TERRY: He was. I think it was kind of a training assignment more than anything else. I'm not sure John wanted to be, you know,... I'm not sure John thought that Finance and all of that was his career path, but it was a good place for John to start or to work in, I should say. And he got very close to the reps and things like that. John and I worked together in this integration phase. I can remember one where both of us were pretty naive and got snookered. This happened to do with leasing cars. John will remember this story, I think. The reps had various policies on either leasing automobiles or reimbursing their sales reps for the use of their personal cars, and we took a look at that and said, "Well, that's fine but, you know, maybe if we set up a nationwide program of leasing automobiles, we could save money," and the reps could, you know, just sign up for whatever car they wanted and we'd get some efficiency in the system and we didn't care about uniformity but maybe it'd be a nice benefit. And we got a hold of some local leasing company around here who really sold us a bill of goods and we offered this kind of nationwide leasing opportunity to the reps and many of them took us up on it and it was a disaster! The administration was terrible! Oh, yeah! It got really all screwed up. Noel got pretty upset and it took us about six months to back out of the whole deal and we went right back to the "You guys do what you think is best...."

KIRBY: I see. [Laughter]

TERRY: "We're not having any national leasing program for automobiles!" It was a bad deal, but it didn't cost us too much.

KIRBY: In summary, how would you characterize the acquisition of the reps? Did it all go swimmingly or were there things that, in retrospect, might've been handled differently?

TERRY: Oh, boy! I don't know if.... The answer to the first part is it went pretty dam smoothly. It was written up in the press, incidentally, the same way—that there was a very nice, natural transition that had been going on, that had been building up over a number of years and we just kind of made it a legal and financial fact. But the day-to-day working relationship just went on, you know, pretty dam smooth. And I don't know that we would've done anything differently. I don't think we would've started any earlier. The details of the contracts are unimportant. No, I think we probably would've done pretty much the same way. Again, let this relationship build over a period of time. So I know in the case of Norm Neely, Norm Neely is...was a very smart guy. He knew what was coming, and he liked it! And he just finally, when it came, when the item came up on the table, he said, "Yeah, I'd like to do this! I think my company is worth X." I know in many of these cases that the number that the reps named—if we hadn't done enough homework—was very close to being acceptable. This was not a...it might have been a case in the RMC thing that we were off the wall, but in many cases, the negotiation was a 10-minute conversation.

KIRBY: Um-hum. I can remember the Wall Street Journal did a lengthy article on page 1 about it, written by a guy named Dave Kelsey, and it was very positive, you know. They treat it as sort of

a new approach to this kind of thing. They were very positive about it.

TERRY: I don't remember that one but I do remember a Wall Street Journal article that became part of a book that the Wall Street Journal put together about how they sell, and there was a chapter in there about HP. I remember being interviewed and Noel and others, that was about the same time-frame of the acquisitions and the rest.

KIRBY: Maybe that's the one I'm thinking of, Bill. Yeah, that's right; it did become a book.

TERRY: Yes, yeah....

KIRBY: It was included in a book. Yeah, I think I've got that somewhere....

TERRY: Yeah, *How They Sell*, that's right. Yeah, it was complimentary.

KIRBY: Now, let's move on to this situation of upstate New York, because you got involved in that.

TERRY: Yeah, I was the Sales Support Engineer for that territory, so I kinda got this assignment because that was a place I knew. Other people were working with Neely and Crossley and so forth but the upstate New York was my beat, so to speak.

KIRBY: So, when did you...it was decided that you ought to go back there for a while.

TERRY: Well, what happened was ..as I mentioned before, Ossmann was killed. We took a look at the situation and decided that what we would do is we'd make a deal with Ossmann's widow—I don't even know what we bought; I think we just bought the assets: typewriters. Ah, know, we didn't buy any office equipment; I think we just bought back the demo stock and whatever money was owed under commissions previously earned, so it was a fairly straightforward deal. And I think the business was actually terminated, Ossmann was terminated. The employees were now free agents and I went back and we hired them, a bulk of them, the most of them but Noel told me that we were going to ... or Noel and I agreed that we were going to have to do this and he said, "You're in charge and you get this thing set up." And that was the deal—"you get it set up". So that was my full time job for about, I dunno, 9 months and I made a lot of trips to upstate New York and got to know the territory pretty well and I hired the people. I rented offices in Rochester, Syracuse, Poughkeepsie (IBM town), and Utica—four offices. I went around with a couple of the ex-Ossmann associate people, Tom Montella, A1 Kennedy and the finance guy, and we rented the offices. I remember learning from Noel, I'd come back and show maps to Noel about office locations and Noel said, "Primary criteria, Bill," looking over his Benjamin Franklin glasses, he'd say, "The primary criteria is you put your sales office right across the street from the largest customer in town." And we found a defunct automobile agency that was right across the street—it must've been a hundred feet—from the IBM purchasing department of Poughkeepsie, so when the IBM purchasing people walked out the door and saw Hewlett Packard across the street! Anyway, I did these things to get the administrative system set up. I got the sales reps hired. I got things settled down, business began to pick up and I was kinda doing this by traveling from here to Syracuse and then one famous day, it must've been snowing in upstate New York. I was here in Palo Alto and I was giving Noel the status report about what was going on, and he said, "You know, we're going to have to have somebody up there running this organization. What you've done to date is fine but that isn't going to last forever." And then I said, "Yeah." And then he said, "How'd you like to move to upstate New York?" And I kinda gulped hard; a third generation Californian and I said, "No, I don't really think I want to move to upstate New York." He said, "Well, okay, that's fine but then you've got to find somebody to run this thing." So I said, "Okay." And we started looking around for somebody to run it and somehow Ed Porter got in the act. I don't remember exactly why but Bob Brunner was a candidate from Neely and I don't remember that I talked to Bob; I believe Noel talked to Bob or Noel talked to Norm Neely about is Bob available, and Bob was not available and Bob was not interested in living in upstate New York. So I was developing this list of candidates out of the rep firms....

KIRBY: Most of whom didn't want to go!

TERRY: ...out of the rep firms and I located a guy, knew a guy well, named Bob MacVeety who was part of the RMC organization. He was Robert Milton Charlie—I believe Charlie had died by then; Robert and Milton were running the organization as an HP-owned sales organization. MacVeety was a pretty senior guy, a good engineer, and he was in Long Island, New York area and he could see that Bob and Milt were going to run this thing for a while and he was ... he had some ambitions, so I proposed him to Noel and Noel liked that idea and I went out and had dinner with Bob at his home one night, overlooking the Hudson River, and I sprung this idea on him and he was pretty interested in talking about it! So he became the head of the Syracuse Sales Division. He moved to Syracuse. He became the full time guy. I guess he worked for me. I was back in Palo Alto and he kinda took over the reins of this thing.

KIRBY: So you were....

TERRY: Spent seven years there, did a great job.

KIRBY: You essentially did not move back to Syracuse, even for a couple of weeks?

TERRY: No, I would be there. Again, up in the airplanes and we don't want to waste money, you know. I'd be there for two or three weeks at a time on one of these trips. But no, I had a favorite motel but I didn't actually live there or move anybody there.

KIRBY: Well, this must've been difficult for your family.

TERRY: Ah, it was relatively difficult. The trips were two or three weeks but they were like every two months, or every month and a half so you'd spend a third of your time in upstate New York. And there were some good people on that team up there.

KIRBY: So when MacVeety got there, the things started to come together, I guess.

TERRY: Yeah, yeah. We'd got the foundations in place. We got the bed...we had a good administrative manager. We had, you know, 5 or 6 pretty good sales reps. We had some offices leased. We had the furniture in place. We had the accounting and the support systems in place. Other people in Palo Alto helped, so Bob moved in there and did a crackerjack job.

KIRBY: He stayed with HP a long time. I don't what eventually happened to him. I know he was in Colorado at one point.

TERRY: Yeah, he was in Colorado Springs, he was a sales manager of the oscilloscope division for a long time and he moved back east and retired and I've lost track of him. I don't whether he's on the retirement rolls or not these days. I believe he lives in New York City, Hudson River area somewhere.

KIRBY: Okay. Now, we're talking about 1965 maybe?

TERRY: Yup.

## **HELLO, COLORADO SPRINGS AND OSCILLOSCOPES**

KIRBY: And then you, after the MacVeety thing, then you were approached about Colorado Springs. Can you tell us how that happened?

TERRY: Yeah, I was approached about several different things. Dave had called me in one day and that was a pretty big deal. You didn't get called into Dave Packard's office very often. Dave would occasionally come storming out of his office to see me sitting out in the bullpen with everybody else but Dave called me in one day and wanted to know if I would be interested in running the components business. We had a components business down here on Page Mill Road and Jack Melchor, who ran it, was gonna be tapped to run all or a big

part of the computer business and we needed somebody to run the component business. And I remember making a big fat mistake and saying to Dave, "Gee, I don't know anything about the components business," and of course, Dave seized on that as an opportunity to say, "Well, that would be a real advantage!" But I was lukewarm about doing that and Dave could kinda see that that was the case so he found somebody else to run the components business but I could kinda tell that I was working for Noel, I was in this sales rep integration job and....

KIRBY: So you had a lot of visibility, really.

TERRY: I guess so and...but I could tell this was a transitory job. We were getting the systems set up, that they really didn't need somebody to do this. I had an exalted title, "Corporate Sales Manager"! I don't know who invented that but there wasn't any sales managing going on, it was just getting the reps integrated and getting the systems set up, and in the meantime, the divisional structure at HP was either set up or was being set up so the sales support role was moving out to the divisions and we didn't need a bullpen of people sitting around. If you've got a question on an oscilloscope, you call the oscilloscope division-marketing department, and so forth. So this role I was in and other marketing pioneers was kinda going away. So I knew that the ... there was going to be some change in my life somewhere, somehow. But you ask about Colorado Springs. We had set up these divisional structures. We had an oscilloscope division here in Palo Alto; it was down on lower Page Mill Road. Cort Van Rensselaer was in charge of it. Dave or Cort or both decided that this would be a good thing to decentralize out of the area. HP was concerned even in those days about too much growth in Palo Alto. Cort was given an assignment to figure out a location; he selected Colorado Springs. A guy named George Fredericks was the R&D Manager. He was the guy that went out originally and set up the Colorado Springs Division. And then Cort moved out, you know, there six months after a temporary building was leased. In the meantime, I'm working with the reps on the integration phrase and we're hearing all kinds of bad rumblings about the oscilloscope division, and so is Dave, and so is Noel Eldred. And some of it was just the normal problem of selling scopes in competition with Tektronix, a really tough deal under known perfect circumstances. That's never going to be a simple deal. But stories would come floating back to Palo Alto about certain people and certain attitudes about what was going on in the oscilloscope division and we were all very concerned about that. So was Dave 'cuz Dave... Dave was, in many cases, the instigator of the oscilloscope business. He felt that this was an important business to be in. He took a lot of interest in it and he didn't like these kind of stories that came floating back, and certain things were done. Now, they had a sales rep... a salespersons meeting in Colorado Springs and that did not go well. I was not there but a number of things were said by the management of the sales reps that were really pretty bad and inconsistent with what you might call HP philosophy, so there was kind of a rumble that came out of Colorado about attitudes on pricing and treatment and sales reps and a few things like that. So the fact that it was kind of troubled was sort of felt by the organization. But I think one day, Dave called me in or called me up on the phone; he called me in. Dave likes to talk to you face-to-face and said, "I'm gonna have to make some changes in the Colorado Springs Division" and that didn't come as a surprise to me because it was not going well. He said, "I've decided to ask Stan Selby, who's a division manager"—I think we called it the Loveland Division at the time—"to move down from Loveland, Colorado to Colorado Springs to run the place and I'd like you to consider going back there and being the marketing manager." And I kinda gulped hard and said, "Well, give me a day to think about that and talk to my wife" and I did and I came back and said, "Yeah, I'll do that." I was kinda intrigued with the challenge and I didn't ... I wasn't real interested in picking myself up. I had, I guess we must've had four kids by then 'cuz the last three were all born here. No, I'm sorry, no, yeah, yeah, that's.... I'm confused now. I'll have to check my kids' birth-dates, but I ... we had a pretty

good-sized family. We had at least two kids and so picking up the young family was a little bit of a problem. But my wife was willing to go along with it.

KIRBY: Bill, we were talking about Colorado Springs. Why don't you continue with the story about moving back there.

TERRY: Yeah, I had decided that this is something I should do and I wanted to do, and I got back with Dave, I think, the next day and I said, "Okay, Dave, yeah, I'll do this. I think I can do a good job at it." Dave said, "Fine." He said, "Please keep your mouth shut, 'cuz only you and I and Stan Selby know about this." I had known Stan Selby only slightly but I liked Stan. That influenced my decision; he had a good reputation with the sales people. So the next day or two, Dave calls Stan out from Colorado and Stan and I sat down and got to know each other a little bit more. And I'll never forget: we had lunch with Dave down at the Palo Alto Club. Cort Van Rensselaer, who was the division manager in Colorado Springs, didn't know any of this was going on and we went down to the Palo Alto Club and had lunch and Dave was catching a 3 o'clock plane to Denver to go talk to Cort about this whole thing and I remember we had a couple of drinks at lunch, which was a little unusual, having drinks with lunch, and Dave Packard said, "I'm going back and tell Cort what we're going to do." So Dave went back to Colorado Springs and the story I've heard from Hal Edmondson, who was the manufacturing manager in Colorado Springs, and he was sitting in the.... The new building had been built, been dedicated with a nice ceremony by Dave and Cort Van Rensselaer. Hal Edmondson is sitting by Cort's desk, the division manager, about 10 o'clock the next morning and looks up and says to Cort, "Gee, that looks like Dave Packard walking in our plant unannounced!"

KIRBY: [Laughter]

TERRY: Dave walked and simply told Cort he was going to make a change. He wanted Cort back in Palo Alto. Cort had moved his family to Colorado Springs; he'd only been there about 6 or 9 months, and then he wanted to put him in charge of a number of projects.

TERRY: Welcome to Colorado Springs.

KIRBY: Cort Van Rensselaer is quite candid about this, you know....

TERRY: Yes.

KIRBY: I mean, he's says, "Dave showed up and..." He wasn't happy with the way things were going and so that's it.

TERRY: Yup! And it was a whole bunch of different things. Cort can tell you better than I. It wasn't the typical HP style. It wasn't any one thing. I mean, there were different kind of problems and nobody expected anybody to put Tektronix out of business and to make a huge amount of dough in this thing, but Dave was really worried about some of the fundamentals of kinda drifting out of the way.

KIRBY: Right, now, at that point, Colorado Springs was solely devoted to oscilloscopes....

TERRY: ...and pulse generators.

KIRBY: ...and pulse generators.

TERRY: Oscilloscopes and pulse generators, and that had been divvied up when the lab was divided and then when the divisional structure was set up and pulse generators had some similarities in technology with oscilloscopes.

KIRBY: Shouldn't we have been in the oscilloscope business earlier than we were?

TERRY: Oh, that's really hard to remember to that, Dave. I suppose in a way you could say that. I believe Tektronix got in it in about 19 ... after the War about 1947, '46 and I don't remember when HP got into it but it was quite a bit after that. General Radio actually invented one of the first oscilloscopes and then Dumont, the famous manufacturer of

television sets, came along and low frequency scopes and then a guy named Howard Valam and Jack Murdock started this business. Bill and Dave knew them in Oregon, making this triggered high frequency oscilloscope but I suppose you could've said that about the time, you know, maybe 8 to 10 years earlier, HP should've looked at that an opportunity.

KIRBY: Now, now, this was your first experience as a functional manager. Who were the other members of Selby's team at that point?

TERRY: George Frederick was the R&D manager, and there were some real concerns about George and he moved back to Palo Alto also, and I think he was replaced by Norm Schrock, if I remember right.

KIRBY: Probably.

TERRY: Norm was a senior engineer there, and I believe Hal Edmonson was the manufacturing manager. Bob Grimes was the finance manager. I was the marketing manager. And I think that's pretty much the lineup.

KIRBY: Okay. Now, while you were there, did we... while you were marketing manager, did we come out with many important scope products? I mean...

TERRY: I was there for 6 years....

KIRBY: Was it that long?

TERRY: It was that long....

KIRBY: Wow!

TERRY: ...and it's hard in my mind to separate my tenure, which was about 3 years as marketing manager, from my tenure as 3 years as division manager. It all kind of blends together in a series of products but, yeah, we came out with some pretty good stuff. The Model 175, high frequency scope, followed by the Model 180, high frequency scope; broadened the low frequency line. I think we came out with some good products. The darn problem was we were dealing with a competitor that was 10 times bigger than we were at 10 times more R&D, and the minute that we came out with an innovation, it would take them about 6 months to either do exactly the same thing or to do that plus something else! So we were... we'd always make a little bit of incremental progress and they would sorta stop us in our tracks!

KIRBY: I guess, I guess you felt like a lot of HP competitors felt in other aspects of the business....

TERRY: Exactly.

KIRBY: ...where HP had a dominant position.

TERRY: Exactly. I'd be reminded of that by people, where some other guy is pretty darn good and Tektronix was very good. They had some weak spots and we'd get ahead of them. We invented a product called a "Variable Persistence Storage Scope", Model 141, where you could electrically determine how long the trace was going to stay on the screen and Tektronix had what was called a "Bi-Stable Storage Scope". It either stored or it didn't, and the one we had was a real breakthrough. We got it from Hughes Aircraft. It was the CRT technology and then subsequently to that we manufactured it ourselves, with some licenses from Hughes. But Tektronix was really shook up about that. I know some Tektronix people who told me they were really, really upset. And it actually took them almost 5 years or more before they invented a similar product 'cuz they were trying to protect their installed base of bi-stable storage and so they would argue about that and we had this variable persistence, which was clearly superior in the customer's view. So we made a lot of headway with that. We sold a lot of those products.

KIRBY: What about, wasn't there an oscilloscope camera?

TERRY: There was a famous oscilloscope camera. We had a line of accessories that fit on our

scopes. Incidentally, one of the bigger contributions in the scopes was the industrial design, a fellow named Carl Clement who worked here in Palo Alto and ran a corporate industrial design group, with a handful of people. Really an innovative guy! Did, made a lot of contributions to HP products. The colors, for example, were all Carl's contribution. He took a kind of a special interest in scopes and designed a number of innovations, including the bezel, which is the metal part that surrounds the CRT. It worked quite well but it was hard to put a Tektronix camera on one of our bezels. You needed an adapter and that was kind of a pain in the neck. So the customers would complain about that and ask us why don't you guys develop a camera? It's not that difficult to do and so people would oscillate around the scope division about "When are you guys going to invent a camera?" And of course, scope division was awfully busy just staying in existence, fighting Tektronix, and it never really did get on the R&D priority list. So there were a couple of people and, Dave, this story actually goes back to just before the establishment of the Colorado Springs Division. This was going on when we were making scopes but the division had not yet moved to Colorado. It was here in Palo Alto, and there were a couple of individuals who decided that maybe they would invent a camera and on their own, outside of HP and sell that to HP for resale and those of us in the marketing department who knew this was going on thought, "Well, that's a fine idea!" All we want is a nice camera to sell on our scopes. And the customers don't have to play around getting adapters for Tektronix cameras. And this was Cort Van Rensselaer and Bill Jarvis. Bill Jarvis at that time was working in the lab; he was kind of a marketing liaison person for microwave products. And Bill and Cort had some ideas, so on their own, outside of HP, they mocked up out of cardboard and sheet metal a fairly nice and fairly simple oscilloscope camera. It had a Polaroid back and a housing and a lens. They ... I don't know. Cort could tell you whether they actually incorporated a company but they started ... they wanted to start a company called JarVan—Jarvis, Van Rensselaer—and this became known as the JarVan camera. And this went on to the p o in t... and their intention was to run this— they were full-time HP employees—to run this as a kind of a side-line business and have somebody manufacture these things and then sell them to HP and we'd resell them to the customer to put on our scopes. Well, this went on for, I dunno, 6, 9, 12 months. They got some prototypes built and about this time, Dave Packard found out what was going on. He didn't like this at all! He agreed we needed a scope camera but he thought it was a pretty big conflict of interest to have your employees running a side-line business and so he told Cort—Cort knows the story better than I—I've heard it second hand—he told Cort that this was going to stop and he would reimburse him for the effort of time, so he gave Cort and Bill Jarvis a little money and Jarvis and Cort delivered all the drawings and stuff to HP and we went on....

KIRBY: ...and brought it into the HP tent!

TERRY: Right, we brought it into the HP tent and we went on to make the 196-A Oscilloscope Camera, which was a well-thought out product. It was simple. We sold one heck of a lot of them over the years!

KIRBY: Now, I seem to recall that Bob Brunner was involved in scopes?

TERRY: Bob Brunner was the marketing manager of the oscilloscope division when it was here in Palo Alto.

TERRY: But he did not want to move to Colorado. So when the division moved to Colorado, Bob went on to something else that isn't really apparent in my memory right now. But he was kind of a victim of not wanting to move out there. In fact, I think, probably, in retrospect, if he had agreed to move out there, I would've never of been in line to get the job! Things would've gone on a little bit differently 'cuz Bob is much more empathetic to the role of the salesperson and that was one of the problems they had. The management didn't really understand the problems of the salesperson.



KIRBY: Now, being marketing manager there, you had the opportunity to view the whole scene. Did some field sales teams operate better than others in the scope business? I mean, that must occur.

TERRY: Yeah, yeah, yeah. They all ... they were all enthusiastic about it, at least initially, because it was such a popular product. It was and today in its variance, it's still the most popular piece of instrumentation on an engineer's design bench. So they were all interested in doing that. They did varying jobs. The low frequency scopes, mid-frequency scopes, sold very well in the Midwest for electro-mechanical kinds of applications, where high frequency scopes were related to computers and radar and things like that were in the east coast and the Neely territory. But they all did varying good jobs and, of course, when we'd have problems—particularly your liability problems—they would become very vocal and very upset about it because they kinda had their reputations on the line also. They were trying to convince customers that they should try an alternative to Tektronix So they were very vocal about that and the Neely people were probably the most vocal of all. They would come to the factory and raise hell about problems if there were problems. They still sold a heck of a lot of oscilloscopes but they were very vocal about division performance, quality of the products, support and so forth.

KIRBY: And the relationship with Tektronix, even though we were strong competitors, it was a positive relationship, I think.

TERRY: I had very little relationship with them. For the operating people of the division, this was kind of a no-no. You didn't take ... you'd see 'em at trade shows but you didn't have anything else. But I know Bill and Dave had a good relationship with Howard. There were fewer. We never had any issues with Tektronix They played the game fair and square. They didn't do anything that was, you know, smacked of ethical problems or anything else, they just kept inventing really good stuff and we were scrambling like the devil to keep up with them. But again, the sales reps were, beside the order intake, the sales reps were an awful good mirror of how well we were doing and they were not bashful in telling us about that. We would have them come down to the division. I dunno if this is on your list, but they would come and visit the divisions. HP is now to the size where we couldn't get all the sales reps in Palo Alto and teach 'em about the products, so they would go around to each of the divisions and they'd usually spend 2-1/2 days in Loveland and then 2-1/2 days in Colorado Springs and they would give us a real ration of feedback on how well we were doing and what we needed to do to do better. We would usually have a dinner or a lunch, and we would give out awards for the people who did a good job and we had this one particular lunch. I don't know why. I got it into my mind that... I was the marketing manager, so I was going to give out the awards and I got some cathode ray-tube guns, the internal structure of a cathode ray-tube? Scrap. And I took 'em home and I mounted 'em on a little piece of wood that I stained and glued 'em on and I think I made about 6 of em, and this was called "The [sounds like] Erect Gun Award" and then we gave these out at a lunch. And I took one—it was a long one—it was a high frequency thing—and put it in a glass laid and bent at about a 45-degree angle, and mounted it on a piece of wood and that was "The Bent Gun Award" for the person that was the farthest behind. So, you know, the numbers spoke for themselves. And we had a lunch at the Air Force Academy Officers Club, a really nice place, very picturesque, and I think people had a few drinks beforehand. They must've. So at the end of the lunch, I stood up and I announced that Neely Sales Region and certain salesperson was the winner of this award for selling the most scopes in the last 12 months or something or other like that and the loser, the one that had done the worst job of all, was Tiny Yewell, who was a very volatile character to begin with. And he came up on the stage, semi-good naturally, and I gave him this sort of the dunce-cap award. And then he grabbed the microphone and he proceeded to deliver a diatribe on almost everything and anything in the worst 4-letter language you can imagine....

KIRBY: Really! About the division?

TERRY: ...about the division! Everything, about scopes, about life. I think he'd had a few too many drinks but I'll never forget looking around the room at the Air Force Academy waitresses all disappeared! We were never invited back there to the Air Force Academy again!! But in the middle of this diatribe, a guy named George Glenday, who was a salesman for Neely, was sitting in the front row. He happened to have a cast on his leg because he'd broken his leg in a softball game. George Glenday stood up and he interrupted Tiny and he said something about, "Well, you son of a gun! You don't know what the hell you're talking about! And I'm gonna take you on right now!!" So here am I, the host of this luncheon....

KIRBY: You're failing!

TERRY: ...in this fairly classy place, I'm refereeing a fist-fight going on in front of a hundred people between these two characters. So I got George to sit down and I got Tiny to shut up....

KIRBY: That's a marvelous story!

TERRY: We adjourned the meeting and left! And Ed Holmes was there and there was a number of HP and Neely people that will remember that story.

KIRBY: Oh, that's terrific! That's terrific. Now, did you and your family ... did you enjoy Colorado Springs?

TERRY: Yeah. We enjoyed it a lot. We bought a very nice home, a large home, overlooking the city and I'm glad we bought a large home because we found out you live about half your life indoors so we had a large basement area so everybody could have their hobbies and there was plenty of room for kids to fiddle around in the winter time, and the weather was not nearly as bad as we expected. Colorado Springs can get cold and windy but there's not really much snow in Colorado Springs. It tends to dry up pretty fast there. So we enjoyed it a lot. The kids enjoyed school. We bought a cabin up in the mountains, not too far from the HP recreation area so we used to go up there on the weekends, and incidentally, that was an \$11,000 cabin!

KIRBY: Really?

TERRY: Yes!

KIRBY: Amazing.

TERRY: So, yeah, we liked living in the Springs. In fact, that was one of my... kind of one of my problems, family problems, to get people to move back to California. That was a lot more difficult than moving to Colorado.

KIRBY: Really?

TERRY: Oh, yeah!

KIRBY: Okay. Well, then, it must've been about 1968, you became general manager of the division. How did that come about?

TERRY: Well, that came about under sort of not too good a set of circumstances. Stan Selby, who was the division manager, and I thought doing a great job—I think everybody else did, too—I believe had had one heart attack, or had a some kind of a problem with his heart, and had gotten over it. And then he had a second heart attack and it was not, it was obviously not fatal—he lived through it—but it was pretty serious and it was the fact that he'd had two. This was the second one. And I don't think in those days, Dave, that the bypass surgery had been invented yet.

KIRBY: I don't think so either.

TERRY: I don't know what Stan's problem was but it was on the occasion of this second heart

attack that Stan felt that he needed a few weeks to get over this and he'd be right back on the job, and Dave Packard didn't agree with him. Dave Packard took the attitude that "Look, you've had two heart attacks here within 12, 14 months (something like that) and I don't want you to continue on here in this job. I'm worried about your health."

TERRY: And so he convinced Stan that we needed to make a change. I don't know exactly what he told Stan. I think he told Stan, "Look, why don't you just take life easy here and continue to work but you can work on community relations and anything else we can think of you to do." And he gave him some kind of corporate assignments and things to work on but "I just don't want you in the middle of this fairly stressful kind of a job, the oscilloscope division." And then he called me, I guess on the phone, or talked to me when he was out there and he said, "I'd like you to be the division manager and you're going to have to replace yourself, and here's what I want to have done," and so forth and so on. So that was the occasion of the change. Stan was a really good leader.

KIRBY: I guess you learned some things from him.

TERRY: I learned a lot from Stan. He was a super practical guy, you know.

TERRY: He knew how to get from here to there in a minimum number of steps. I'll never forget the first staff meeting we had when Stan and I arrived there—this is three years before his heart attack—he got the staff together, including this guy, George Frederick, who was the engineering manager, myself, Hal Edmondson and the rest of the team and he started in and said, "Now, I want you... I want everybody to tell me what they think the biggest or the series of the biggest problems we have right now in the division." And people would describe things, like Tektronix and and so forth, and George Frederick, who had been the founder of this thing and set it up before Cort arrived, said, "Well, I think the biggest problem was we put in all this expensive landscaping out in front and the neighbor's cows are eating the landscaping!" Stan looked him in the eye and said, "Well, that's real easy. We just shoot the cows and hang 'em on the fence. Then they don't come over here anymore! What's the next problem?"

KIRBY: [Laughter] That sounds like Selby!!

TERRY: And at the end of that meeting, it was the same meeting, I'll never forget Stan says, "Now, there's one important thing that everybody in this division needs to know how to do." And, you know, we're all kinda thinking, well, it's make a profit or happy customers. He said, "You need to know how to shut off the fire sprinklers. If we ever have these sprinklers go on, you're gonna want to know how to shut 'em off." So we all got up....

KIRBY: [Laughter] Yeah?

TERRY: It must've been the Spring; it was a little chilly outside and we all walked around the building with the facilities guy and we found this great big red valve to turn off the fire sprinklers. Stan made sure that everybody on the staff knew how to turn the fire sprinklers off. Stan was also a bug on everybody on this staff is gonna have a key and they can get in this plant any time they want. And of course the facilities people thought this was a terrible violation of security.

KIRBY: Yeah.

TERRY: Every character's got a key to the front door, you know and says, "You gotta get in here to get something done"—he learned this from Packard. This went on back here in Palo Alto in the early days but Stan was a very warm guy with customers and salespeople and just an overall good leader.

KIRBY: As now general manager, who was on your team?

TERRY: Boy, I'm gonna have to scratch my memory now. And the first order of business is who replaced me? I believe we moved Dar Howard. Darwin Howard had become the

engineering manager.

TERRY: My memory's getting fuzzy here ... I think we moved Dar over to manufacturing manager and appointed John Strathan the engineering manager. I'd have to go back and think about this, Dave, or look at my charts in the archives, I don't recall bringing in anybody from the outside. We just kinda reorganized internally. Hal continued; Hal was kinda my right-hand man.

KIRBY: Hal Edmondson.

TERRY: Yes, Hal was the manufacturing manager. Lia Fulgham, was the personnel manager....

KIRBY: That's right.

TERRY: Bob Grimes was the finance manager. And these were three strong people who had been in their jobs, they were well-thought of by their professions, and the only change that was really made was replacing myself and hence, which is what I think we did with Dar and then, which was not unusual, move from engineering to marketing, and then appointed a new engineering manager.

KIRBY: I imagine it's hard for you to determine this, but was your management style ... it wouldn't have been exactly the same as Selby's but...

TERRY: No, Stan's background was heavy in manufacturing....

KIRBY: I remember here in Palo Alto, he was in manufacturing.

TERRY: Yeah, he was Mr. Manufacturing. And I didn't know that nearly as well as Stan, so I relied on and, you know, Hal was the guy running manufacturing and I was the guy in lab on what products we're going invent and how we're gonna get 'em sold and what are we going to do about this Tektronix thing and things like that.

KIRBY: Um-hum, yeah. How did your division get along with the Loveland Division? Did you have much contact?

TERRY: Not very much at all except for one annual famous event which was called "The Colorado Olympics". The people in the division would have, in purchasing or manufacturing, might have something to do with Loveland, sub-contracting of sheet metal or something but most of the time, it wasn't much going on. We had totally different products. We would ... Tom Kelly, the marketing manager and I would've talked about schedules for the rep visits 'cuz we shared that but not very much else, except for the famous "Olympics." I think the Loveland people suggested this, that once a year we get together on alternate sites and we would have a 1-day series of athletic contests and a barbecue and we signed up for this and said, "Gee, this seems like a good idea. What the series of events?" And there was softball and horseshoes and archery and you name it, and they would come. And this went on for a couple of years while I was there and we'd have a very nice day but the only problem... and there was a point system set up. The only problem was we'd lose by a lot! Loveland just wiped our butt in all these athletic events!! Of course, we were so dog-gone busy that, you know, getting a softball team together happened 3 days before the event....

KIRBY: Well, and you weren't as well-established as Loveland.

TERRY: That's right; they had more depth and more time.

TERRY: So this went on for about 3 years and we lost, I think, every 3 years. We came close one year, I remember. And then I found out, by accident, that Loveland—this went on in the summer—Loveland was making a policy or procedure in recruiting summer school students to recruit certain students who were outstanding in certain sports!

KIRBY: Really? Really?

TERRY: Right! And I also found out that they would—even if they'd find a student that was

outstanding in a sport that wasn't on the Olympics list—then they'd recommend a new sport.

KIRBY: They'd add the sport.

TERRY: They'd add the sport, and we were getting beat by all these—not all; this wasn't the whole story—but they would run in these ringers from these colleges. You know, the Midwest horseshoe champion who would beat everybody in sight! So, I used to give Loveland a hard time about "You've got this thing tilted." Well, the thing sort of fell of its own weight after a few years. The traffic driving up and down and we didn't do the Olympics anymore but we used to see each other once a year from the Olympics.

KIRBY: I often felt that the Loveland workforce, and perhaps to a lesser degree, Colorado Springs, had great pride in its esprit de corps and you know, you could feel it when you walked into the plant. And I've often wondered how did this come about?

TERRY: I think it came about mostly, Dave, because they were first. They were the pioneers! They were the first group to launch off from Palo Alto: this is Loveland, now. To cut their strings with the Mother-country back here, and go off on their own and run their own show, their own way, you know, without a lot of influence from people in Palo Alto. Years later, when they were in the workstation business, I used to call them—this was a compliment—I'd call them the "Israelis of the Hewlett Packard Company".

TERRY: Proud as hell, willing to fight at the drop of a hat!

KIRBY: That's right! That's right!

TERRY: But it just came about 'cuz they were first and they were going to prove, by God!, they could go off on their own, without a lot of interference from Palo Alto and set up their own show and a lot of it was Stan Selby in Loveland. He established a number of, you know, kind of cultures up in Loveland. He was the first, as far as I know—I followed him. When he went to Loveland and we built the first plant, he insisted that the men's and ladies' toilets were labeled "Ladies" and "Gentlemen". He said, "Those are the kinds of people we have working in this plant" and I continued that in Colorado Springs, and I used to chide people around HP about "What do these things say 'Men' and 'Women'? It ought to say 'Ladies' and 'Gentlemen'." That was ... and Stan had a whole bunch of those kinds of things.

KIRBY: Stan talked about that once at a management meeting, a general managers meeting.

TERRY: There were just a whole bunch of things, very warm, human guy. He was a good businessman, too.

KIRBY: Yup, sure was. Who were your principal contacts in Palo Alto at that time? In other words, you must've had a dotted line, er, some relationship...

TERRY: It was when I was a marketing manager, it was definitely Noel. Most of the marketing had been decentralized.

KIRBY: Noel Eldred?

TERRY: Noel Eldred, Noel was the marketing boss. He died when I was in the Springs and the people who worked for Noel. We had corporate departments related to...I think Peter Sherrill was there at that time.