

DAVID EVANS

ORAL HISTORY

COMPUTERWORLD HONORS

INTERNATIONAL ARCHIVES

**Transcript of a Video History Interview with
David Evans Co-Founder, Evans & Sutherland**

**Recipient of the 1996 Price Waterhouse Leadership
Award for Lifetime Achievement**

Interviewer: Daniel Morrow (DSM)
Executive Director
Computerworld Honors

Date: April 18, 1996

Location: Salt Lake City, Utah

Interviewees: David Evans Senior (DE) Linda Evans (LE)
Peter Evans (PE) Joy Evans (JE)
Susan Evans Fudd (SEF) Gail Shydell (GS)
David Evans Junior (DEJ) Mary Evans (ME)
Gordon Fudd (GF) Katherine Archer (KA)
Anna Evans Brown (AEB)

DSM: These interviews are being done for the permanent research collection of the National Museum of American History, the division Information Technology and Society, Dr. David K. Allison, the Chief Curator and head of the division. Unless indicated by anybody here, the remarks will be on the record. If anyone wants to stop the interview at any time, you certainly may and should feel free and comfortable in doing so. If there are folks who want to make other remarks off the record to be placed under seal by us, we can do that as well and we'll do it on a separate tape and mark it as so. There are guards to prevent people from seeing it so we should have as much fun as possible, I hope, and I'm really honored and pleased on behalf of the Smithsonian to be here, and on behalf of the institution and Dr. Allison, and the American people, I thank you for giving us this time and opportunity.

It's Thursday the 18th of April, it's 5:45, and we're at the home of Dr. David and Joy Evans in Salt Lake City, Utah. These interviews are part of a collection comprising an oral history of the life and work of Dr. David Evans, physicist, engineer, teacher, entrepreneur, co-founder of Evans & Sutherland, Scout Master, father and winner with his partner Ivan Sutherland of the 1996 Price Waterhouse Information Technology Leadership Award for Lifetime Achievement.

We're interviewing today we're also interviewing two of the Dr. Evans' sons, David Jr. on the left and Peter on the right and that's Dr. Evans in the middle. There are some questions that I'm going to want to ask everyone. Dr. Evans, thank you so much for being here. There are questions that I want to ask, and at the end of this, I'm just going to throw out some free association terms for everybody to talk around. One of the greatest fears of any historian is that in 200 years people will say, 'Why didn't he ask him that?' So if any of you think of things that we should ask about this, feel free to jump in and do so. This doesn't have to be continuous, we're not jumpy, so the idea is to just get as much talk on tape as we can. Before I start asking questions, I'd like to start with David Jr. and Peter, and just have you tell, if you will, some of your favorite stories about growing up with your dad.

DEJ: I'd be happy to. Dad, I was thinking about this the other day. One of my favorite memories of growing up is something that we as a family have reminisced about often, which is the degree of trust that Dad had for each of us. One time, when I was almost 16, Dad and Bill Smart went for a walk in the woods during deer hunting season with, I think, no intention of going deer hunting. They allowed me to take my brother Doug, and a bunch of other kids to go up Jeeping in the mountains behind our cabin while they walked around looking at the deer.

It was an early winter that year, and there was snow up where we went. As fate would have it, about six or seven miles from where we were supposed to be, I got the Jeep stuck. We tried everything to get that thing unstuck and we couldn't do it, so we decided to bundle everybody up and walk out. We walked, and walked, and walked for an awfully long time, and one of the great lessons I learned from Dad on that is, that rather than panicking in a situation where things are going poorly, just do what you're supposed to do.

Well he and Bill Smart were at the spot where they were supposed to be and we were late. They'd built a big fire. They appeared to be visiting casually with one another, which I was quite surprised by. They had greeted us warmly, and we headed off down a trail that led towards the cabin, which was still a couple miles from there. We got into the forest, and we're walking about maybe three or four hundred yards after we'd all made sure everybody was fine, and Dad came up to me where I was walking and he says, 'So uh, where is the car?' So I explained what had happened, and then I learned one of his other great characteristics my Dad had, which I marveled at as a young man. When we got back to the cabin, some other deer hunter had left a Jeep there, thinking that they would come up again sometime, and within about twenty-thirty seconds, he had it running with no key. I said, "I didn't know you knew how to hotwire a car. Dad, you never taught me that." He and Bill Smart and I went back up to retrieve the car I had been driving. We got it unstuck and everything was fine, but I learned a couple of things from Dad in that experience. One was not to panic. He never panics on anything. I don't believe I've ever seen him panic on anything, but to deal whatever needs to be dealt with. Secondly, to always be willing and able to use the resources that are at hand to solve the problems that you've got, even if you're not really otherwise prepared to deal with the particular problem that you've had. But I've never seen him panic, I've rarely seen him get upset at a difficult circumstance, and I've always felt that he trusted me as I was growing up, even when perhaps I didn't deserve to be trusted. It's a great feeling.

DSM: Peter?

PE: I had actually thought of a story that was very similar to David's. I remember an occasion where we were in yet a different Jeep, a nicer Jeep than the one that David was stuck in. I was with a group of friends and we'd gone also into the cabin late in the year. It had snowed heavily while we were out, and this Jeep had two gas tanks and two fuel pumps and on our way out, the snow was deep enough that we actually ripped the skid plate on the bottom of this Jeep. It sliced open a gas tank and cut the electrical system. So we had one good gas tank, with one electrical pump now with a bad fuel line, because of the electrical problem, and we had a good fuel pump and a bad tank on the other side.

So it took us hours to get those criss-crossed so that we had a good pump, on a good line, and on a tank with gas. By then it was very dark. It had been snowing terribly and we were really concerned about getting home. We did get home eventually, and as it was our custom when we got home late, we were always to report in, knock on the door and tell our parents that we were home. That was a knock that I was very nervous to make because we were very, very late on a stormy night and I knew that they'd be worried about us. It was a very interesting response that we had from them, because they weren't mad. They weren't upset. They were very much unconcerned about the Jeep. Their first concern was, "Is everybody all right?" They said, "We can always fix a Jeep. We can always fix a gas line. We can always fix a fuel tank, but we couldn't handle it if there were a problem with people." It was really an important lesson to me to know that they cared a lot more about us than they cared about things - that people were a lot more important to them than possessions. As children it was wonderful to know that we were valued. Our feelings and our relationship was much more important to them than the condition of a vehicle.

We did a lot of damage to that car that night, but there was never a cross word. There was no recrimination. There was a feeling instilled in us that we were responsible and we wanted to never do that again, but we never felt punished for doing something that was an accident. And it was a wonderful thing to know that they cared a lot more about us than they cared about possessions that they had, and that was a wonderful lesson to me. Wonderful lesson.

Dad traveled very broadly, and had friends all over the world. I spent some time in Europe with them, in England and in Scandinavia and in Europe. We visited with their friends, and they always included us in their meetings. It was fun to be included in their circle of friends and associations. They never put us off to the side if they were with their friends, and our home was always open to the people they did business with. We had people in kimonos, and people that spoke Spanish, and people that spoke Norwegian, and they brought their customs and their friends and their food, and they were made welcome in their home, and we were made welcome. We knew that they valued us more than they valued these other associations, or at least equally so, and we were always included in that. They were wonderful as parents in instilling in us that we were treasured, that we were wanted, and that we were their prizes, rather than these other things, which may be seen more visible and more prestigious in terms of the world. That does remarkable things for young children. We were really the beneficiaries of parents that helped us feel good about ourselves. We knew that we were loved, and that was a great blessing to us.

DSM: In conversations this afternoon with three of Dr. Evans' brothers, they talked about the same kind of confidence that his parents had in him and in his brothers. Did you guys know your grandparents, and can you talk a little bit about them? Dr. Evans, do you remember your parents? Could you tell us a little bit about your dad or your mom?

PE: Did your dad give you good opportunities?

DE: Oh yes.

PE: We had this summer property that has been in Dad's mother's family for a lot of years, and boy there's just so many memories with his parents taking us along. I don't know how it was with the older kids but they would frequently take one or two of us and just up for the weekend. We would ride horses with them, and fix fences with them, and do projects, and it was a wonderful thing. I think they gave you guys a lot of freedom too when you were kids, didn't they?

DE: Yes.

DEJ: Uncle Carl talked about you guys going down to Berkeley to Aunt Lenore's house. Do you remember those trips?

DE: Oh yes, I do.

PE: Uncle Bob talked about how you guys could go off into the city. You'd leave Berkeley all on your own, you were about 10 and 12 and 14 years old, and go clear over to San Francisco by yourselves. Dave, do you remember Grandma and Grandpa?

DEJ: Oh yes, I really grew up with them. As Peter has suggested, the family is divided into kind of the older kids and the younger kids. Those of us that were a little older grew spent our childhood lives in California, and lived largely in the Los Angeles area in a place called Playa Del Rey. Every summer, we would make the pilgrimage back to Utah to visit the family at Christmas time, and I think we came up every summer, didn't we?

DSM: If both of you could be thinking about the stories about Dave that his parents were particularly fond of. That's one of the things I used to appreciate about my grandparents, was they would tell me what my parents were like when they were kids.

DEJ: Well Dad I think it might be interesting if you talked a little bit about how you heard about Pearl Harbor. How did you hear about Pearl Harbor?

PE: Now Dad you're going to have to 'fess up' to sloughing Sunday school.

DE: We lived in Berkeley and...

DEJ: Well at the time of Pearl Harbor you were in Salt Lake, as a young man.

DE: That's right. You are right, David maybe you ought to tell it.

DEJ: So I tell a little bit and then you tell the rest, ok? Well before computers, there were radios, and Dad was a great radio operator. He had a ham radio operation at home.

PE: He's very young, ten or twelve years old when he started.

DEJ: W6SIAS. What was your call letter, Dad?

DE: W6SIS.

DEJ: That's it. Bob said he remembered it because you used it about 1,000 times every year. You knew your call letters because you'd used your radio all your life as a kid.

Dad grew up in a strongly Mormon home where one of the values was to go to church on Sunday as a regular thing. In fact, my grandfather, Dad's father, was in the leadership of the local congregation for many, many years during this time. So when he was supposed to be at church, he was at home listening to the ham radio at times.

PE: He and Bob ditched out to his friend's house so they couldn't get caught at all.

DEJ: Is that true, Dad?

DE: Yes, that's it.

DEJ: How did you hear about Pearl Harbor?

DE: Well I was listening Sunday morning and I heard a call.

DEJ: You heard special calls over the radio?

DE: Yes.

DEJ: You were talking to someone in Pearl Harbor...

DE: Yes. They called the order to close all communication in the United States.

DEJ: It's a pretty remarkable event to be listening to first-hand.

PE: And his biggest dilemma was whether to report Pearl Harbor, or to admit having skipped church.

DEJ: The other things I think you might remember, Dad, growing up as a child, is life up on this cabin property. We used to go up and spend a week or two there during the summertime. In Dad's childhood, they would go up and spend the entire summer. The roads were not nearly as good. The cars were not nearly as good, and they would make the trek in early summer and come home in time for school. Dad and his brothers and their mother would stay up on the property all summer long. My grandfather would travel down to work and then come up for the weekends. But they really lived on this property all summer, and one of the results of that is that Dad became a wonderful fly-fisherman. Mother said that when we were little kids, Dad was trying to get up quietly and go fly-fishing without us, and I didn't know that. Is that true?

DE: Must be.

DEJ: Dad was a remarkable fly-fisherman, and I don't know about the younger kids, but I grew up being taught that fly-fishing for trout is the only fishing there is in the world. The Weber River comes down through this property and there's both river fishing, which Dad never really taught me that much, and then there's pond fishing. There were all these beaver ponds where you had to cast very quietly, and be very silent, and very quiet, and very successful. But I was shocked to hear from Mom the other day that you were trying to get out of the house without us a couple of times.

PE: I think you learned how to do that by the time I came along. He never taught us, he just left.

DEJ: We would go out in the morning, and the grasses were always heavy with very cold dew, very wet. There was no heat in the cabin. So you would jump out of bed, and you'd put on your shoes and socks that were wet from the day before. He of course would have on his waders or something, and I would walk out with him in the mornings up to these beaver dams and we would fly-fish.

Then when Dad was a Scout Master in my Boy Scout troop in California, we did long hikes in the Sierras every summer. We fished, and fished, and fished in very small streams in the Sierras, largely, and just had a wonderful time. But Dad's father, my grandfather and his brothers, and Dad, are all just expert fishermen, and I think they learned largely growing up on the Weber River, didn't you?

PE: Dave's comments remind me of another thing as well. Dad's had a real love for this Scouting program and I think he was all of our Scout Masters.

DEJ: He was a Scout Master 27 years.

PE: It's kind of a remarkable thing. All of our friends and associates, at least those that lived in our neighborhoods, were all affected by him, as he really learned to take care of us, and teach us a lot of interesting things. He's shepherded hundreds of boys in terms of teaching them to love the outdoors, and to learn to fish, and to hike, and to camp, and to be out among nature, and I think that's one of Dad's favorite things. The older kids in our family say it's because they had no money when they were children, but we went camping a lot.

However, even later, when maybe there was a little more money, being out in nature and being in the outdoors was really a very favorite part of our whole family experience. Dad really taught us to love being outdoors, whether we were in the deserts or the high mountains, or whether we were running rivers or fishing or camping or hiking or Jeeping. We saw a lot of country trails along the way. And it's interesting because the influence that he had in our lives was really felt by hundreds and hundreds of other boys. Mom tells the story that when they were first married about having a group of 12 year-olds knock on their door to say, 'Can your husband come and play?' I know that they gave up a lot of family vacation time so that Dad could take these kids on these long hikes. He was not much for traditional camping, or Scout camping, but thought that everyone ought to have an adventure, and ought to see the highest peaks and the most beautiful waterfalls and the pristine lakes, and that has been a fun influence in our lives.

DSM: The words that kept being repeated in the lunch this afternoon were integrity, friend, mentor, tutor, big brother. People have also said he's a tough questioner, and the family values that this family has are self-evident in every imaginable way. What did he expect from his children, and how did he teach you what his expectations were?

PE: You know it's funny, when we talked about this and kicked some ideas around, everybody uniformly said, "You never ask Dad for help on homework unless you really wanted to understand the principles." If you were just looking for the answers you go to somebody else. You had to understand this algebraic formula completely before you got the answer.

Anna said Dad would always say, "Oh don't do it that way," meaning the way we had been taught at public schools by the math teacher. He said, "I'll teach you a much better way to do it." He always taught us the quicker way, the brighter way, the best way to do that kind of stuff.

The other thing which I admired about him is that he let us determine what was important to us. He never wanted us to be what he wanted us to be. He wanted us to succeed at the things that were important to us. As an example, I was a musician, and I really appreciated the encouragement of my music background, and they let everybody sort of flow naturally to do things which were important to us. They would encourage us in our own activities, whether that was extra-curricular activities or professions or other kinds of activities. There was really no pressure on their part to be what they wanted us to be, other than to have integrity, to do something honest, to work hard, to be the best you could be. And that kind of encouragement goes a lot further than forcing people to do stuff, and they've been really wonderful about encouraging that way. I think they've always felt like they would get more mileage out of high expectations and encouraging us rather than demanding things of us.

DEJ: How did you do it, Dad?

DE: Give them food and the necessary supplies and love.

DEJ: One of Dad's expectations of us was that we would be independent, if that makes sense to you. I think my father and his father enjoyed a great relationship throughout their lives, but I also think one of the reasons he moved to California was to be reasonably independent. It was not a matter of acrimony between them, just that Dad had strong ideas about what he wanted to do with his life, and he felt the need to implement them and to do it his way.

DSM: Your mom has said that growing up, things worked out very well, that there weren't a lot of hard rules in your household.

PE: I think that's really true. My friends thought it was remarkable that my parents just trusted us. They taught us to do what they thought was right, and then they trusted us to do it.

DEJ: One example of that was this same four-wheel drive vehicle that we referred to earlier about being stuck - I purchased it just as I turned 16. All of my friends' fathers sold their four-wheel drive vehicles just as their sons turned 16. That vehicle wasn't a gift to me. It was a well-used family car, and we didn't have a lot of cars.

PE: Mom especially liked the Jeep, and liked to take it out.

DEJ: We had another, more plush version that she took out and broke a rib.

DSM: It sounds like with this family, if you have a four-wheel drive, you'd never find all of you.

DEJ: Interestingly, right now I own 4, four-wheel drives. It gets in your blood and never leaves you I think.

PE: I don't think you've ever been without one since.

I think my parents had a lot of expectations about what we would do. They always expected us to treat people kindly, and to not get in trouble, but there just weren't many rules. We didn't have curfews. Of course they wanted to know when we were home, and we had chores, but there weren't a lot of rules. They gave us a lot of freedom to make our own mistakes, and I'm sure they hoped that we would learn from those. They helped us learn how to live our lives.

DEJ: They asked us to pray for you, Peter.

PE: And I can't tell you what they asked us to do for you! I gave them far fewer gray hairs than you did. But it was a remarkable thing not to have rules. We didn't have to operate under a system of rules and it was a great lesson to us.

DEJ: On the other hand, there were high expectations. And in my mind they set a perfect example of parenting - a great combination of love and trust and example, of doing what's right, and being anxiously engaged in all areas of our lives in good things, and not wasting time, not piddling away whatever assets you've got - but really use all of your assets. I don't just mean many - but all of the assets of your life to do something good with it. I think that kind of love and trust works when the parents are also setting that kind of example. That's what they did.

DSM: Dave and Joy grew up in a very special and very tough time in history. There was the Great Depression, and Hitler and World War II, then Korea and the beginning of the Cold War. Did your dad ever talk about any of those things growing up?

DEJ: He talked very little about the War. He was in the War for four years. In fact, Mother and Dad were engaged as he left for the War, and they married not too long after he came home. But I will say that that four-year period of time is probably the segment of Dad's life that I've heard the least about. What I do know is that there were both very sad circumstances and a few thrilling circumstances, but I think that for both of them it was a hard period of time. Something that I think Dad took away from the war experience was a great love for life, and for good things to come from living the good life.

PE: I don't remember hearing a lot about the war. The only times I do remember were stories told around campfires. Dad was a great, great storyteller. When he had had a group of young people out in the mountains, far away from home, and the luxury of a roaring fire at night, he was a wonderful storyteller. I probably only heard a half a dozen stories out of his war experience, but we heard those enough times that we were thrilled to sort of know the punch line, and some funny things that had happened, and some tender things that had happened.

I remember him talking about an experience where he was with an advanced group, and they were the first of the Allied soldiers then to free prisoners of war who were at the Buchenwald camp. I've thought often of that, and I've used that example as I've talked to other people of the power that some had to free others and to help them in a way that they couldn't do for themselves. There are some experiences like that that I think have been very tender to Dad in terms of the War, in terms of seeing that it's not all killing, it could also be liberating.

There were some tragic things in the war as well which we heard of, but very few, very few. And I think we came away with a respect for a very difficult experience that he went through, and one we were grateful that in our lifetime that we haven't had to deal with. And grateful that there are people that would value their freedoms as he did, and to fight for them, and do whatever was required of him to make sure that we lived in a free land. That taught us great respect for our country, and for our government, and for the people of America, and that's something that I think we're the beneficiaries of.

JE: Peter, I think you might tell them about the Depression and Grandpa Evans' business associates and the way they paid their bills and such.

PE: We talked a little bit about that this afternoon when we were with Dad's brothers. Dad was the oldest of five boys. As they grew up in the 1930's, their dad was an advertising man, and did a lot of work for business people who frequently couldn't pay their bills. They were paid in kind. I know that they got a lot of vegetables, a lot of produce, and I'm sure they were very grateful to have fresh food as a result of that.

One of the great stories which Dad's brothers were very happy to announce, was a short-lived experience was one about Grandpa Evans. He had done some work for a man whose wife was a ballet teacher, and he paid for the services in ballet lessons for these five boys who were very uninterested in ballet lessons. Uncle Ted and Uncle Bob assured us that it was a very dismal experience, and that they were not at all grateful that that method had been chosen as payment for the services. They were good-natured about it. I think those five boys had wonderful experiences together.

There are ten years between Dad and his youngest brother, and they were given a lot of latitude. They got to travel some. They got to break watermelons open in fields, and have lunch in broken down cars, and they traveled through southern Utah. They learned to have adventures, and I think that's why Dad is adventurous. He and his brothers were raised with a very broad worldview. Their parents were wonderful to them, and so it was fun. I'm sure they didn't like the ballet lessons but I think they were grateful to have what they had during the Depression years. They had more than many, many families, but they learned to be frugal. They learned not to waste things and to work hard, and all of those ultimately are virtues. So I'm sure they're grateful for the experience.

DSM: Was it the dancing lessons that made him worth waiting for, for four years?

PE: But you guys aren't big dancers.

JE: We used to dance quite a bit.

PE: Did you?

JE: We always went to the university dances.

PE: You want to Salt Air. There was a big resort out on the Great Salt Lake, which was known as Salt Air, which in its glory days was really a spa.

JE: In fact Dad first held my hand out there.

DSM: When did you meet Joy, Dr. Evans?

PE: How did you meet Mom?

JE: We met in a Sunday school class, I think.

DSM: Sunday school class?

PE: It's a good thing you didn't ditch out on that class!

DEJ: They lived actually quite close to each other. It was within easy walking distance of where she grew up and where Dad was. In fact both sets of grandparents lived in the same homes as during the time my Dad grew up, and it was about a five-minute walk between the two. So we would often stay at one set of grandparents' one night, and sleep at the other grandparents' the next night. The church that they met at is kind of halfway in between, and so that's where they met, as teenagers growing up.

PE: Very young teenagers growing up. They don't want any of their grandchildren to know that Dad was 17 when he was engaged, and he's two years older than Mother. How old was Dad when he went to war?

JE: He was eighteen.

DSM: And how old were you?

JE: Sixteen.

DSM: But times were different.

PE: She assures us that times were different.

DSM: Now, you came back from the war, finished a PhD in physics and then taught at Berkeley and the University of Utah. After coming out of the Depression and the war, a ten-year track at a distinguished university must have seemed very secure, safe. What did you think of this crazy idea in the year 1968 to be a businessman that started a business?

JE: It was very exciting.

DSM: Was it really?

JE: Oh it was. Very exciting.

DEJ: It was a wonderful new experience, wasn't it?

DE: Yes.

JE: David had had several good ideas when he started this business. One was that if it doesn't work, it's okay. We can start over. So that was one.

PE: And you only had to live with that one for about eight years.

JE: The other thing was, he really wanted it to be something that was a benefit to other people. He wanted it to be something where people enjoyed working and where they were doing something good for the community, something good for the world.

DEJ: What would Grandpa say?

DE: He said it was insanity.

JE: Actually Grandpa had two characteristics. One was that he was always right. The other was, he wasn't always right. He thought this was insanity, and it wasn't. It was wonderful. And when David came home from the hospital at four pounds, twelve ounces, he said 'He's too little, throw him back.' And that's wrong.

DEJ: I have a story about the founding of the company that I enjoyed, and I don't know how much of it is my perception and how much of it is others', but the summer before the company was founded, I spent much of the summer with Ivan Sutherland and his family in Boston. Ivan was a young professor at Harvard at the time, and they had a lovely home in the Cambridge area. I also got to spend some time with Malcolm Loeb. I don't know if his name has popped up in the context of the founding of the company or not, but Malcolm was a businessman who had sold a very successful company, and he actually was also one of the founders of the company. He was someone who made introductions to as many of the people that initially invested in the company, including the Rockefeller family. It was a great summer. Boy what a neat summer. Malcolm had a big yacht, an ocean-going racing yacht, and Ivan was interesting, and fond of playing chess, and he had a fast car. For me at that age, it was really a great summer.

DSM: How old were you?

DEJ: Fifteen. And when I came back there was a lot of talk about forming a company. Prior to that time, we had moved several times. We moved when I was going into sixth grade. We moved in the middle of the seventh grade. We moved when I was going into ninth grade, and I had just finished my ninth grade year when this all was happening with the start up. And all of a sudden there was talk about moving again, because Malcolm lived in the Boston area, and Ivan lived in the Boston area, and the money was on the East coast. However, I expressed reservations about moving again. I told my parents that I loved it back there, but I had just made new friends, and I repeated to them how often we had just moved recently. I'm sure they realized how often that they had moved recently.

I always thought it was pretty special that instead of us moving, the company ended up being founded in Utah with Ivan coming here and Malcolm coming here, and the money coming here, and the family being able to stay. That was a great happiness in my life. I never worked in the company, as a kid growing up. Peter had some jobs at the company. Who else did, Doug and Katherine. I got hired one Christmas to go pick up some things when there was some kind of a transportation strike, but I never actually worked for the company. I just felt really happy the company was here. I felt that it was more evidence of Dad listening to us and to our needs, and perhaps putting some of our concerns above what otherwise might have made a lot of sense.

PE: There was another example of that. When Ivan and Dad started the company they used a local bank, Zion's First National Bank here in Salt Lake City. It was the second or maybe the third largest bank in the state, but it was not national sized. Dad knew the officers of the bank. We actually he lived fairly close to the president of the bank, and the president of the bank used to say, 'Are you going to make it Dave?' And Dad would say, 'We're going to make it.' He'd say, 'Okay I'm counting on you.' Anyway, the Zion's Bank stood by the company through some very, very lean years, and continued to provide lines of credit and financial services that they needed. There was great pressure on the management of the company by the outside board members to get a real bank, to get an East coast bank, like Bank of America, but Dad was very, very loyal. Today any bank would love Evans and Sutherland's business but they still bank at Zion's. They stood by a young company that was trying to make it, and once they made it, when everyone wanted their business, they stayed with the bank. I think Dad's always been that way in terms of listening and being loyal to those that have been good to you and doing the right thing.

DSM: I asked his brothers this afternoon if there were sort of patterns in Dave's life, or pathways very early on that they identify with, that they associate with. They mentioned several things; one of them was tenacity – that once he had grasped an idea, he took it forward. I was wondering if, as his children, if you see a pattern or a series of pathways in your dad's life.

PE: I haven't ever seen any physical patterns. One of the things that I've always seen about him though, particularly as it relates into the company, is he's had a willingness to look at people for what they could and needed to contribute.

When I was finishing college I was working with the company doing recruiting at colleges, and he looked at people very differently than many people would traditionally look at them. He didn't really care about their overall GPA. He didn't care about their ACT scores. He didn't care about how they performed in a lot of sort of traditional measures that other people looked at. What he really cared about was what people really cared about. What they liked to do. What their passion was, and he hired a lot of people that maybe would have been rejected for other reasons who happened to fail history, or fail music theory, or whatever else, but were really good at whatever they were doing, which is what E&S needed. As a result of that he had a very eclectic group of people that worked for them, some of them you might even call scary, Dad, I'm not exactly sure how you could categorize them. But they were real characters, and they were full of life, and they loved what they did. They became very loyal to him because it didn't matter to Dad that they weren't polished in some areas that weren't important to their job performance. It didn't matter as long as they could figure out how to do effectively what they were hired to do.

My dad taught us really to look at people, not for this packaging that's around them, but for what they could contribute, and find the good in people and focus on that. I think that's always been a pattern. He's always looked for good people. He's looked for the right people for the right jobs. He hasn't been perfect in getting the right guy for the right job every single time, but I think the track record speaks for itself. And the loyalty of those people, even his students, so many of whom came to work for him. They got out of school but they still wanted to be mentored and taught and worked with, and that's a real tribute to how he perceives people and wants to build them for what their strong points are. I'd call that one of the patterns that I see in how he lives his life.

Are you going to defend my comment that you hired an eclectic group?

DE: Yes.

DEJ: I think there always was a pattern of real diversity among the people that he did business with, and the people he worked with. I think he valued that very highly. I think he thought it was important to the company, and was important to the community, that the proper mixing of personalities and cultures and people would bring out the best in everything.

You talk about patterns; one other pattern that I have always treasured about Dad was his ability to prioritize things. He didn't waste a lot of time on things that didn't matter very much. Whether it was at home, or at work, my observation is he always tried to tackle the things that needed to be done, and didn't worry too much about things that maybe ought to be done, but didn't really need to be done. I think it's been a pattern in his life to try and figure out what are the things you have to do, given the time that he's got, the abilities he's got, and then to go about doing them, rather than waste a lot of time on things that either he couldn't appropriately deal with or he didn't have the resources to deal with, or even if he dealt with, wouldn't matter anyway.

PE: I have one more comment in terms of patterns. It's not a physical pattern but a trait I see in him in terms of how he's dealt with people, and he's had a lot of interaction with various groups of people.

If you were an associate of Dave Evans your name was safe. I never remember him speaking ill of people. If he didn't get along with somebody, he worked it out. If a guy couldn't perform his job, he figured out a way to get him a different job, but he never badmouthed people. He never complained about people.

He never was derogatory in his comments or his speech in any level about people that he worked with, about people that were in his church, about his neighbors, about his friends, about his family. He and Mom both, your name was safe with them. That was a great, great lesson to us in terms of how you treat people.

DSM: A young man who won one of these awards last year was a young entrepreneur who said that one of the hardest things about being an entrepreneur is that you're always worried, and you're always alone because of all the responsibility for the company and the people. Yet I don't get the sense that Dave transmitted that terror to his family or to his company. And the story that comes to mind is the Christmas 1972 story. Did you guys have any idea how serious that was?

PE: Actually that is a great story because the company had come up to the Christmas holidays and had sent people home with a pat on the back and maybe a turkey, knowing there were no resources to pay them when they came back. That was an enormous burden to them, which actually worked out in a miraculous way because they had good people on their team, and had made appropriate recommendations. Financing came through and they were able to take care of their employees.

You know, as a child I was absolutely amazed because Dave Evans was my dad. Dave Evans was the guy who cleaned out the garage. He was the guy that fixed leaky pipes in an old house that we lived in. He was a guy that helped in the yard, and raked and did the kinds of things that dads do. He was the kind of guy that would take you on a bike ride or a hike, or take you swimming, or to see your grandparents. I probably grew up not knowing he was as great as he was. I think he not only didn't he bring the troubles home, he didn't bring any pomp home, either. He was just Dad to us, and that was a wonderful thing. I'm sure he worried a lot more than we ever knew about, but I don't think it translated much into his personal life.

DSM: We are now being joined by additional members of the Evans family. I would like to start by just giving everybody a chance to sort of go around the room, one at a time, and if any of you have a favorite story about Dave, or being in the family or joining the family, or thoughts about Dr. Evans, his career, his impact on you or the folks you know, I'd just like to give everybody a chance to tell one of their favorite stories first.

GS: My name is Gail Shydell and I am David and Joy's oldest child. I have too many memories to tell you all about tonight, but we had great fun growing up in the Evans family. One of the things I think about Dad, and Mom too, but particularly about Dad, is that no matter what he was doing, he always had time for us. I think about that in several different periods of time in my life.

When I was probably four or five, I remember him coming home from work, and I don't remember the occasion but I remember he built a big fire in the fireplace, and we turned all of the lights off, and we laid down on the floor on the pillows and he read to us about Donald Duck. Why I remember that I can't imagine, but I do. As we grew up, there was always reading in the home, something was always being read aloud to the family.

During another period of time, when I was perhaps fifteen, I learned the hard way that Dad always had the time for you. He was very willing to help you with whatever assignment you had going on at school, but you had to really want Dad's help; because you knew no matter what you asked him about, he knew something about it. In my case it was geometry. Dad would ensure that you would understand that concept inside and out, but you wouldn't get your assignment done because you would get too involved in exploring learning with Dad. It was so important to him. I remember we had a religion class before school, which started at about six in the morning, and if we needed him to help us with geometry at five in the morning, he would get up and do that. That was always burned into me, that we were important to him.

Another time when I was a single parent with a toddler and an infant, I had a major plumbing catastrophe at my house, and a whole house full of water. I called Dad and said 'Help!' I didn't really get to talk to him, it turned out he was at an Evans & Sutherland board meeting, but he left the board meeting to come and help me with my plumbing crisis. We knew, we still know, that Dad's always there.

SEF: I'm Susan, and I am the second daughter. One of the things that people know me for now in the area that I live in is that I have been a girls' camp director for fifteen years. It's run by our church, and we have sometimes as many as 300 girls at a time. I attribute my love of that to my father, and the time that he spent teaching us not only to love working with people, but to love being outdoors and appreciating the many, many things that come to us, and the beauties that there are of the earth.

I remember so many times growing up, I don't know if it was because we had no money or because my father loved the outdoors, but he used to let my mother, who often wasn't well, stay home and he would take us out to the outdoors. I am not a great fly-fisherman, but I remember watching my father fish, and having to be still as a mouse. The few times I tried it I never caught anything, but he taught me to appreciate what was there. He taught me to appreciate hiking and using the outdoors to our benefit, and to appreciate that, and being with the people that you love, doing things that you love to do together. I think that has become a part of me, and a part of the things I appreciate.

He always took time, just as Gail said, to be with us, to teach us to appreciate the things that were valuable to him, and the beauties that he saw in his family and make us appreciate those ourselves, which now I hope I'm able to pass on to those that I work with.

DSM: Twenty-seven years as a Scout Master.

SEF: He tells me I'm not quite there yet. I have a few more years to go.

DEJ: My name is David Evans. I'm the son of David and Joy, and the third child in this family. I would like to pick up on something we talked about a little while ago. The question was asked whether we knew how hard things were at times. During late 1972 I was serving a mission for the Elias Church in Japan. Every week I would get a letter from home, and usually the letter was written by Mother. But about ten times, during the two-year period I was overseas, Dad wrote me letters. He often wrote letters when he was on an airplane going somewhere. And he would start the letter, 'Dear David, I'm on my way to Chicago,' or 'I'm on my way to London,' or "Coming home from New York," or something like that. And he would write for the duration of the flight and catch me up on the world from his perspective, and interestingly, his perspective was often different somewhat than Mother's perspective on what was happening. I have two letters of interest from that general time period. One is a letter from Dad that says, "We've sold the company." I guess they came very close to selling out to another company as a result of money being tight. And I also have a letter that says, "We sold the house." Neither thing ever happened.

PE: They were just trying to keep you happy.

DEJ: I live in the same general area of the city, and I go down the street called Virginia Street, and as I pass a certain house there, I say, "That's the house Dad told me the family was moving to." But yes, neither of those things happened.

The other item that I don't think we've talked about much is the influence of the Elias Church or the Mormon Church on his life, and his parents' lives, and our lives. One of the great treasures of my youth was going up to the canyon property. We often rode with his parents to the extent that my mother would allow it because Grandpa's driving deteriorated over time. My grandmother, Dad's mother, was a daughter of one of the founding pioneer families of this valley. She would tell us for the whole two-hour trip, story after story of growing up in the late 1890s, and the stories that her parents told her about coming to the valley, and stories of some of Dad and his brothers as children. However, most of the stories were of her childhood, and of our ancestors in the Cannon and the Benyon families.

The running joke was that after about ten years of this, you were hearing the same story every trip. But what a real treasure it was. There was a great belief in families, and in the importance of linking generations together, of passing on tradition from one generation to another.

One interesting thing about Dad is he's also tried to not pass on certain traits or certain traditions in families. Dad grew up in the Depression, and when Grandfather had a young family, things were hard to come by. And I think as a result of that, things were hard to let go, although he had a generous spirit about him. So he would give, but give with a string, in some sense. Dad's philosophy has always been, "If I'm going to give it, I'm just going to give it. I never want to be in the position of asking you what you've done with it, or asking for an accounting. But if I'm going to give you something, it's because I want to give it and because it's from my heart." I think that's been a great blessing, again I think signifying the level of trust and confidence that he's had in us, and in everybody. He has a general belief in the goodness of people, and that's been a fun thing to learn growing up.

AEB: My name is Ann Evans Brown. I'm David and Joy's daughter. One of the things that I treasure in remembering my father is, when we were younger, we used to take a lot of trips where a lot of driving was involved. We would all pile into the old station wagon. First there were four, then five, then six, and eight, and who knows how many kids. For some reason Dad liked to drive a lot at night, and I could never sleep in the car at night. As things would quiet down and everyone would go to sleep all around the car, I used to sit in the front seat in the middle, right next to my dad. I can remember sitting next to him all through the night, hour after hour, just being able to talk to him. It was a very special time for us. I think that's when I really learned what a neat person my dad was. It didn't matter what I asked him about. It was just so amazing that he had such a wealth of knowledge; whether it was some passing question about the constellation there, or the stars, or what happened to that tree, why was it that way, what kinds of rocks were we driving through, anything that you could think of to ask - history, science, mathematics, languages, anything. He would have this knowledge at his fingertips, and it wasn't kind of 'Well I read somewhere,' he had the dates, exact, precise figures. That really inspired me in my learning. I wanted to study and to do well in school and learn.

The other thing that Dad did that encouraged us in our learning was, when we would become interested in something, even when finances were tight, and time was tight, he would take the time and make sure that the resources were available, whether it was piano, or gymnastics. My brother Doug once wanted to learn how to cut glass, similar to the designs in Tiffany lamps. I was interested in field botany for a while and Dad lugged all of my plant dissecting equipment and presses, and dichotomous keys up into the Uintas with me.

We spent a whole week learning about the wildflowers and such. That's something that he's always done for his family and I think that has really benefited all of us in different things that we've become interested in.

SEF: I think we should talk about being a mentor too, and the things he did in teaching us to learn. One credit to my father is that all of his children are college graduates. It was never a question "if" you go to college. It was always "when" you go to college, and when you want to go. And because both he and my mother were so well-educated and kept educating themselves, they taught us to want to learn, and to aspire to do the kinds of things that a college degree can help you to do, and to better your life with that. They certainly always lead by example, because we watched them learn and then we wanted to learn with them.

GS: You may have noticed in the home many, many books. When Mom and Dad moved into this home there were eighty boxes of books, and Mother has read them all. If Dad didn't know something about some such subject, there was a book that would help you, or there was an encyclopedia. Or if you said, "Mom I need this poem for English. Where is it?" She would go find it. You didn't have to go to the library to find it. It was there. Because of that I think we all had a love of learning. When Mom would have a couple of hours, she'd read a whole mystery novel just for fun. That's what she would do when we weren't bugging her.

DSM: I've heard there's a family tradition among the brothers, about Dave's mom.

SEF: Dad used to read to his mother who had very bad eyesight, and one of at least the older children's favorite memories are particular books such as Wind in the Willows and Thundercave and some very familiar books to us that my father read. He used to read "Brer Rabbit" stories, and included the Southern accent with them. We didn't spend a lot of time watching television or doing other things, because it was so much more fun to have him read to us.

DSM: One of the other things we've heard this afternoon is there didn't seem to be a lot of formal, rigid rules. There seems to be an awful lot of trust and freedom, and yet it's very clear that everybody has a very firm idea of how just or unjust, or trust or not trust.

PE: It's maybe not exactly related to that Dan, although maybe it is. I think there was a lot expected of us as children in terms of what we did and what was expected of us. I sort of wondered what he would be like as a grandfather, because we grew up knowing very clearly what was expected and being encouraged in that way. I'm Peter, and I'm the fifth of the seven children. So I'm one of the younger children, and my children are quite a bit younger than some of the other grandchildren.

But the thing which I have found quite remarkable, even among Dad's challenges with having Alzheimer's is, I think one of his abilities that has been sharpened is a total love for his grandchildren. I think our children feel like even today with the challenges he faces, that they are loved and accepted and encouraged in ways that are quite remarkable. He'll always comment to them of their beauty and how much he loves them and how sweet they are. It's a very tender expression from a grandfather to our children, and to my children in particular, as I value it. It makes them want to be good, rather than demands excellence of them. I think our children are the recipients of that kind of direct, unconditional love and appreciation for whatever virtue you have, and are encouraged to find the virtue in people. That's a really wonderful quality.

KA: I'm Katherine Archer. I'm the youngest of Dave and Joy's children. Perhaps being the youngest I sort of got some of what the grandchildren get - since the oldest grandchild is only five years younger than I am. I just felt growing up that I was completely and wholeheartedly cherished by him. I just couldn't have done anything that would make him sad. And I think that's why that whatever he expected I wanted to do, because I felt so loved. I loved him so much and my mom. It wasn't hard to do what was expected. That's all.

AEB: To me the emphasis was not on what was expected, or what he wanted us to do, so much as I think that I got a deep sense that he wanted whatever was best for me. He wanted me to do what was best for me. He wanted me to excel and do as well as I could. He wanted me to go after whatever hopes or dreams I might develop rather than having a goal for me. He was just there, wanting me to do the best that I could.

ME: I'm Mary, but I would like to respond to this as an outsider. I'm the wife of Dave, so I didn't grow up in the Evans home. But to go along with the things that we've been hearing, my earliest impressions of Dave, of Dad, was one of total acceptance of what I was doing too. As I was dating Dave, I always felt accepted and part of the family. When Dave left on his mission, I left Salt Lake and I moved to California. I kind of was exploring other things, life in the big city, that kind of thing.

Two things of interest from that time - as I was living in the Bay Area, one day I was talking to a person that lived in my same apartment complex. He happened to be a computer science person or student at Berkeley. And I said, "Oh you know my boyfriend's dad. He has something to do with computer science." And I told him who he was, and he said 'I've read about him in my textbooks.' Wow. And that same man, who was in the textbooks, when he would come to the Bay Area, he would call me and come and take me out to dinner.

As a student, someone struggling to work a few odd jobs and save tuition money, those dinners were really important to me, physically as well as spiritually. I knew that he valued me, and that was so important to me. And I wasn't even a member of his family. But he would take the time out of his schedule to find me, find my apartment that was tucked away in a little student hole, and take me across the bay to San Francisco, and spend an evening with me. Those are choice memories.

GF: My name is Gordon Fudd. I am the husband of Susan, and Dave's son-in-law. We've been speaking of Dave's ability to guide without dominance and firmness. Shortly after Susan and I were married in 1968, I was a student at the University of Utah. I became involved in selling insurance, and I thought my fame and fortune were in that direction. So I left the university fairly early in my education, I believe I was a sophomore. Now, as a parent, looking back on how I would feel if my daughter's husband left school and didn't finish, it would be very difficult for me. Dad spoke to me on many occasions, but never said, this is what you should do. Nor, 'I expect it of you.' There was an unwritten, unspoken expectation of excellence, to do your best. And I had that terrible pull within myself, between what I was doing in a mediocre way, and my desire to become more excellent. And because of that, I'm going to term it as a movies title "gentle persuasion." I went back and graduated.

LE: I'm Linda. I'm married to Peter, Dave and Joy's son. A lot of things come to mind when I think of my memories of my father-in-law. Today he and I were talking about a love of certain types of music that he has. He's not a musician himself but really encouraged that, and I'll ever be grateful for how he encouraged that in his son, my husband, and the music that's in our home because of that. Both he and Mom really promoted that among their children, and it's been a wonderful blessing in our home. We were talking about the Kings Singers concert that we went to in Deer Valley, how he introduced me to them, to Jean-Pierre Rampal. He's bought a lot of CDs for us and I'm kind of interested in that connection between a math genius and an appreciation of music that he has. I appreciate the way he promotes that in his children and in his grandchildren.

Other really choice memories will probably always center around our time spent in the Bay area, when Peter and I were living there with our kids. He would come there quite frequently on business to San Francisco and to San Jose. We would have the privilege of hosting him in our home, and how much the kids loved having him come and visit. We would fix special foods that we knew he enjoyed, or we'd go out to dinner, or go to Half Moon Bay. We enjoyed some great times together there in California. I so appreciate those memories that we'll always have and cherish, and appreciate how his example has influenced me, and my husband of course and our children.

And I think the number one example I'll remember him for is the way he would always respect other people's names. Never spoke ill of anyone, and promoted the best in everyone. That has encouraged me to be better, my children to be better, and I really appreciate that about him.

LC: My name's Louise, and I'm the foster daughter of Dave and Joy Evans. I would just like to reiterate what Ann said about the knowledge that Dave has. You could almost ask him any question on any subject and he'd have the answer for you. He's a wealth of knowledge, and he's willing to share that with us and with anybody that could listen.

My memory that I would like to share from five years ago, when we still lived in our condominium on the hill. He and I would go jogging after I came home from work. We would have like two hours to be together and to be able to enjoy the outdoors, to be able to share that time together. For him to have a little time outside and to enjoy what he did, was to run, then I could somehow help him as he had helped me throughout his life and mine, that I could somehow spend that little time as he had spent time with me.

DSM: Gail had something special she wanted to say.

GS: Well I don't know how special it is. I've been thinking as we've talked about how we knew it was important to excel in whatever it was we were doing. One of the things that we learned very young, is that it didn't matter what you were doing, as long as you did it the best that you could. If you got a C in math but you worked really hard at it, that was okay. But if you got a C in math because you didn't do your homework, that's not okay. But they always told us that with love and with understanding, with an arm around us – this is okay, but you can do better. We never heard harsh words between them, or between them and us. We never heard loud screaming and yelling. It was always gentle, loving pushing, to move on and do a little bit better tomorrow. Tomorrow you can do better than you did today.

DSM: Joy. As you said a minute ago, you met in a Sunday school class. Is this the first time you noticed this man?

JE: Actually my parents had just moved into the neighborhood, and a friend I had met at school invited me to go to Sunday school with her, so I did. That's when I met Dave, at that Sunday school class.

DSM: What about this young man attracted you?

JE: He was friendly. I don't think there was any one special thing that I thought, "Aha!" We just became good friends very quickly, and stayed good friends for a long time.

DSM: Talk about when you got married.

JE: Dave went into the Army when I was a senior in high school. He left in February and I graduated from high school the following June. Then I went to college and nursing school, and he went off for his walking tour of Europe. We got married when he got home.

DSM: So you waited for him while he was overseas, did he write a lot?

JE: We tried to write every day, but we didn't quite make it. But we wrote many times, many letters.

DEJ: Where are the letters?

KA: I've seen letters from Dad. I've read them.

DSM: You have?

KA: They were very romantic. I was so surprised.

JE: They also got re-hidden and we have not found them since! I think the letters I wrote were probably lost in Germany and Czechoslovakia and some other places, but most, not all, but many of Dad's letters I have.

DEJ: Where?

DSM: Do you know where they are?

JE: Yes, I do, actually. They were safely put in the laundry room.

PE: She knew we'd never be in the laundry room. We would never go there on purpose.

KA: Well Mom went to her high school graduation with her father while Dad was gone.

JE: I went to graduation dance with my dad, and our grandchildren think that's very funny.

PE: Did a lot of people do that during wartime?

JE: Quite a few did, quite a few. I wouldn't say a lot, but quite a few.

GS: He probably was a great dancer. It was probably a lot of fun to spend a night with him.

DSM: I understand that Dave was a dancer as well.

JE: That's right, including his early ballet lessons.

DSM: Dave came back from the war, you got married, and you were a registered nurse.

JE: Actually I hadn't finished. We got married in March. I graduated in June, and then graduated from the university in August. So I was still in school, and he was still in school, and we were both working. So we had a very busy schedule for the first part of our marriage. We didn't have time to do a lot of other things.

DSM: So Dave at this time was starting his graduate degree...

JE: No, he was still doing his undergraduate work. He had had just one year of college before he went to the War.

DSM: How long was he an undergraduate?

JE: He had nearly three years as an undergraduate, and then he did his graduate work, got his PhD.

DSM: Do you have any idea why, given that all of his other brothers are in medicine or law, or the arts, do you have any idea why this man was so interested in science and physics?

JE: No, but he always was. More engineering than physics, I think. He had taken things apart from the time he was four years old, according to his mother. The alarm clocks were never safe in the house, and the radios were never safe. But he always managed to put them back together again from a very young age.

When I first knew him, before he went into the Army, he was the neighborhood radio repairman. He had his own, as has been explained, his own ham radio set. There were pieces of it all over the bedroom floor. From the time I've known him, he's had those interests. I'm not sure why. I don't know why any of us choose to do what we choose to do, but that's always been an interest of his.

DSM: Now, in 1948, if you had an undergraduate degree, you were in the top 3% of the educated population of the United States, and only 10% had high school degrees. And yet Dave made a decision to go on, and to get a PhD. Do you remember making that decision?

JE: Oh I certainly do. We talked about it a lot. Dave felt very strongly that education was the key to opportunity, and that if a person wanted to do a lot of different innovative things, he had to be well educated. We had friends who were in the Army about the same time Dave was, who came home and married about the same time we did, who bought a little house and had a little business, and quit school. Even now some of them are in those same houses, and doing those same things. Not that that was bad, but that Dave wanted to do some broader scope things than that.

PE: And did you live in poverty?

JE: Yes, I would say so.

GS: You had three and a half babies, a card table and two cribs.

DSM: It's hard enough being a student without having a family. It must have been especially difficult.

JE: Well most of our close friends at that time, were in school also. They had been through the war also. So it was hard I guess, but it was a lot of fun, too. And we knew it was for a purpose. That this period of time would come to a conclusion. We've known some people in our lifetime who really live on the edge of poverty, who are never going to have anything else. It wasn't like that for us, because we knew it would be hard, but in a few years, it would be different. I think the total outlook was quite different from just living in poverty.

PE: How did you live? I mean talk about getting your laundry and having no car.

JE: We lived in an attic apartment, we had to walk right down the center of the room or you bumped your head, so it was a good thing neither of us was very tall. We had no washing machine. We had no car.

We had an oven that had no thermometer in it, so the landlady said you just kind of put your hand in and when it feels warm enough then you can use the oven. That was not too hard. The laundry situation was difficult. We did washing in the bathtub and draped things around the house in the winter. Of course no one had a dryer at that point.

GS: No one also had disposable diapers.

JE: Oh no, there were no disposable diapers, of course not. My mother, in that period of time, did become the proud owner of a Bendix washing machine. It was never called a washing machine. It was always the Bendix. Sometimes I would gather up the babies and the laundry and walk two blocks to the bus and go to my mother's to do the laundry, but that was such a pain. It was almost easier to do it in the bathtub. Our children don't believe that, but it was wonderful. When we finally did get a washing machine, we bought one for twenty dollars from another student who finally graduated. It was an old ringer washing machine, and Gail promptly climbed in and broke her arm. We had to drain it into a bucket and then pour it into the sink because it wasn't hooked up to any plumbing. It was kind of primitive.

DSM: Was Dave different after he came back from the War?

JE: Not a bit. Not a bit. I think he was not. I've seen some movies where returning service men have terrible adjustments and different kinds of experiences, and I was never cognizant of any of that in Dave.

DSM: So in 1953 Dave had a brand new physics PhD, what was it like?

JE: Oh it was wonderful. We were going to have a salary. It was very exciting. We did have an old car by then, and we were moving to California. We had three babies. David was 18 months old when we moved, and Ann was on the way. I was very nauseated. We had a card table and a crib, and these children, and an old car, and we were on top of the world.

DSM: So this is when you were going to California. What do you remember about it? Do you have fond memories about your period over there?

JE: We had a wonderful time there. Actually we had an interesting experience just prior to Dave's graduation. A number of companies had wanted him to come work for them: Bell Telephone and some other companies in the East. Bell Telephone had agreed to have him fly back for an interview to New Jersey, and we decided that if we went on the bus, I could go, too. It was a long bus drive. I would never recommend it.

But we did go and we did meet a lot of interesting people, and we did decide that we probably didn't want to live in New Jersey. We had interviewed with a number of companies, other places, and we said, "Well we don't really care too much where we go." There wasn't much demand for computer scientists in Salt Lake at that point. We did say, "Let's not go to Los Angeles." So of course that's where we went, to Los Angeles. While I still would probably not choose to live in Los Angeles, we had a wonderful experience there. We had wonderful friends, and there were many interesting things to see and do. We enjoyed our time there very much.

DSM: You went to Los Angeles in 1962. That's interesting and exciting. From '62-'66 you were at Berkeley, at the height of the Civil Rights Movement, the Free Speech Movement. What do you remember about those times in Berkeley?

JE: A couple of things seemed striking to us at the time, especially as we would see reports of things going on at Berkeley, in the newspapers or the magazines, the news magazines or on television or the radio. There would always be these huge crowds of protesting students, and yet, there weren't so many protesting students. There would be a few protesting students, and a lot of others came to see what was going on. But it seemed totally different to us, actually being there, than it seemed to be portrayed in the media. Of course there was the Free Speech, and the filthy speech and all the other speech. It was interesting to see that happening, and to see the tremendous, I don't know if rebellion is the right word, but certainly it was a different feeling among college students, from what we had experienced as college students. We were all so grateful to be in school, so grateful to have the war over. So it was just different.

But we had wonderful student associations in Berkeley. We enjoyed our faculty associations very much. Eventually we left Berkeley to move to Lafayette, which is just across the hill from Berkeley, kind of through the Orinda Tunnel. Not because we had any racial feelings about what they were doing in the Berkeley schools, which was kind of at the height of the beginning of the busing movement nationwide. Berkeley had decided instead of busing students to equalize the black population and the white population, that they would have all of the children in the school, in the sixth grade, for instance, would go to one school. And all of the children in the fifth grade would go to another school. This happened throughout the whole city and so on up to high school. Then they all went to Berkeley High School. But the parents were responsible for taking their children to school and bringing them back. We had so many children that I was just driving to school and back all day long, and it was just ridiculous. So we decided to move. It was the cowardly way out.

We loved living in Lafayette. We sort of expected to be there the rest of our lives. We had a very nice home, and enjoyed being there very much. Dave enjoyed Berkeley very much. It was about a twenty-minute drive to school from where we were. Then James Fletcher, who was then the President of the University of Utah, invited Dave to come to begin the Computer Science department at Utah.

DSM: This was James Fletcher within NASA?

JE: Yes. So we decided to come home, and we did, and it was wonderful.

DSM: This was about 1967?

JE: 1965.

GS: I was a senior in high school.

PE: Dad bought the home without Mom seeing it.

JE: That's right, I had never seen it and we moved into it.

DSM: Now the young Dr. Evans is back home with a tenured track at the University of Utah. After all this pain, life is beginning to pay off, and along comes Ivan Sutherland and this crazy idea of the business. How did you feel about this change?

JE: How did I feel, or Dave?

DSM: How did Dave feel, and then how did you feel?

JE: Dave had met Ivan a number of times professionally. The two of them were both consulting for G.E. in Phoenix. And while they were there at one time, they hatched up the idea, "Why don't we start a business?" They had tried to talk a number of companies into doing what they thought ought to be done, and everyone thought it was a great idea, but no one did it. So they thought, "Maybe we should have our own company and really do it." David always wanted to do this sort of thing, and I was very pleased for him.

It was very hard for a while because he was full-time at the university and full-time at Evans & Sutherland, and scout mastering and we had all these children. There just weren't enough hours in the day to do all the things that had to be done. So part of that time was a little stressful in that respect.

But I always admired Dave so much for his total integrity, and total desire to make this company that something that was a benefit to the world, that would make the world a better place, that would provide a living for the employees and would be interesting and stimulating. Somehow he knew it was going to work and so I knew it was.

DSM: Did the kids have impressions of this time? By now you were all in high school.

GS: I was in college at the time, at the university.

DSM: So now we're talking 1968.

GS: I was a student at the University of Utah at that point in time. I was kind of in my own oblivious world, not really aware of how stressed and pushed Dad was, because I came home to eat and sleep. I didn't spend a lot of time at home as you would expect, and I truly was oblivious, Dad was just Dad. We knew he was a good guy. We knew he was busy, and maybe some of the younger ones were aware of what he was doing, but I wasn't. I was out in la-la land. But I had a number of college friends who are still my friends who are in the engineering department at the university and in the computer science department at the university, and they said to me one day, 'Do you know who your dad is?' I said, 'No. He's just Dad.' And they said, 'Well let me tell you who your dad is.' I didn't have a clue that Dad was known in the whole world for the things he was doing.

DSM: So you began to get the inkling that your dad was doing things that were literally transforming the world.

GS: I remember the atmosphere. Although I was a nursing student, I spent lots more time in the college of engineering playing and studying with my male friends in the college of engineering. There was electricity in that department. You could feel it, even when nobody was around. It was an exciting place to be.

DEJ: One of my memories about that time is exactly what Gail is saying, is that I think our memories centered more on the Merrill engineering building than on Evans & Sutherland. Many of those students became employees of the company, and they were in our home. Ivan was at the university also, and many other people whose names have become prominent, or were prominent at the time, were being gathered into that department and into the computer science effort that was going on. So my memories of things at the university were about all the exciting developments. I didn't know why they were exciting, but you could just feel the excitement.

The graduate students would be working on something that by today's standards it wouldn't be earthshaking. But for example, they would generate a dot of light on a picture. Dad would be excited, and say, 'Come with me, David.' It would be 11:30 at night on a school night, and you'd go up to the Merrill engineering building and you'd see a little dot of light. But we knew that he was very excited about what was happening, and we knew that very good people were being gathered together in a very unique environment.

PE: I was really young when the company got started. I was ten, and I had a funny impression. I remember Dad always used to include us, and we would go and see what was happening. They were located in some old barracks that were adjacent to the University of Utah. You could put a pencil down and it would roll out the door, these were really bad old buildings. I remember being impressed as a kid one day when he drove home in a pick-up truck. The company had bought a truck. I thought that was so amazing, and I asked my dad if he bought it, and he said, "Yes." And I said, "You mean that they just let you?" "Yes," he said, "the Board just let me buy this truck." And I thought, "Wow, I can't believe my dad's the president of a company that can just go buy a truck!" That was my impression as a very small boy, that that wow, this was big.

I also remember in these facilities, they had a trailer. And I remember when they got their first picture, which was maybe beyond the first dot of light. It was the first picture of a woman's face. The face was not smooth. It was not shaded. It was not shadowed. It was just polygons that looked like a wire mask of this head, of a face. That was so exciting. Everybody gathered to see it, the grandparents gathered, the Scout troops gathered, the students gathered. There was great celebrating to be able to come up with an image that looked like something.

I remember going up there early in the company's history when we had the first landing strips on an aircraft carrier, and it looked like stick figures, it looked just like a pencil drawing, a poor pencil drawing. There was no shape of the boat, there was nothing except this grid of what the top looked like, that some pilot was supposed to land on and make you feel better as a passenger. This is not going to ease my comfort in flying, but it was pretty exciting to see development after development after development.

I remember when I had finished serving a Mormon mission in Paris, my parents came and picked me up and they brought my younger brother Doug who is not with us tonight. And I had a chance then to go to England, where Dad's company had a marketing agreement with the people that actually build flight simulators. And I flew a simulator, for really the only time in my life.

I remember taking a 747 approach to land in to an airport, with poor weather conditions and with a lot of wind, and with rain. By the time we had landed, I had worked myself into a complete sweat. I absolutely was scared to death that we were going to crash. I didn't actually land successfully, but the simulator just shut off. It was in a shut-off mode, rather than into a crash mode, and so fortunately I didn't break my leg or anything. But I compare that initial concept of looking at that stick figure, where people are landing on something that looks like my five-year old drew it, to the day we landed in a 747, where you actually had this physical sensation that you were landing, and that you were scared to death that you weren't going to make it. And that you all of a sudden realize that it was all an experience that wasn't going to hurt you, it was a remarkable thing to see what's happening in terms of the technology, and it's been a fun thing to watch. Even from the early days when it was exciting to see very small progress, elements, to today where you can't tell the difference between an out of the window scene of a real airplane, and on the computer screen of the database as you're flying through it.

I guess the last thing that I'd just like to say is how grateful I feel as a son, and I think all of us feel as children, and others may want to express themselves to our parents for the kind of lives that they've lived. They've given us wonderful lives, but more importantly than that, they've had wonderful lives. They've shown us what it means to be happy in terms of not focusing on yourselves, but focusing on others, in terms of how you make a family work, in terms of blessing your children's lives, and in terms of how you make your communities work, and the people around you work. That is a real tribute to you and about how you've treated people, and what you've expected of them, and I think it's been a remarkable thing. I feel like I am the beneficiary, and all of us are beneficiaries. I'm so grateful that we were raised the way we were raised, and that we have the kind of parents to look to that we have. It's truly been remarkable. You have been wonderful influences in our lives, and continue to be. We're very grateful for that and grateful to you for all you've done, and all you mean to us. It's beyond our ability in words to express our gratitude, and we love you very, very much.

SEF: You asked the question how did my father's company affect us, and I think it's interesting to listen to my brothers' and sisters' perspectives because 1968 was the year that I got married. The first thing I remember is, in addition to starting the company; several of the children have mentioned how we came first. We didn't have a lot of money. My father didn't have a lot of time. They were very busy starting a new company. Yet I never felt like what I was doing wasn't the most important thing. Whenever time needed to be focused on me and my marriage and what I was doing, my parents were there. My father was willing to sacrifice to be able to be there, and to help make that a special time for me.

Looking beyond that, I think it wasn't very long after we were married that we left the Salt Lake valley. So I was not living here where all the excitement was going on, and I knew my father was doing great things with computers, but I got a very different perspective of it, because what I learned about my father very quickly, is that he is also a very modest man. If I would call and say, "How are you doing?" He would say, "Fine." And without prodding, I didn't hear a lot about the kinds of really exciting things he was doing, unless I heard them secondhand.

As I pursued my career and my family and we met other people from my husband's career, we met lots of people who knew about my father. These were people who became involved in computers, and were very willing to share with me their excitement about the kinds of things he was doing, like the simulators and the training they were getting on them. We live in Dallas now, which is a very large hub for American Airlines where there are a number of my father's simulators. I've met lots of pilots who trained on his simulators and who are beneficiaries of the things that he was doing. I learned very quickly to become very proud of my father, not because my father ever said he was doing great things. In fact, I very rarely even heard about all the wonderful awards he was getting because he never mentions them. He was my dad, and when he came to visit, he came to visit me, and to be Grandfather to my children, and to spend time with us. So we didn't hear anything from him, we had to ask. I had to say, 'What are you doing?' And pretty soon it became very apparent to me that he was not only my father, and he was not only doing these great things people were talking about, but he was becoming very well-known. He was becoming quite famous with the things he was doing. I also learned that everyone I talked to loved him. They had the same kinds of things to say, which is, "I knew him. I trained with him. I loved him." They all knew who he was, and they all had the same kinds of things to say about my father.

Being well known is not Dad's goal. You can tell the reason he's so successful is because what he's doing is important, and the people he works with are important, and that's what makes him well known to them. So I see and I'm a recipient of all the great things that he's done and it makes me proud to say, "Gosh my father did that." I've learned that he not only feels important about what he's doing, he has made it possible to show people that you don't have to be pompous, you don't have to show you're proud about what you're doing. If the things you're doing are important, if the people you work with are important, then you become important as well. And that makes me very proud. I want to thank my parents for teaching me that, because I think they're both very service-oriented, and they love people. One of the reasons that we feel the way we do in our family is because of the values they have. One of the reasons I think so many of us have become happy and successful in what we're doing, is we've learned that your family is first.

The values that we have from our church and from them, have become values to us, and made us see that when you put those first, the other things come.

DEJ: We've spent most of the day talking about things that happened a long time ago, and I wanted to just talk about recent events a little bit, and Dad's perspective on them as they developed. Several years ago, Dad was diagnosed with Alzheimer's disease, and it's something that has impacted him significantly. At first, there were just small things that were seen, and ultimately there's been a large impact.

When that diagnosis was made quite a few years ago now, one of the things that happened as we went from doctor to doctor, as we counseled together as a family, he had to stop driving. We lived relatively close, so I would drive him to work. One day, before he retired from the company, I had driven him to work and we were in the parking lot and kind of having a tender moment about all of the things that were happening, and it seemed like everything was collapsing a little bit around him. He might have to soon retire from the company that he loved. He couldn't drive anymore. People were always asking him if he was okay. It was a hard time. If you project yourself into that, you can see what a hard time that was. So we were in the car, I was in the driver's seat and he was next to me, and we actually held hands for a few minutes. I got a little teary about the whole thing. And I said to him, after expressing my frustration with what was happening, I said, 'Well Dad you're certainly dealing with this well.' And he looked at me and he said, 'Well, what's the alternative?' And I guess that personifies Dad to me; which is you take the worst possible circumstance, and then you deal with it the best possible way that you can. Rather than fight against things you can't fight against, you take what's best and do it as long as you can do it.

The second thing that he expressed to me at about the same point in time was that expression of his faith and why we're here on Earth. His faith is that life was before we were here and will continue after we leave this earth. What he said to me was, 'I'm not surprised to know that not too far down the line, I'll be leaving this existence. I've actually understood for a long time that sometime I'm going to die. And that doesn't frighten me. I've lived a good life. I'm not afraid to meet my God. I believe He will be happy with what I've done.' And to me, that little private, personal expression I've always treasured, to know that even in very difficult circumstances, we can take the faith that we have and use it as a bedrock to continue to do the right and the good things for however long we can do those things. I'm particularly grateful to have had, as I'm sure the others have had, little private times where he's had an opportunity to express that.

But I believe he's felt that throughout his life, and I believe his expression was sincere, that he's lived a good life, and that he's not afraid to go on. The other thing he expressed at the same time is however, as I think about the trial that's going to come, not to me, but to you, and especially Mother, I might have chosen something else.

GF: I'm Sue's husband and Dave's son-in-law. The family has always tried to be active in a lot of things, one of which is they had a boat and they did some annual water-skiing. I grew up in a family where we didn't have those opportunities. And this was during a time when I was dating Susan, prior to our marriage. I don't believe we were – we *were* engaged at that time. I was awestruck by Dad. You couldn't ask him a question without getting an answer, in great detail. He taught me many things. But on this day, we were all on the boat, those who were going to go water-skiing. I had ridden in a boat one time in my life. I lied when I was asked if I'd water-skied. And when I saw these water skis they looked like telephone poles. They were just huge, enormous things that one could not control. I put them on, and in those days, they didn't have those nice, comfortable, tight-fitting life vests. They had a four-inch rubber foam strip around your waist, a life belt. I don't know what good it did. So I got out in the water, I put these skis on, and the boat took off, and I think I stood up. Shortly thereafter, the tips of the skis went under the water, and I followed. I was taught not to let go, and I didn't let go. I was dragged for some distance, and Susan kept yelling to Dad, 'Dad he's really drowning! He's really drowning!' It was quite intimidating to have your perspective father-in-law stop the boat, dive out and save your life.

SEF: It took three tries. I said to my father, "He's drowning out there!" And of course, we all grew up in the water and nobody drowns water-skiing. And my father said, "Oh, nobody drowns water-skiing." So he's fumbling around in the water and a few minutes later I said, "Dad! He's drowning out there!" And he said, 'Nobody drowns water-skiing!' Then the third time we realized that somebody does drown water-skiing. He'd never even been swimming, much less water-skiing before. He was drowning. So Dad jumped out and saved him.

GF: He even let me marry his daughter.

DSM: That's a good place to stop. Thank you all – it's been a privilege and an honor to be part of this group. Your father is a special man. I feel genuinely honored to have been a part of this.