

SMITHSONIAN INSTITUTION

**Marilyn Hamilton**

Transcript of an interview  
conducted by

Katherine Ott

Via Zoom for the

National Museum of American History  
Smithsonian Institution

on

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with subsequent additions and corrections

**Speaker 1 (00:00:01):**

And Marilyn, are you recording your audio?

**Marilyn Hamilton (00:00:05):**

I am. I got it on.

**Speaker 1 (00:00:06):**

Okay. I'm going to go on mute and then it's on Katherine. If you don't mind doing the countdown and then we can begin.

**Katherine Ott (Interviewer) (00:00:12):**

Yeah. 10, nine, eight, seven, six, five, four, three, two, one. I'm Katherine Ott, a curator in the History of Medicine at the Smithsonian's National Museum of American History. And I'm talking this afternoon with Marilyn Hamilton. It's March 11th, 2021. I am in my home. It's a Zoom conversation. I'm in my home in Washington, DC and Marilyn is in her home in California. Welcome Marilyn. It's wonderful to see you. So, let's start with your early background, your parents and your family. Take us through your childhood, where you grew up, things that stand out for you that helped you develop as an inventor, innovator, creative person, that sort of thing was. So, start there.

**Marilyn Hamilton (00:01:16):**

Okay. So, I grew up in Dinuba, California, a small San Joaquin town known for farming, and mom and dad, Mary and Edward Koobation owned an interior design business. And my brother Jon and I grew up above that downtown business in a quaint apartment. Dad was handy and over a couple of years built our family home. And when I was around four years old, we moved into it and it just seemed huge after living in this little tiny apartment for so many years. And I was always a tomgirl and loved hanging out with my friends and family and really stayed there through my high school years in Dinuba. My mother's parents had a dry-cleaning business there in Dinuba, where my parents met after World War II, and they got married, started their business and lived there till my dad passed away.

**Marilyn Hamilton (00:02:17):**

And so, our childhood was really quite busy and happy, grateful that it was full of love. And my parents had strict rules for us, and mostly we listened. I have many fond memories, of weekend gatherings because we were so family-oriented with all of our relatives and had lots of cousins that we could play with. And our aunts and uncles would barbecue and cook together. Being from an Armenian family, there was a lot of cooking going on. they played cards and visited.

**Marilyn Hamilton (00:02:54):**

And other weekends, activities included everything from racing go-karts, the whole family raced them, to playing tennis and water skiing and snow skiing. And so, we were all very active. And when we were not doing that, there was always household chores to do. My parents had high expectations for us, and they practiced what they preach in really challenging us to try new things and to be curious, and to set goals and to do our very best. My dad was a real perfectionist

and there's a double edge of always wanting to do things perfect and getting things done. But this created a strong foundation that gave me a lot of strength and wisdom to deal with challenges that would come later on in my life. So, my parents taught us to take every day really seriously and go after our dreams and really make a difference. And they gave us a big dose of belief in our ability to succeed for what I'm very grateful for.

**Katherine Ott (Interviewer) (00:04:06):**

I have two questions. Where were you in the pecking order in the family? And you say you were a tomboy, does that mean you played with tools or you were encouraged to try anything you wanted or was it sports or a whole variety of things? How do you think of yourself as a tomboy?

**Marilyn Hamilton (00:04:27):**

I was a tomboy because I just loved sports and activities. I'd make model airplanes with my brother and we'd go out and fly them at the local school that was down the road from us. And we would just be active our whole lives. What was the other question? Sorry.

**Katherine Ott (Interviewer) (00:04:51):**

Pecking order.

**Marilyn Hamilton (00:04:53):**

And our family, I was number two. My brother Jon was a year older than myself. I was the second in a family of four. My sister Barbara came along four years later and then my brother Stan a year after that.

**Katherine Ott (Interviewer) (00:05:11):**

So, we'll move to your education and we probably should start by asking what you learned from your grandmother, Hatoon Bazarian. So, tell us about her and how she influenced your developing mind.

**Marilyn Hamilton (00:05:30):**

So, my grandmother was a force to be reckoned with, and she truly had two lives. One that I knew about, which was a sweet, loving, and caring grandmother. However, for 27 years, her life was very different growing up in Armenia and surviving the tragic 1915 Turkish Armenian Holocaust. And she lost her whole family, husband, her children, her friends, and there were over a million and a half people that died in that incident over [inaudible 00:06:09]. So, grandma really became a freedom fighter and was wanted dead or alive by the Turkish leadership. And in 1922, she was captured and managed to get away and applied to an American missionary and went directly to a refugee camp. [inaudible 00:06:27]. Then in 1923, she was able to get on an American ship and through Ellis Island arrived in the US. I truly credit much of my courage to the example of what my grandmother... I didn't realize that was going to bring a tear to my eye, and mother taught me to really never give up.

**Katherine Ott (Interviewer) (00:06:53):**

She sounds like she was tough and resourceful. Did you know her for quite a while? And what other things do you think you learned from her example?

**Marilyn Hamilton (00:07:07):**

My grandmother never talked about her life before, so I really didn't know about it in my early years. And I knew her all the way through high school. She lived to about 60, she and my grandfather, my mother's parents. And years later, we learned through some memoirs that she wrote what her life was really about. And that's when I really connected to it and realized that the strength came from a place that I didn't really know.

**Katherine Ott (Interviewer) (00:07:48):**

So, you spent most of your early years through high school, college in the small town where you grew up in the Central Valley. Is that right?

**Marilyn Hamilton (00:07:58):**

I spent all of my years in Dinuba until through high school. And then I ventured off to California State Polytechnic College in San Luis Obispo. And it was on the central coast where I earned a Bachelor of Science degree in education and a minor in art and a secondary teaching credential. And this is where I really learned to embrace a motto that Cal-Poly had, which was learn by doing philosophy. And this learn by doing and getting involved in everything and not just studying book work really is where I learned that there was no substitute for just giving it a shot and trying something and see what happens. So, while I was there, Rick, my boyfriend from high school, attended a university in Los Angeles, and we kept in close contact. And our last year, we married in 1971 and we both finished our teaching credentials at Cal-Poly, and it helped me to really apply information in a different way and helped me separate the difference between important and really what wasn't important in pursuing my passions in life.

**Katherine Ott (Interviewer) (00:09:21):**

In combining art, science, teaching, those interests, did you make things throughout your life? Were you thinking in your head designing or fooling around creating things, painting whatever?

**Marilyn Hamilton (00:09:41):**

I loved making things, from sewing with my mom to working out in the yard with my dad. It was quite a variety and a range, sports and activities with my high school sweetheart, Rick Hamilton. I think the full range of things that I really got exposed to is what really helped me to be who I am today, I think. And it's a range of things. It's not any one thing that I can point my finger to.

**Katherine Ott (Interviewer) (00:10:17):**

Can you remember anything you built or sewed or put together that really excited you and that you may still have, but that was a formative moment for you?

**Marilyn Hamilton (00:10:30):**

Well, I remember one of the things that was both terrifying and fun, and those extremes are always interesting in life. When I ran for Dinuba Raisin Queen of all things, and I was trying to figure out what the heck I was going to do for my talent, because I didn't really have a talent of singing or dancing or anything that I felt like was appropriate. And so I put a whole collection of clothes together. Imagine getting up on stage and discussing a whole collection of coats and clothes and things. So, I was really handy and my parents helped me to learn to make things. So that was probably the biggest memory.

**Katherine Ott (Interviewer) (00:11:23):**

When did you go off to Australia? And tell us some more about that.

**Marilyn Hamilton (00:11:28):**

So as soon as Rick and I completed our secondary teaching credential, he landed a job in Australia. And I figured once I got there, I would find new jobs. So, we went off with no worldly possessions and no friends waiting for us, and we just had each other, and we'd just gotten married a year before. So, it was daunting, and it was also exciting at the same time. And Australia was short of teachers, so it was fairly easy for me to get a job once I got there. And then once we did that, came the whirlwind of finding a home and setting it up and buying a car and making new friends and exploring this exotic place that we called home. And so, every day was really filled with new experiences. And I loved stacking up all of those experiences, which I think gave me more confidence about trying new things.

**Katherine Ott (Interviewer) (00:12:28):**

Was that a kind of immigration experience similar to what your family, like sort of in your blood to move around and try new things and have to find your way in new places?

**Marilyn Hamilton (00:12:42):**

Well, no one in my family really ever traveled, so I was pretty much the trendsetter of leaving the family and moving to another country and taking a two-year contract before we returned to the United States. So, it was quite different for our family.

**Katherine Ott (Interviewer) (00:13:06):**

What'd you do when you got back to the States?

**Marilyn Hamilton (00:13:12):**

Actually, on our way back to the US, we traveled for about four months, and that was another heck of an experience for us. So, we just booked open tickets to travel to several different countries and whatever we liked, we stayed there till we explored it and then we moved on. And so, we really started, we hadn't gotten to New Zealand yet. So, we started in New Zealand for one month and we were just in our glory. We were camping and hiking from the black sand beaches of the North island to the rainforest of the South Island and hiking four days into the famous Milford Sound and walking on glaciers of Mount Cook. And next we headed off after

that month to Singapore and Hong Kong, which were totally different cultures and big cities and lots of activities from hiking to cities.

**Marilyn Hamilton (00:14:10):**

And then we lived, after that, with the locals in Indonesia and primitive dirt shanties, and took showers in these little rooms with holes to go to the bathroom and little buckets of water in a trough to pour on yourself. And so quite a variety of experiences. And finally, we enjoyed getting back to Hawaii before returning home. And that was when we just kind of decompressed and really reminisced of what just happened to us and what we did. And it really taught me about adventure and cultures and really not following the status quo. It helped me toward conquering fear. We were scared a lot of the time. And each time I did something bigger and different, it helped to grow my confidence and really stack some successes up. I think it really prepared me for the next challenges and chapters that I was going to be handed.

**Katherine Ott (Interviewer) (00:15:11):**

I want to dig a little deeper about your relationship to art. What kind of art do you do? When you were traveling, were you aware of art and were you drawn to the colors and designs? How was that a part of how your mind works and who you are?

**Marilyn Hamilton (00:15:31):**

I didn't have a special, specific one type of art that intrigued me. I didn't draw, I didn't paint. I was more creative and doing macrame and creative little projects around the house. I loved design, I loved interior design in particular. My dad was an interior designer. So, I had a lot of influence there from parents. And so, it really was, again, not any one thing, but a range of things that I loved. I love nature and colors and really clothing and everything.

**Katherine Ott (Interviewer) (00:16:22):**

It sounds as if your family were your main mentors. Were there others or particular family members that you feel got you and encouraged you in ways or taught you important things that have stayed with you?

**Marilyn Hamilton (00:16:40):**

In the early years, my parents really were my mentors. And after I had a hang-gliding accident, then I started searching for other people and things to really help me understand what happened to me and to really start to get beyond the why me that comes from an accident and get into the why not, and get back to where I wanted to be.

**Katherine Ott (Interviewer) (00:17:17):**

How would you describe yourself? What are some words that come to mind to describe yourself?

**Marilyn Hamilton (00:17:24):**

I would probably describe myself as curious. I would say I'm passionate about whatever I decide I'm going to do. If I get involved with something, I'm very driven, a lot of perseverance. I really like making a difference and helping others.

**Katherine Ott (Interviewer) (00:17:50):**

Do you still stay in touch with friends from your early years before your accident, besides family members? Are you still in touch with some people?

**Marilyn Hamilton (00:18:01):**

I do stay in touch with some friends over the years, in high school and in college. But my life is really large, and I seem to always be finding new friends and new people. And I certainly stay in touch with a lot of the people that were a part of starting Quickie.

**Katherine Ott (Interviewer) (00:18:25):**

Let's move to some of the questions about the sports wheelchair and that invention. You were hang-gliding, were you doing other sports when you got back to the US?

**Marilyn Hamilton (00:18:44):**

We love skiing, so skiing, water skiing, and sailing and hiking and tennis. And then when we returned to the US in the mid-seventies, I was the original, you might call me an adrenaline junkie, looking for a new thrill. And at the time, hang gliding was the hottest sport around, extreme sport around, only really done with guys. And I was all over it. I was used to being around guys a lot, well growing up with my brother and his friends. We just got passionate about the sport. And in 1978, I was really considered an expert pilot after about four years. I loved being with Rick and my friends at our local site in the Sierra Nevada's. It's a couple thousand feet high where we'd set up our hang gliders. It was mountain flying.

**Marilyn Hamilton (00:19:38):**

And we'd spread our wings out and take a few steps off the mountain. And the wind would come up underneath and connect underneath our gliders and pick you up. And then you were just exploring the sky. And it was very exciting, and it was very focused. You had to be laser focus to be able to do this. And once you learned how to fly, the most fun was really catching thermals and riding them. And a thermal was a column of air that would be rising. And it was caused, by the uneven heating of the earth below, and then when the glider would hit a thermal, it would start to float up with that thermal, and you really had to follow the thermal. And it was a challenge. It was really exhilarating. And to be a good pilot, you have to learn how to look and spot these areas because we're not use to looking down.

**Marilyn Hamilton (00:20:34):**

You don't have that perspective in many things in life. And watch for the signals and feel how the wind is blowing and listen. And when you find one, it's just thrilling to be able to rise up 2000 to 3000 feet above takeoff. So, I loved the adventure and it was really addictive to me and it consumed my thoughts. When I was running with the dogs in the morning, I would think about

thermals. And when I was watching birds that were flying in the sky, I was thinking about thermals. And when I went to bed, I was visualizing it. So, I'm a real laser-focused person when I lock onto something.

**Katherine Ott (Interviewer) (00:21:10):**

Where were you living at that point?

**Marilyn Hamilton (00:21:13):**

We were living in Reedley, California, a small town close to Dinuba, on an 80-acre ranch. And at the time, it was a farm, Rick was no longer teaching high school. He was actually working with the family business. They were growers, packers and shippers of fruit, and sold it all over the world. And then I was teaching high school at Kingsburg High School, another small town in the San Joaquin Valley.

**Katherine Ott (Interviewer) (00:21:40):**

What subject were you teaching?

**Marilyn Hamilton (00:21:43):**

I was teaching home economics and art.

**Katherine Ott (Interviewer) (00:21:47):**

So hang-gliding, did you own your own flying machines?

**Marilyn Hamilton (00:21:53):**

Yes, I owned my own flying machine, which was really made for me, my size, my weight and my range of where I could put my arms to maneuver the glider because there's a triangular control unit. And when you're running off of a cliff, you're holding it up high and then you drop down to the bottom and then you can maneuver in any direction, the hang glider. And so, I like the really small gliders, so when I can jump in a thermal, I could really maneuver it around and the wind wasn't overtaking me. So, all gliders were always customized to each person.

**Katherine Ott (Interviewer) (00:22:36):**

Was it a particular company that made the gliders that you preferred?

**Marilyn Hamilton (00:22:41):**

I'm trying to I think what glider I used back then, and I just don't remember. I don't remember. [My glider that was popular during this time in California was a Wills Wing.]

**Katherine Ott (Interviewer) (00:22:55):**

That's all right. So, you had an accident. What was the recovery time and what did you go through to get to the "Why not"?

**Marilyn Hamilton (00:23:14):**

So, in August 1978, it was a defining year for me, and in a split second one day while I was hang-gliding, my life changed dramatically. So, I made a mistake that day at takeoff that left me paralyzed. And thank goodness that I was surrounded by a loving husband and family and friends. And when you're in the hospital and you've had a tragic accident, you wonder if there's life outside of the hospital, and it is very challenging. And at the same time, I hated being in the rehab center. And so, after three weeks, it was unheard of, in 1978, to leave the hospital in three weeks, and I did. I figured I could rehab better at home and I was more comfortable figuring things out and how to live again. And I was very resourceful and had enough support around me.

**Marilyn Hamilton (00:24:16):**

Life is full of choices and I had the choice to get stuck or to move on. And I was so fortunate to be able to say that day I made a terrible mistake, but I'm okay and I can move forward. And for some reason, I can make that transition fairly easily, and it's hard. It's not easy because there's so many new things to learn and figure out how to do.

**Marilyn Hamilton (00:24:43):**

And I think that this is where that strong family upbringing and positive people really helped me to move on and get back into my life. I wanted to be active. I wanted to work. I didn't want to stay at home. I wanted to travel, and I really wanted to have fun again. And I knew that if I could just have a better wheelchair with a lot more mobility, it would really open up many opportunities for me to get back into life. I couldn't understand how I could have a hang glider that had more technology than my legs. It was just totally unacceptable to me that this fun hang glider was something that I couldn't do anymore at the time, but my legs were pretty sick.

**Katherine Ott (Interviewer) (00:25:32):**

After three weeks, you went back to the ranch and what did you rig some stuff up or did you get Rick to move things around? I'm sure you were inventing or innovating things. What kind of things did you do for your own assistive needs while you were at the ranch recovering?

**Marilyn Hamilton (00:25:51):**

When I left the hospital and went home, I was very fortunate. Rick had, outside our house, he had laid a flat pad because it was all gravel driving into the ranch. And so he put a cement slab there and a ramp going into the house so that I could get in and had started remodeling the bathroom so that I could roll into the bathroom. And that was pretty much it with the exception of a hospital bed in the middle of the living room floor, because I really had a body brace on and I really was not very functional at the time. But I was able to figure out how to live again and do all the necessary things that we do.

**Marilyn Hamilton (00:26:40):**

We take for granted all the things that we do every morning when we get up, and it's not so easy when you have a paralysis and a disability to really navigate through all of those things. The first time is always the hardest, just navigating. I was a great cook, so it was pretty easy for me to navigate, but everything I did was sideways. I was sideways at the sink; I was sideways and it's very awkward to be that way. So, we started renovating underneath the sink to having the opening so that I could sit forward.

**Katherine Ott (Interviewer) (00:27:16):**

Before your experience in a wheelchair, after your accident, had you known anyone who used a chair or walkers or things, or had you used one because you broke a leg or whatever? What did you know about wheelchairs, in other words?

**Marilyn Hamilton (00:27:33):**

Yeah. So, before my accident, I didn't personally know much about wheelchairs. Although, my uncle Bill, Rick's uncle, who I've known since high school, was in a wheelchair and I had no idea how amazing he was. It never registered to me how amazing he was. 17 years old, he was injured in a Ford Model T car [inaudible 00:28:00] accident after World War I, they left him a tetraplegic [inaudible 00:28:04]. So, he had a spinal cord injury, He could only use his arm and lift up a phone. And at that time, people didn't live a day or a year, or certainly not a lifetime. And uncle Bill lived to be 60 years old. He graduated from UCLA; he earned a law degree. He ran the packing house fruit operation. He was such an important role model for me. But little did I know before I landed in a wheelchair, anything about this. And he would tell me I could do anything, just go after your dreams and don't let anything stop you.

**Marilyn Hamilton (00:28:43):**

And Uncle Bill really gave me the confidence. I had no excuse seeing what he had accomplished with virtually no movement. And so, within a year with everyone's help, and a lot of determination on my part. I was walking on short leg braces because I said the first five years I was going to walk. Didn't ever happen, but I had the dream and we were pioneering wheelchair tennis at the time and sit skiing. So, I was back into skiing and tennis. And I was also working with Uncle Bill as a fruit broker. Never done that before, but I really loved being around him and watching him daily and seeing how he did things. And it was so interesting to me to see so many people come to him with problems and he would be solving other people's problems. And I would think, what are you solving these problems for? Your life is much more problematic than theirs. But he was so gracious and so kind. So, I'm just very grateful to have him in my life. He was a huge role model.

**Katherine Ott (Interviewer) (00:29:56):**

The chairs available at the time were pretty clunky things. Did you try a few before you got just totally frustrated? How did that evolve that you decided you're going to make one?

**Marilyn Hamilton (00:30:12):**

Yeah. Within the first year after my accident, I had purchased, for some reason I was in a little zone because I've lived in Australia for two years and I lived and I taught high school in California for four years. But I didn't have really insurance that covered wheelchairs. So, I was buying wheelchairs. It was the craziest thing I'd ever seen. And I had tried a Everest & Jennings wheelchair, a 80 pound dinosaur. And then I tried a stainless steel, it was from Stainless the company, wheelchair, but it just had so many accessories on it. It was so awful.

**Marilyn Hamilton (00:30:52):**

Then they came out with a sports chair and the sports chair meant there were no arm rests on it because these chairs were made and they were just one size fits all, either a 14, 16 or an 18. And

if you were anywhere in between, that was it. And all the accessories were locked on. So, then I got the sports chair and it was still a stainless-steel dinosaur. And that's when I said, "It's over." My hang glider had more technology than my legs. Then I was after finding a way to get a better wheelchair.

**Katherine Ott (Interviewer) (00:31:25):**

Where did you begin? Who'd you talk to? How did you look for parts or materials?

**Marilyn Hamilton (00:31:33):**

My co-inventors, Jim Okamoto and Don Helman, were building hang gliders at the time. They were my buddies and they were feeling sorry for me. And at the same time, I was stalking them, and they were playing around with producing these hang gliders and they were in these fun colors. And I didn't understand why wheelchairs were dreadful and sick looking. So, I really-

#### **PART 1 OF 4 ENDS [00:32:04]**

**Marilyn Hamilton (00:32:00):**

... once sick looking, so I really just begged them to make me a lightweight chair that had more performance that used some of the same technology on the hang gliders and also bicycle technology was really the blend that we used to pull a chair together. And I knew they could make me a better chair than what I was sitting in with similar technology. And so, they would come out and watch me play tennis, or struggle to play tennis and talk with me about my needs and wants. And then we watched other people playing other sports, like basketball and road racing. And so, we really reached out to the consumer to understand what all the needs and wants were and how they were going to make this chair for me.

**Katherine Ott (Interviewer) (00:32:59):**

What were the main design hurdles for that first chair, the things that were getting in the way of having a really good usable chair?

**Marilyn Hamilton (00:33:11):**

Well, the chairs at the time were all stainless steel. And so, at that time, really, the veterans were the real leaders where they were hacking up the shares so that they could road race and so they could play basketball better. And that was not the solution. The solution was really looking at a different material, and we used aluminum because that's what our hang gliders were made out of, seamless, drawn aluminum tube. And we looked at a different frame geometry and we looked at high-performance parts and movement and adjustability and we considered flexibility and really quality components were a lesson learned right up front that if everything was perfect and high quality materials would help that to happen, we could streamline manufacturing and create [inaudible 00:34:07].

**Marilyn Hamilton (00:34:07):**

We really thought a lot about, not a wheelchair for me, but how do we take that and now commercialize that for everyone, and how do we take that chair and really create creature features in it with adjustability so you don't have to buy a whole new chair when you may be

different or want to do something different, you could just take off accessories. So, there are bolt-on accessories and customization. And the first quickies that we built were for sports people looking for a better solution in performance, because they were willing to take that risk. The dealers out there were not willing to purchase from us in the beginning because we weren't giving as much margin, they were more expensive and it wasn't something that... they didn't know if we were going to be around in five years. And so, they weren't taking that risk with us. But the therapists got it and the consumers got it. So, we're very consumer driven and therapy driven.

**Katherine Ott (Interviewer) (00:35:13):**

What were the issues with the wheels size configuration and the seating, the angles and things? Did that change from the old E & J to the QUICKIE?

**Marilyn Hamilton (00:35:28):**

So, the configuration of the wheelchairs changed with the material. So, we were able to add adjustability to it. We could put brackets on the side and sit higher or lower. We could put on different kinds of wheel locks. We could change the size of the front castors. We could create a lot of creature features like a little pouch underneath it, a little pocket underneath it that you could put your keys in, you don't want to carry something with you or your license if you were driving. So just, we really tried to look at how do we create more function and usage in someone and create total adaptability and adjustability but make something that can be manufactured in a streamlined way.

**Katherine Ott (Interviewer) (00:36:19):**

We're all of the people working on this doing a little bit of everything, or did people have certain mindsets that they were really good in one thing or another?

**Marilyn Hamilton (00:36:32):**

Well, in the beginning it was just us, so it was me that's trying to do everything. And Jim and Don worked on the manufacturing and design quality manufacturing, tooling, setting up all of that. And I really worked in sales, marketing, and promotion, and it really tied back to sports for me because I was out there competing with other athletes and they would see me and then they would want to know where they could get that chair because it was just so much more effective. And it just looked cool.

**Katherine Ott (Interviewer) (00:37:13):**

At what point did you-

**Jake Klim (00:37:13):**

Can we pause real quick? Just to do a pause in the recording.

**Marilyn Hamilton (00:37:18):**

Oh, so do I turn the recording off?

**Jake Klim (00:37:21):**

If you... Yeah. Would you mind just hitting the stop button? We'll just do a second one when we start back up again.

**Marilyn Hamilton (00:37:28):**

Okay.

**Jake Klim (00:37:28):**

That was just about 40 minutes, I think.

**Marilyn Hamilton (00:37:34):**

Okay. So, I hit done. And then can I just hit...

**Jake Klim (00:37:43):**

You should be able to hit the record button again once we start up, once Peter starts up he lets me know he's going again. He just might take a minute. Sorry to jump into the... You guys were on a roll, so.

**Marilyn Hamilton (00:38:02):**

Okay. I got it back.

**Jake Klim (00:38:04):**

Okay.

**Marilyn Hamilton (00:38:05):**

I can focus.

**Jake Klim (00:38:07):**

Peter, let me know when you're good to go. Peter's just checking. We're in contact via text message.

**Katherine Ott (Interviewer) (00:38:18):**

You want me to count down again?

**Jake Klim (00:38:19):**

That'd be fantastic if we could but stand by. Okay, we're rolling again. So, if you'd give us a countdown, Katherine. Thank you so much, everybody.

**Katherine Ott (Interviewer) (00:38:43):**

10, nine, eight, seven, six, five, four, three, two, one. At what point did you all start thinking about protecting your ideas, your creative work, intellectual property protections, things like that?

**Marilyn Hamilton (00:39:07):**

In the very beginning, we knew that we had... You can't reinvent a wheel, and really patent it. But we did know that we had parts and pieces that were very unique, because we were using aluminum. And so, we really started working with a patent attorney, actually in the San Francisco area and started patenting a few of the things that we could patent on the wheelchair. Although we knew that it made absolutely no sense to try and protect our patents, because that would most likely take us off track and of doing the business. So, it was many years later that we went back to really go after the people that had used our patented items.

**Katherine Ott (Interviewer) (00:40:01):**

Who was test driving your different models for stress fractures and wheels crashing, castors coming off, who was doing that sort of heavy, dangerous driving?

**Marilyn Hamilton (00:40:18):**

We tested parts before we ever put them on. I would come to the garage and Jim would be throwing up wheels in the air and letting them bounce. It wasn't really the most technical way of doing things. But we were a garage and we were trying things and they would get in the chairs and ride them themselves, and I would get in the chairs and ride them. And so that's how we really tested things. But what we did do which was very different than anyone else, we started with one of our friends, Dave Counts, who had a CNC, numerically controlled parts. And all of our parts that were on QUICKIE were very, very tight tolerances. And so, quality from the beginning is what really, and Dave brought that to the team, was really our success of making sure that everything fit, and it fit five and 10 years. And QUICKIE was always known for that. You got a different front end and you wanted to put it on the chair, it always fit because it was such a high-quality device.

**Katherine Ott (Interviewer) (00:41:30):**

The work you were doing, it's all collaboration. How did you learn to collaborate? Where'd you learn that even, because some people have no clue about how to give and take ideas? How'd you learn?

**Marilyn Hamilton (00:41:46):**

I really didn't have a business background nor did John, Jim or Don. So, we really went with our gut. We cared about each other and we challenged each other. And especially Jim and Don in managing the design and manufacturing. They'd grown up together, and so they were best buddies and friends. And I was sort of new in this threesome when I entered in the hang-gliding world. But once you do something with someone and you're doing extreme sports, you know the importance of working together and to learn from each other. And so, they really challenged each other. Jim would make something, or Don would make something, and Jim would make it better. They were constantly challenging themselves to do things better and different and bringing in other people. And sort of my role was more on the sales and marketing side, and because I was playing sports it was easier for me to be the front person. They were in the back end and I was in the front end of the business.

**Marilyn Hamilton (00:42:56):**

And then, once we moved out of the garage into a 5,000 square foot building, which we thought was huge at the time, then we hired our first two associates. Eric Vielbig who [inaudible 00:43:09] worked in manufacturing, sewing. None of us knew how to do these things. Here we have machines that were sewing upholstery, making it and putting these things together. And then we hired, actually the person that I bought all my wheelchairs from, from Abby Medical, Wayne Kunishige [inaudible 00:43:27], who managed sales for us at that point. And then, really the business started skyrocketing.

**Katherine Ott (Interviewer) (00:43:36):**

Were you getting demand for orders or chairs before you actually thought we should make a company, or was it happening all at once? How did the company actually come about?

**Marilyn Hamilton (00:43:49):**

Well, we weren't officially a company and we hadn't really incorporated yet, but we were making chairs for other sports people, including Wayne. He was in a chair and played basketball. And so, Wayne was out playing basketball and at track and field events, he was pulling sales in. While I was skiing and playing tennis, I was pulling sales in. So, it was really the active sports people that supported us. And so that 5,000 square foot building in one year, was too small and ... we bought a building that was 18,000 square feet on two sides of a driveway so we could have all of our soft goods and offices on one side and the hard manufacturing on the other side. And that lasted about a year and a half while we built a 100,000 square foot state-of-the-art manufacturing facility.

**Marilyn Hamilton (00:44:43):**

So, we were on a skyrocket. We just weren't looking back, and we were running as fast forward as we could. And we were still considered a sports wheelchair company. So, the big manufacturers didn't look at us as competition. We were just small, and we hid, we stayed with that image of just a sports wheelchair company, because that was how we knew that we could stay under the radar. And it was really a good strategy, but none of us knew what we were doing. We really just followed our intuition and learned as we went along. So, I was really glad that I learned that technique at Cal Poly because that came in really handy, whether I was traveling or whether it was starting a company, because honestly, it was all new to us.

**Katherine Ott (Interviewer) (00:45:39):**

When did you incorporate or become official?

**Marilyn Hamilton (00:45:43):**

When we moved into the 5,000 square foot building, we incorporated. And our first name was Motion Dynamics. And when we went to incorporate, it was already taken. So, we changed our name to Motion Designs, and we did that for liability, really. That was our biggest concern at this point. And we needed to make sure that the marketplace, the dealers, which started coming on very early, a few of them, and then it started building, but they needed to know that we were real and that we were going to be around and we weren't just a garage. Because, there were a lot of other garages that were operations that were starting also at the time, there was even one before

us that started, but they just didn't have the foresight or the quality to really... they weren't built to last. The company just overall was not built to last.

**Katherine Ott (Interviewer) (00:46:41):**

Were you and Wayne and Uncle Bill all using QUICKIEs at this point, exclusively, or Wayne?

**Marilyn Hamilton (00:46:48):**

Wayne and I were using QUICKIEs. And I was so sad that Uncle Bill died before we could get him a QUICKIE folding 2 wheelchair. So that was a heartbreak for me because it was just something that I really dreamt about him being in a very lightweight chair. He was very fortunate because he was a producer and worked, that he had people, because he's a tetraplegic he had people around the clock with him. So, during the day he had people with him, at nighttime he had people with him, he had people living with him.

**Marilyn Hamilton (00:47:28):**

They would get him out of his wheelchair and throw him in the back, he had a limousine so it had plenty of room, throw him in the back of the limousine and he'd go to work or wherever he was going, up to the lake when we would be entertaining buyers, fruit buyers from all over the world. We had a barge and a boat, and we'd take all the kids out water-skiing and Uncle Bill always participated. He was always a part of what was going on. And that was always really encouraging. Instead of moving away and shying away from doing things, even back then, he was very progressive.

**Katherine Ott (Interviewer) (00:48:06):**

Was he using an Everest & Jennings or some kind of power chair?

**Marilyn Hamilton (00:48:11):**

Uncle Bill was using a manual Everest & Jennings wheelchair his whole life. And that was the easiest because it was foldable, and it could go back in the trunk. Power wheelchairs are wonderful for personal mobility and independence, but they are not the easiest thing to maneuver or move around. He would've had to have a van with a lift and all those things that come on with that, and hard to get upstairs where they could just pick him up and carry him up the stairs and carry the... there was not a lot of accessibility back then, carry the wheelchair up and throw him back in it. All that movement and singing, I think really helped him because he was a singer and it helped him with his respiratory so that he could really stay clear and just, he was just a great man.

**Katherine Ott (Interviewer) (00:49:06):**

What are the business lessons that you learned from those early days of starting a company that you would tell somebody today who was thinking of that? What big lessons are so important to know that you wouldn't learn in business school or somewhere else?

**Marilyn Hamilton (00:49:27):**

As I think back of how we ran the business and sort of some principles that were building blocks, I don't know that we really thought about them then, but I can summarize them now. And it was really finding a need and filling it, that was the first step. And the world needed a better wheelchair, and we found a way to create one. First for myself and then for other persons. And we kept incubating ideas. We learned everything we needed to know, and we just figured out how to do it. So that was the first step. And the second step was just really surrounding ourselves with great people. We hired top notch professionals who were passionate and we hired people that were just like us. And they wanted to be the very best at what we could do. And people that would think outside the box, they weren't going to do it just like everyone else. They're risk-takers that were rebels. And we were rebels with a cause at the time. And we built a lot of teamwork.

**Marilyn Hamilton (00:50:33):**

And then there was a lot of just great fun in surprising each other. We liked to surprise each other and show them, did you see this? Look what we just did! That was always an exciting part of innovation and recognizing that in all areas. So, that was the second thing that I think was really important. And then our motto really was to do it better than everybody else. So, we poured quality into everything and we partnered with the best vendors. They became part of our family. We purchased the best materials. We innovated high-performance products, tooling, manufacturing processes, and we just figured them out. And we started bringing people in that can help us figure them out that were smarter than us.

**Marilyn Hamilton (00:51:25):**

And I think that's a really important lesson to learn that it's very intimidating to hire people that are smarter than you, if you're not the owner. And when you still have control, you hire people that are smarter than you, because you really want to move forward. And so, we built a really solid foundation by building solid relationships. So, that was the third principle that I think we did. And then I think the fourth thing was having lots of fun. We were all players. And so, we loved to work hard, but we also even played harder. We skied together. We did things together all the time. Mostly they were hallway meetings. Our culture was to have fun and to make progress. We didn't have formal business meetings except when the accountant came in. Otherwise, it was just talking to everyone and working with everyone, and we enjoyed each other's company and that extended into sports and traveling together.

**Marilyn Hamilton (00:52:23):**

And then I think the last thing is really giving back. We never forgot that sports users ... They were the core of our start. And we sponsored not only sports people and events, but we also sponsored businesspeople as role models. So it was really important to involve people in what we were doing and to show that they were able to do things and be role models for other people to recognize, okay, I can go after my dreams. So, Sunrise, when we sold the company to Sunrise, they were very progressive and managed and helped with that also by sponsoring the 1996 Paralympic Games, which is the first time they were in the U.S. And we, at that time had 300 athletes worldwide. And so, we were very much giving back around the world. And then we also started a kid's foundation called Winners On Wheels, and we tried to help less fortunate folks. So that was really, I think the... I'd sum up the five key things.

**Katherine Ott (Interviewer) (00:53:36):**

At what point did you start fooling around with kids and inspiring them and showing them other ways to be out in the world?

**Marilyn Hamilton (00:53:47):**

When you get out in a rehab center or a children's hospital and you're there, and the kids see you in this really cool wheelchair with colors and light up wheels and fun things, then it was very early on that we started working with kids, but we really didn't have a kid's chair. And you just can't take something and put it on a copy machine and make it smaller. So really, we started working more and more with kids when we actually created a very specific kid's chair just for kids. And at that point, then that whole piece of the business really expanded.

**Katherine Ott (Interviewer) (00:54:29):**

That was Sunrise or before Sunrise?

**Marilyn Hamilton (00:54:33):**

Before Sunrise, we started with kids' chairs. We actually were also... We also created a mid-wheel drive power wheelchair before Sunrise, which was very revolutionary in itself, being mid-wheel, it could turn within its radius and it could be very high performance. It could be used for quad rugby as well as everyday use. When you try and get in close to a bathroom and get close to the toilet or the bathtub, it was very easy to maneuver. In fact, Judy Heumann had one of our first, our dear friend, had one of our first mid-wheel drive QUICKIES and she loved it because it was cut off in the front, which allowed that closeness to things that she couldn't do before.

**Katherine Ott (Interviewer) (00:55:19):**

She has almost run me down so many times in her power turns.

**Marilyn Hamilton (00:55:26):**

I can understand that. When I was testing our QUICKIE, when I was testing our power mid-wheel drive chair, I knocked a big hole in the wall. It was so fast. I started spinning and my legs went straight out in front, we had to tone the chair down because it was just too fast. 12 miles an hour, it just wasn't safe.

**Katherine Ott (Interviewer) (00:55:48):**

Initially it was mostly word of mouth that got you known, but eventually you're national. So how did that evolve? How did you work on marketing, advertising and how did that ramp up and what were you doing?

**Marilyn Hamilton (00:56:05):**

Sports was the equalizer that really took us around the world, because people would come to national and international competitions from all over the world. And so, then they would see the wheelchair and they'd want one, and then we'd open up distribution in that country. So, we really grew very strategically in growing our sales. As far as advertising and marketing, QUICKIE really changed all the rules. The industry was drab, it was sick, everything was black and white

and only showed products, they never used people in a wheelchair. What, we can't show any people in this wheelchair, only the products, it's got to be a beauty shop, and it's got to be in black and white. So, we changed the perception of people in wheelchairs. That was our goal, is in the spirit of fun. We called our products fun names like QUICKIE. For the senior population, Breezy. For the kids, Zippie, which always made people smile.

**Marilyn Hamilton (00:57:09):**

And we featured people, not just in the product, but we gave them recognition. Going after their dreams and their active lifestyles to show other people that they could be active and create that awareness with the general population. And this was a first and appealed to the curiosity of everyone. Additionally, at trade shows, our booth stood out because normally you would see a sea of blue, gold, and white at a trade show, the backgrounds, and ours were bold black, silver, and red with a sea of wheelchairs in colors. And so our displays captured a lot of attention, stood out and we won a lot of awards. And later we really started incorporating athletes like Randy Snow, who was a world-class tennis player, road racer and basketball player, David Kiley, who was a world-class basketball player, road racer and a skier. And we told their stories. We really tried to create image and awareness. And we even built wheelchairs for David and Randy, and put their names on it, signature chairs, so that we could move into... And they loved it too. We paid people to work with us.

**Marilyn Hamilton (00:58:40):**

And on the marketing side, we just had a slew of promotional items. And when you have a name like QUICKIE, you can have a lot of fun with it. You may remember we had buttons displaying slogans like nothing beats a QUICKIE, and you'll never forget your first QUICKIE, and I love a QUICKIE. And they were always creating a buzz and we're sought after whether you were in a wheelchair or not. So, we told our QUICKIE story, a girl gets injured, two friends come to her rescue, they make a wheelchair and it changes the world. And we showed the innovative work and really changed the mindset. And once you get in a QUICKIE, you never go back to any other chair, because even if it was a sports chair, you just can't get out of it. Why would you get back in an 80-pound chair when you have freedom of movement and mobility, and it fits you and it's your legs?

**Marilyn Hamilton (00:59:37):**

So, we created a movement and really a mystique. We did not know we were creating a mystique. It was everything. It wasn't just one thing. It was everything that we were doing was the mystique. And you don't know you have it when you're doing it, but you know when it's gone. And that was an interesting lesson learned.

**Katherine Ott (Interviewer) (01:00:00):**

On the topic of the mystique a little more, and the naming, especially of QUICKIE that you alluded to and all the possible meanings, to what extent did you discuss naming it QUICKIE and your awareness of what could happen? Because it's a sexy... What you were doing was sexy. The whole thing was sexy with the designs and colors. So, were you talking about these things?

**Marilyn Hamilton (01:00:31):**

We were talking, when we first came up with the name QUICKIE, we knew it was fun because it had been such a medical industry that was drab, it was Everest & Jennings, it was Stainless, it was Invacare. What is that all about? It was all medical and awful. And so, QUICKIE was really different. It was hard for the funding sources in the beginning. They looked at it with a little bit of a challenge because they just looked at us as a sports wheelchair until we really came out with a folding chair. And so that was really challenging the status quo, but we knew that it was really important to change image in an industry, to do things differently. And we differentiated in everything that we did.

**Marilyn Hamilton (01:01:22):**

And so, actually Don, one of my partners came up with the name. And Burt Rutan, in years to come, was a very famous builder of canard wings and spaceships and all kinds of things, but he grew up right down the block from me. We used to put model airplanes together and fly them at the school with my brother and Burt. And so when Don came up Quickie, and Don was aware from hang gliding and flying interest, that there was a QUICKIE canard wing. And so we just sort of took it and put it in medical, the name, and it just exploded from there.

**Katherine Ott (Interviewer) (01:02:04):**

I think the name is at least half of why it took off because it caught attention really quickly.

**Marilyn Hamilton (01:02:14):**

It did.

**Katherine Ott (Interviewer) (01:02:14):**

What would you say your greatest joy is from starting this company?

**Marilyn Hamilton (01:02:24):**

Some of my greatest joys we're changing people's lives with freedom of movement that I now felt and know how it changed my life to have this really cool wheelchair. And I truly loved seeing our athletes doing things that they'd never done before, because they had a new freedom of performance and movement. And so that was really exciting to see. I love seeing kids' faces light up when they got their first QUICKIE or Zippie. Some parents didn't like the word QUICKIE, and so we changed the name to Zippie, the kids' products. And really, I love being part of a world-class team of rebels, revolutionized mobility change, pioneering sports, figuring it out when there was no real path, helping people to go after their dreams. And I think the most important thing back then, and even today, is really creating awareness.

**Katherine Ott (Interviewer) (01:03:32):**

From the first prototype that you started out with to the last one you were directly involved with, what percentage of the design and materials do you think changed?

**Marilyn Hamilton (01:03:46):**

One more time on that.

**Katherine Ott (Interviewer) (01:03:47):**

From the first prototype that you had, that you were trying out and you switched out things, you tried all kinds of stuff to the last one that you worked on with design that you directly worked on, what percentage do you think, of that chair had changed or transformed?

**PART 2 OF 4 ENDS [01:04:04]**

**Katherine Ott (Interviewer) (01:04:00):**

Do you think of that chair had changed or transformed over the course of the development?

**Marilyn Hamilton (01:04:08):**

Okay. So, from the first chair that I received when I went, in 1980, to the first ski championships in Winter Park, Colorado, that was the coming out of Quickie. The changes that were made were mostly incremental changes, like my front end was sticking out further and we realized that we could pull that in closer, and so it would give me more maneuverability and I'm short, so I didn't need that.

**Marilyn Hamilton (01:04:41):**

And so, really there weren't a lot of changes. Quickie was very revolutionary. It had bolt-on accessories, it had total adjustability and it really was a solid design. Now, when we got to the Quickie 2, which I have to tell you a story that was just so good. When I came back from the 1980 Ski Championships, Jim and Don showed me a Quickie 2 Folding Wheelchair, totally evolutionary.

**Marilyn Hamilton (01:05:22):**

And we put it in a closet and we never took it out for three years, and actually it was four years. But we had to build the business, our distribution, our sales channels. We had to go out and get a \$250,000 loan. We had to produce 300 of these wheelchairs that were ready to ship at the time of launch. Somehow, I got a therapy conference in Kansas and Wayne went to a sports event in Hawaii and we showed it for the first time.

**Marilyn Hamilton (01:06:01):**

That's when everything changed for Quickie, because when we brought that folding wheelchair out, that was a totally different style, again, and met everyone's mainstream needs. That's when all the competition really knew we were a player and game on. We were now in the limelight, no longer in the background hiding. And so, for four years, none of us spoke about it. We didn't share it with anyone. It sat in the closet until we were prepared and ready to launch it in a spectacular way.

**Marilyn Hamilton (01:06:40):**

That was a great insight that we had. It was just intuition. We knew that we wouldn't be around because in six months, all the major competition were working on copying our chair and had chairs that came out. We would've never made it if we hadn't done that. So, that was a great thought.

**Katherine Ott (Interviewer) (01:07:04):**

Genius. And then what eventually led you to sell the company?

**Marilyn Hamilton (01:07:14):**

We decided to sell Motion Designs after being courted by many competitors. All the major ones came after us. And, but none of them really met our standards. So, quality, vision, continued innovation, they weren't interested in it. It was, sort of, like they would tell you the words that you knew weren't in their hearts and Sunrise Medical came along and Dick Chandler was a similar visionary, and we felt that he would carry out the mission forward and keep the quality and maintain the risk-taking and innovation and he would allow us to be autonomous.

**Marilyn Hamilton (01:07:59):**

Jim, Don and I had... We're entrepreneurs and we took Motion Designs as entrepreneurs and created the excitement like foundation and change the face of wheelchairs in the industry, but it really needed help getting to that next stage. And, when you build a company, you've got to start building infrastructure in it.

**Marilyn Hamilton (01:08:21):**

And we were just doing it. We weren't necessarily building the infrastructure that would make it built to last. And so, it wasn't our sweet spot at all. And, the question was, do we want to take on that role and all the liability that comes with it also, or do we want to, at this moment in time, sell to Sunrise Medical and they were a leading medical brand and they would... It was an umbrella.

**Marilyn Hamilton (01:08:52):**

They would buy small companies and put them under their umbrella and each one of them had to bring into an image, a feel, and they all complimented each other, but they were all different. And so, Quickie became one of the wheelchair brands under their umbrella. I really didn't want to sell the chair, but there were three of us and it was teamwork, again. It was time for them to move on and so, they stayed with the company for a few years. I stayed with the company for many years.

**Katherine Ott (Interviewer) (01:09:24):**

How long were you talking with Sunrise before you actually sold? The length of negotiations and getting to know each other.

**Marilyn Hamilton (01:09:36):**

We spoke with Sunrise, probably, for a year. Dick Chandler courted us on a regular basis. And in the beginning, it wasn't interesting, and it kept getting more interesting. And, we finally opened up the kimono and showed him some of the things that we had that he really didn't know about, so creating more value for the company when we sold it. So, it was about a year.

**Katherine Ott (Interviewer) (01:10:07):**

So, where do you think wheelchair sports are headed now? You're still playing, right? You're still a player.

**Marilyn Hamilton (01:10:16):**

No, I'm not playing. I'm not actively competing, but I do...ride a bike, one of our Quickie bikes and I'm really entrenched in business these days and not a lot of extra time. So, I work on fitness more with our new technology, but wheelchair sports, I think, are headed for fine athletes to finally get recognition for the amazing things that they're accomplishing.

**Marilyn Hamilton (01:10:46):**

When we were competing, no one was there to watch us. No one was there taking videos. No one knew what we were really doing. It was very little... We were doing it for the fun of it, but these athletes have not only overcome a disability, but they have been training to be the top of their game in many different sports and be the best in the world. And just overcoming a disability is a big deal.

**Marilyn Hamilton (01:11:10):**

And to be the best in a sport, on top of that, is huge. And, I remember how rewarding it was when US Disabled Ski Team moved from Winter Park, Colorado to Park City in Utah. And we were side-by-side with the Olympic athletes training with them on the same mountains, with the same clothing and learning through each other and create more opportunities for all of us.

**Marilyn Hamilton (01:11:35):**

And so I think today, we're going to see more media visibility with the Paralympic games being televised, and I hope, nationally, that it also helps sports to continue on because you always have to have a tier system and bring new people into the sport. And they have to be strong enough to be able to really help people to compete, because there has to be a certain mass number of people so you can compete with each other, even worldwide. When you're not at a Paralympic level, but you're at a learning level, you've got to do it through sports and recreation or through other activities in local communities.

**Marilyn Hamilton (01:12:13):**

So, I really see that athletes are also exploring extreme wheelchair sports. It's shocking to see these wheelchair athletes maneuvering in skateboard parks and doing flip and challenging their limits. So, I think that's going to keep going on, and the better the technology is and the more clever and people have passions, we're going to see things that we haven't seen before. And every year in the Paralympics, there's a new sport that starts to come into the game.

**Katherine Ott (Interviewer) (01:12:46):**

Are there some big sports you have to crack? Do you think? What are they? To crack into.

**Marilyn Hamilton (01:12:55):**

I don't know. I learned to scuba dive... A lot of different sports. And so, I think there's quite a few of them out there. I don't think I have any other insights on new sports. That's not what I'm focused on so, I don't pay a lot of attention to it beyond being excited every time I see something new going on.

**Katherine Ott (Interviewer) (01:13:19):**

What are your thoughts about the income and costs involved and making it available to people at all income levels? Same thing like with swimming and the expensive gear that was a controversy, is that happening with wheelchair sports? Where do you think about that?

**Marilyn Hamilton (01:13:41):**

So, technology is expensive and especially if it's high quality technology. And if we want to push the envelope and if we want to continue to innovate with quality, a price comes along with it. And, I think that people find ways to pay for things that they really want. It's unfortunate that Medicare and Medi-Cal and insurance companies, third-party payers in general, don't see the value of being active. When people are active, they're not getting sick, they're doing things in life and it costs the insurance companies less money, but I don't see that changing. It breaks my heart to see we get what's medically necessary instead of what might change our lives. And we just need to do a better job there.

**Jake Klim (01:14:46):**

Can we take a quickie break?

**Marilyn Hamilton (01:14:50):**

That was a good pun.

**Jake Klim (01:14:54):**

Well, I think it's been about 40 minutes, so it seems like a good stopping point. And I've been writing that joke for the last 30 minutes. So, I had to use this.

**Marilyn Hamilton (01:15:04):**

Thanks for humoring me.

**Jake Kilm (01:15:11):**

So, Peter, just let me know when we're rolling again, and I'll tell Marilyn to start at the same time... Stand by everybody.

**Marilyn Hamilton (01:15:23):**

So, Katherine is this what you're looking for?

**Katherine Ott (Interviewer) (01:15:32):**

That sounds good. You're great. You're very articulate and clear, personable, charming all about, you're perfectly [crosstalk 01:15:43].

**Marilyn Hamilton (01:15:43):**

Now you're really beating-

**Katherine Ott (Interviewer) (01:15:47):**

And you have done a lot of interviews too, so you're a pro at it to be able to go with it. But your answers don't sound like you've given them a thousand times, which is a big piece of it. It's like you're present, which is important.

**Jake Klim (01:16:04):**

And we're rolling again for number three. So, Katherine, if you don't mind just counting down again once Marilyn let you know she's recording her audio.

**Marilyn Hamilton (01:16:15):**

I am recording. Thank you.

**Katherine Ott (Interviewer) (01:16:15):**

10, nine, eight, seven, six, five, four, three, two, one. What would you say are the hardest moves in wheelchair sports generally or sports specific or in general, the hardest things to do?

**Marilyn Hamilton (01:16:37):**

So, I think the hardest moves for me in a manual wheelchair are going up and down steep hills. It's a lot of pressure to go up these hills and then you have to get into a wheely to go down. And that's... The steeper the hill, the challenging is actually going down the hill than it is going up because you're slow and controlled going up.

**Marilyn Hamilton (01:16:59):**

And, I think one of the other difficult things in a wheelchair, especially as you age, is transferring from the ground to the wheelchair. So, that's always that technique to try and jump from the ground to the wheelchair. Of course, dealing with stairs, it's horrible and then, different surfaces.

**Marilyn Hamilton (01:17:25):**

So, it's quite hard to get around on snow and sand and gravel. So, manual wheelchairs are very highly portable, easy to throw in the car, get going, take off and do things. But at the same time, there's technique that, you have to use, and it gets harder. While it's doable, sometimes I just need help and especially with aging. So, I'm constantly working on being fit and staying fit.

**Katherine Ott (Interviewer) (01:18:00):**

Next topic is your work with Dr. John McDonald III, and how you got involved in all of that. How'd you meet him? What sorts of things are you working on before, during and in that area?

**Marilyn Hamilton (01:18:15):**

So, I met Dr. John McDonald at a conference in Washington DC when I was speaking at an event and we became fast buddies. Dr. McDonald was really a visionary in activity-based restorative therapy, using electrical stimulation at Washington State University, and working with people like Christopher Reeve and helping him to recover, as much as he could, as they were playing.

Marilyn Hamilton (01:18:44):

Sam Schmidt, another giant in the industry that gives back and in multiple ways, race car driver who still has racing teams. McLaren teams, even today, and NeuroGyms and has done so many big things that's hard for me to imagine. And, Pat Rummerfield, who was the first person to have a recovery from spinal cord injury as a tetraplegic. And Dr. McDonald worked with all of those people and many more. And we became friends and excuse me... And, he started a neuro recovery program after he left WashU at Kennedy Krieger Institute in Baltimore.

**Marilyn Hamilton (01:19:25):**

And that's when I met him, when he was at Kennedy Krieger Institute and our friendship grew and Dr. McDonald and I decided to work on an exciting wearable exoskeleton project, way before its time. And excuse me... Dr. McDonald and I started to work on a very forward project, which was an exoskeleton project, but it was a wearable technology, not exterior technology.

**Marilyn Hamilton (01:19:58):**

And we needed more resources. So, we reached out to John Oliver from Intel to help us develop the hardware because we wanted to find someone who's great in hardware, because we knew that was a big component of it. And then we worked with Roland Siebold, who was an Innovation VP from Adidas to bring insights on performance athlete needs and electrical threads, because they had a company that did that inside of clothing. And then Dr. McDonald brought his medical knowledge and I focused on the consumer needs of people with neural conditions.

**Marilyn Hamilton (01:20:31):**

So, we knew that we wanted to build something that was a universal tool, that could work for sports and able body. Because if you're just in the medical field, it's very difficult to grow a profitable company. But if you can make something that's universal that meets a larger population people, then you've got the numbers to really grow it.

**Marilyn Hamilton (01:20:51):**

So, our goal was to produce a soft exoskeleton that you'd wear underneath your clothing, and it would have electrical threads in it, and it would train the muscles with smart interface hardware. And we did that for... We created something, we hired a patent attorney and they helped us secure a patent as we were developing the technology and the clothing samples. And after a couple of years, we recognized the project was way before its time. And you know, when you go into a business, you have to know when to get out of it.

**Marilyn Hamilton (01:21:33):**

And this was a lesson in when to get out of it. It was too expensive. The computing power wasn't there, and it was going to be cost prohibitive to bring it to market and create the awareness. And so, we're in the model T stage of exoskeletons right now, and it will eventually move to this.

**Marilyn Hamilton (01:21:55):**

Our idea was to make sleeves. So, if we can work with people with the most challenging conditions, then we can work with anyone. And so, we were going to do sleeves that you...

Material that you would put on to make your hand move and make your arm move. And it would use smart software technology that in this clothing it would find the muscles and activate the muscles with electrical stimulation. And as you grew those muscles, it would find other muscles that needed to build. And so, there was a whole logic to this, but it was just... We have a patent, but it's way ahead of its time.

**Katherine Ott (Interviewer) (01:22:33):**

Did you look at those old myoelectric designs and the whole range of stimulation that the vets tried out in the '70s and others? Did you try the other stuff? How did you put yours in the stream of this work?

**Marilyn Hamilton (01:22:53):**

No, we didn't try. I didn't, maybe Dr. McDonald knew about it. I didn't. We were really saying what's the technology of the day, with hardware and software. What do we need to do? And what are our very specific goals and how do we do it in bite-size pieces so that we can build on one another to eventually make a whole-body suit and wouldn't that be cool? Imagine it'll happen.

**Marilyn Hamilton (01:23:19):**

This is similar to Dick Tracy watches. Those used to be too crazy thoughts, and now they're on our wrists and one day we will have that for people. There will be clothing that will be exoskeletons underneath our clothing and that's a very exciting thought. Maybe not in my lifetime, but it's a very exciting thought. You've got to keep pushing. You've got to not listen to the status quo and move forward. And you look back only to, kind of, see what's there, but you've got to now apply it in a new way with what's out there today.

**Katherine Ott (Interviewer) (01:23:51):**

Is there an actual sleeve somewhere or part of a sleeve, or just a drawing or an imaginary sleeve?

**Marilyn Hamilton (01:24:00):**

We have the hardware, which is real, and we have the material inside electrical threads in the material, but we didn't take it to the point of building all the software because the hardware was going to be too expensive. That computing power wasn't there with anyone, including Intel, to make it cost effective. You could do it, but it wasn't going to really make it a product that could be used.

**Katherine Ott (Interviewer) (01:24:26):**

And so, with the Cleveland Clinic, is that the same, sort of thing, or is that a completely different project?

**Marilyn Hamilton (01:24:34):**

So, with the Cleveland Clinic, I was approached by Hunter Peckham. Dr. Hunter Peckham, is a very well renowned researcher and PhD, and they had developed a Hand Stroke Therapy device and so he asked me if we would develop it to market for them. And so, we gave it a shot and we

actually licensed their patent and work with the inventor, Dr. Jayme Knutson, and pulled together a team of people to develop the technology.

**Marilyn Hamilton (01:25:10):**

And our role was really project management. The technology had been developed. They had a team of people that could test it. So, we were in developmental stage of that. And, but there was... We need funding. We couldn't really do it. So, we submitted for a phase one NIH grant, and that's a whole learning experience in process. And we received the grant and after a year... And develop the technology... And then after a year of development, we had 25 prototypes and Cleveland Clinic took them and they began using them with consumers and testing them.

**Marilyn Hamilton (01:25:51):**

So, what we did is we had a piece of hardware that was on a table. And then we put a glove on the good hand, and we put on the other hand a glove and it had electrical threads in it, so many into it. And when you squeeze your good hand, it would automatically squeeze your other hand. So, it was almost a mirroring effect where you were able to stimulate through the electrodes on the arm and the device on the hand. And it was quite an exciting venture, but it took a lot of time. So, people had to do it twice a day for an hour, a day, to get enough repetitions through electrical stimulation so, that device to get started. We moved away from it.

**Katherine Ott (Interviewer) (01:26:47):**

How much strength in the grip was there? Was it... How powerful was it?

**Marilyn Hamilton (01:26:53):**

It was good enough that you could pick something up.

**Katherine Ott (Interviewer) (01:26:58):**

And then the Galileo Mechano-Stimulation, that's a different project, right? [crosstalk 01:27:08] about that.

**Marilyn Hamilton (01:27:10):**

So, in 2009, we were approached by Novotec Medical in Germany who produced mechanical stimulation devices. So, there's electrical stimulation and there's mechanical stimulation. And electrical stimulation target specific muscles by putting electrodes on, wherever the muscles are that you're activating, and mechanical stimulation works through the nervous system.

**Marilyn Hamilton (01:27:32):**

So, we're working the whole muscle chain and they were... Used it to improve muscle bone health. And again, another brilliant engineer, Hans Schiessl started the company in Germany about, now, 35 years ago. When we came in, it was less than that 25, but before he'd been in the field of bone and muscle health, and he developed technology.

**Marilyn Hamilton (01:27:59):**

And before that, interestingly enough, he developed for Coca-Cola a conveyor belt that would keep the Coke bottles from hitting each other. And it would fill them automatically to the right fill levels in any type of a surface. So, he had quite a lot of inventions that he would do, and just a real high performance. Wonderful, wonderful man. And it's a family-owned business of engineers, couple of generations who innovate a full line of muscle bone health devices.

**Marilyn Hamilton (01:28:31):**

So, they started in diagnostics with the pQCT, and what that is, it looks at the trabecular cortical structure of the bone, and it's a three-dimensional CT scan. So, you and I would normally... People do DEXA scans and we have two dimensions. We extrapolate that third dimension with that, but the pQCT is used by researchers because you can really look at the material properties inside the muscle and bone, which is quite interesting. It's a \$200,000 machine and researchers worldwide use it. You don't have to be on the same machine. They're all calibrated perfectly and last for many, many years, the quality was important there.

**Marilyn Hamilton (01:29:10):**

Then they developed, and they did a lot of research on it... Then they developed the Leonardo Force Plate and they assessed the muscle bone health by the forces on the body.

**Marilyn Hamilton (01:29:20):**

There's about 28 different tests that you can do from balanced tests to jumping tests, to sit-to-stand, to jump down, all kinds of tests that you can do, including grip strength, which is very important for aging population. And they started with aging population and trying to prevent risks, prevent a fall risk.

**Marilyn Hamilton (01:29:42):**

And people don't fall because their bones are not good. They fall because they don't have good muscle health. And so, if you have an intact nervous system, you can reach through mechanical stimulation, the muscle. And if you can reach the muscle, you can put pressure on the bone and have good bone health. So, it's a continuum, but they then came up with an efficient training tool for muscles through the nervous system where you can and called it Galileo. So, Novotec approached me and wanted to give me one of their tilt tables for exercise and meet us while they were in the US. They were attending a Bone Conference.

**Marilyn Hamilton (01:30:28):**

And since the Bone Conference was in Baltimore, we had the bright idea and suggested that they ship the Galileo TiltTable to Kennedy Krieger Institute in Baltimore, where Dr. John McDonald was because I wanted to know what his feedback and the doctor's feedback was. And I also wanted to know what the therapists really thought about the technology and for them to use it.

**Marilyn Hamilton (01:30:49):**

So, after trial, we were intrigued, and we decided to fly to Germany. So, we flew to Germany and spent three weeks to do further research and talk to doctors and hospitals and clinics and

families and schools, and to see if it was a good fit for us to become a distributor. And we never been a distributor before, but we thought, let's go ahead and give it a try and educate the US market and import them into the US. We were totally blown away with the technology, with the standard.

**Marilyn Hamilton (01:31:28):**

It was the standard of care in Germany and many European countries. And again, so hard for me to understand why it was not in the US? Why is this not a part of our healthcare? If we can do something very efficiently, if it works for universal population of people and what is wrong and why don't we have this technology here? So, we said, okay, we're going to take this on and create change.

**Marilyn Hamilton (01:31:54):**

And, Bob and I make a great team, and we were passionately studying the science behind Galileo, reading research papers. They have 375 research papers that are all independent, peer-reviewed and published over the last 25 years, just with Galileo. There's a whole slew of them for the pQCT and the Leonardo Force Plate. So, we set up a distribution channel here and have been having a lot of fun ever since.

**Katherine Ott (Interviewer) (01:32:22):**

And the we is you and Bob, when you say we traveled and we were doing this? Are there more of you in your business?

**Marilyn Hamilton (01:32:32):**

There's really no more of us. When I talk about, we, it's Bob and I holding up many hats, which we're used to doing, figuring out ways to contract with others to help us to drive this forward. But what really intrigued me was this mechanical stimulation we call Mechano-Stimulation, is so efficient because you can train muscles working through the nervous system, and you can use them for everyone.

**Marilyn Hamilton (01:33:07):**

And there's 50 different devices. We have platforms, we have chairs, we have dumbbells, we have tilt tables, we even have little early intervention devices where we've got little baby tilt tables with positioning on it. So, kids with SMA and rare diseases or CP. The sooner we start with these little kiddos and get them their muscles moving whether they're hypotonic, where they are noodles and they can't move at all, or they're hypertonic and they have a lot of spasticity and they're over excitable. We can train these kids and give them once we can build function in their body. Every little piece of development for them is huge for the rest of their life. And the sooner, the better.

**Marilyn Hamilton (01:33:54):**

We started two months, excuse me... We started two months old for these little babies... With our baby dumbbells, we've got a little baby dumbbell that we put their little hands on. We put our hands over their hands cause they really can't hold on to it yet and then we move their hands that

supination and pronation and all different directions and start to build the little arms, start to build the neck because the neck is so important. So, it's just really exciting.

**Katherine Ott (Interviewer) (01:34:19):**

How are these devices categorized, for markets?

**Marilyn Hamilton (01:34:24):**

We have a full line of kids, early intervention and pediatrics. We have a full line of fitness devices and we have a full line of medical devices. So, there's three different categories of... That's why we have so many products and then many different variations with each one of those, because we're working with high performance athletes, huge bodybuilders and people because there's less forces on the joints, the ligaments and the tendons.

**Marilyn Hamilton (01:34:53):**

So, that means for a bodybuilder, they can use less weight and maintain their body mass by using Galileo and having the mechanical stimulation under the feet. So, we're really using the muscle spindles. So, when the doctor hits your knee and it kicks out, that's what we're doing. That's called the stretch reflex. We're disturbing a muscle spindle underneath the foot. And then it sends a signal to the afferent side, which is a sensory side of the nervous system.

**Marilyn Hamilton (01:35:23):**

The nervous system picks it up at the spinal cord and goes to the efferent side, which is the motor side of the nervous system as a closed loop system within your nervous system. So, it's very efficient. In a short period of time, we can create a much bigger effect. Imagine we work in balance and mobilization. There's three zones that we're using frequencies balance and mobilization. We work in a range of motion and flexibility training, and we work in power or spasticity modification with those with neurological conditions and say, I have 25 Hertz and I'm trying to get rid of that spasticity or to build power it's in the same zone.

### **PART 3 OF 4 ENDS [01:36:04]**

**Marilyn Hamilton (01:36:00):**

... hurts, and I'm trying to get rid of that spasticity or to rebuild power, it's in the same zone. That's 25 muscle contractions in one second, up the whole muscle chain. That means up your leg, through your pelvis, and up your back on the opposite side, because it's mimicking walking. So we're using the whole muscle chain in a phase shift, and it's going so fast that you can exercise the entire body by standing on it, by sitting on it, by putting your arms and shoulders on it and by lying on it and fascia release. It's just really a pretty cool product. We're really fired up and working hard to educate people and really help people to [crosstalk 01:36:47].

**Katherine Ott (Interviewer) (01:36:47):**

How are they distributed, marketed? Are they prescription or only the medical devices, prescription controlled, FDA controlled? And it's international. So, there's that aspect. How are you trained to use them? Can anyone buy them? What's the review process that you've been going through?

**Marilyn Hamilton (01:37:09):**

So, our distribution is different in different channels. So, because we have a medical line, we sell that into the hospitals, children's hospitals, rehab hospitals, because they have different standards of what they need. And then we have a fitness line, and in our fitness line, anyone that's working at home or in clinics that don't need the hospital rehab, the hospital requirements, they're less expensive, but have many of the same features. And so, there is no prescription. There is no insurance payment for them. So, people buy these outright. Like we did with the Quickie Wheelchairs, there was no insurance to pay for. And it's amazing to see, especially families, that it's very hard because they have so many things that they're doing. They find ways through foundations or friends and family, or just outright purchasing them because they tried them, and they see what a remarkable difference it is in the children's life. There's an immediate effect that you get.

**Marilyn Hamilton (01:38:18):**

Now, we know that with neuroplasticity, which we've learned in the last 20 years, that the brain can learn and relearn. And so, can the spinal cord, independent of one another, but it takes a lot of repetition in order to do that. And we can give you that repetition in a short training time, in your whole body. And so, what fires together, wires together. That's what we do with Galileo in the most efficient way. So, there is no funding source for it. There is funding in a hospital environment in 15-minute segments to do therapy, but as far as purchase, it's an outright purchase.

**Katherine Ott (Interviewer) (01:39:06):**

If I were to ask you, so what are your professional identities? Entrepreneur, businesswoman, whatever, the whole thing. What do you put first now?

**Marilyn Hamilton (01:39:20):**

I guess if I were to try and list who I am, would be a change agent. I just don't seem to follow the status quo. I don't mind doing the hard work that's necessary to do something new, to go down that road less traveled and I'm highly motivated to figure things out.

**Katherine Ott (Interviewer) (01:39:46):**

In what ways has your relationship to technology changed since your first E and J?

**Marilyn Hamilton (01:40:01):**

My relationship to technology has just expanded into learning so much more. Again, I love that learn by doing philosophy that I learned at Cal Poly because I held it very close to my heart and continue to challenge myself to learn new things. So, my relationship with technology is very intimate with my wheelchair. It is very much a part of me, not only my identity, but my performance and function and ease of movement. And you've got two Nike's, I got four wheels.

**Katherine Ott (Interviewer) (01:40:45):**

I know you do this learn by doing, and you live it instead of talking a lot about it sometimes. So, what is your relationship to disability rights, disability justice? Because this has all unfolded in

your lifetime. So, what are your thoughts on what's happening? Your relationship to disability rights?

**Marilyn Hamilton (01:41:12):**

My thoughts on disability rights has really grown and have high appreciation. My piece of it is technology, but I have high appreciation for all those that are fighting for, still today, lack of awareness and needs to help people become contributing members of society. Gosh, 70% of the people with disabilities still don't work. And every year I think that's going to change. And it doesn't. Over the last 40 years, I've not seen it change. Which is concerning to me because I think that if we could give people a safety net and teach them new skills when adversity hits and they can't live the lives that they used to, or for children, that they have grown up with, that we could help them to participate.

**Marilyn Hamilton (01:42:13):**

And that's going to take a lot of doing by a lot of people in disability rights to play their role. My role has been more on the side of technology and awareness and that, and trying to be a role model and an example through... As an example, my parents did that for me. They were strict and there were rules, but they lived the talk. I try to more play that role. I'm not really vocal out there in disability rights.

**Katherine Ott (Interviewer) (01:42:53):**

What are your thoughts on the tensions between Paralympic or straight up athletes and other people who are living their disability lives? Because there is a hierarchy in some ways with athletes, with Paralympic athletes. Does that matter to you? It might not even be an issue for you.

**Marilyn Hamilton (01:43:30):**

I've never felt the hierarchy with national international Paralympic athletes and disability rights or one is better than the other. I really think that teamwork and all of us coming together, bringing what we do and working toward a bigger goal is a better way to look at it. I don't like to be called a hero. I don't like to be looked at as untouchable. And a lot of people can look at me and say, well, you've done all these things. But that's great. I'm living today, what I'm doing tomorrow is important to me, not what I did in the past. You're asking me to tell my story and I'm trying to tell it, but at the same time, I think today forward is where we have to move, and all come together to play that role.

**Katherine Ott (Interviewer) (01:44:34):**

Absolutely. So, what's next for you?

**Marilyn Hamilton (01:44:40):**

What's next for me? I think I'm going to keep doing what I'm doing. I'd like to stay fit. And the reason why I really, Bob and I wanted to go into this area of fitness and medical, was to age gracefully. I want to really be able to stay as fit as possible, as long as possible, contribute as long as possible, and then move on.

**Katherine Ott (Interviewer) (01:45:20):**

What advice do you have for young women inventors today?

**Marilyn Hamilton (01:45:28):**

So, what advice do I have to women inventors today? I think that I would tell anyone, any people that are looking to invent something is that if you're passionate about something, keep thinking about it. Be positive and think about it all the time, figure out how to make it your reality. Share it with others, grow a team, stay laser focused. I've always had a philosophy to do whatever it takes and then some. Keep doing more and more and more. And when you get passionate about something, I think there's something about dopamine just releases chemicals in your body and you really just get so excited that you flow with things and you don't even know that time has gone by and you can do so much more. I look back and I have no idea how I did all the things that I was doing. Jim, Don and I never took a salary for three years, when we were starting Quickie. We truly, we were paying other people. But until we knew that the business was really doing well, we finally paid ourselves back for all of our time and effort. So, I would say, do whatever it takes to move forward. Don't be discouraged if others don't see your vision, don't listen to other people. If I listened to other people, we would have never started Quickie. There were so many naysayers, you can't do this, and you can't do that. And it was like, oh, this is nauseating. And if you just talk to attorneys, there's always a reason why you shouldn't do things. And so, you got to be really careful to follow your own intuition and whatever you think about you can become.

**Marilyn Hamilton (01:47:22):**

My parents taught me that. I've always cloned the phrase of don't limit your challenges, challenge your limits. There aren't limits. You can do as much as you really want to do. I would say, for me, it was if you can't stand up, stand out. So, it was easy for me. How are you going to do that as an entrepreneur and really stand out and make a difference? So, I think that mindset is really important, to be positive, to stay positive, and be realistic at the same time. And that's by surrounding yourself with people.

**Katherine Ott (Interviewer) (01:48:08):**

How did you get through your dark moments to stay positive, to keep going, what got you through?

**Marilyn Hamilton (01:48:18):**

So, I think my darkest moments were really that why me moment, that why did this happen? And how do I now move forward? And interestingly enough, I don't remember when it changed. I remember the why me, but I don't remember when I really changed the thinking to something more, because I just got active. I started playing tennis. I started skiing. I was working with Uncle Bill in the fruit packing business as a broker. After we did all of that, I was working with Jim and Don, starting the company. And then I was skiing in the winter times. I was playing tennis and competing in the summer times.

**Marilyn Hamilton (01:49:02):**

I think what I really learned, that was really important is, business is long-term success and goals and you learn long-term, so you have to have a lot of perseverance because you don't get

immediate feedback. What sports gave me was immediate feedback. I knew how good I was when I was out competing. And it wasn't any one thing, it was everything. But it was also who was better at mind control and mindset? Who could stay positive, who could really be at the top of their game? And I got that feedback and I could stack up successes. And I think that was really important in my business life. I think I got lost in there.

**Katherine Ott (Interviewer) (01:49:49):**

It was great. It was wonderful. So, what have I missed asking you about? Anything else you want to add or go back to?

**Marilyn Hamilton (01:50:13):**

I feel very fortunate that I've had really strong people in my life, and this time in my life, it's Bob. And he's my second Mr. Hamilton, that's a whole other story. And we both found ourselves single after many years. Bob was actually one of my first dealers that we sold Quickie Wheelchairs to for many, many years. And he was very progressive. And gosh, in 1998, we got together on a personal level. And I think it's really important and fortunate to have people in your lives that you can bounce ideas off of. He's still the love of my life and we work well together, and we just have really grown and learned together. And it started taking me into some new directions when you have different people that are influencing you and you're influencing them. I think that's been a really an important part of me.

**Marilyn Hamilton (01:51:12):**

And then, you were asking me about design and that's something that I love. And with my dad being an interior decorator, I really had a lot of fun developing a universally designed modern home that worked perfectly for me and for anyone else. And it was just really exciting for me to find ways to make my life more convenient. So, when I wake up in the morning, I can strategically get through all the things that I need to do. And then when I'm, in my day, in the kitchen, because I love to cook, we created ovens that opened sideways Gaggenau ovens, we put in our kitchen. So, I wasn't pulling a heavy oven down on me to try and get inside the oven to pull something out.

**Marilyn Hamilton (01:52:08):**

We took sinks and created beautiful finishes where I could roll underneath the sink and it was covered and there were cupboards below it. And I could put things inside of it. We did, because I love to cook, again, we did a pull-up mixer on a hinge and I could pull it up out of a cupboard and it would come up and then it would be at a height that I could actually use it. I innovated into the home, a rolling pantry with shelves that pulled out so that I could have everything in hand control. The usual suspect places that are really difficult, bathrooms. So, we put cabinets with mirrors on both sides of the cabinet door and the inside of the door. So, when I was getting ready, I could see myself and all my utensils and blow dryers and curling irons were inside plugged in. So, I didn't have to plug them in and pull them out.

**Marilyn Hamilton (01:53:02):**

I could look good because it was completely closed and out of the way and bathtubs, imagine every time you jump on a bathtub, there's this big lip on it. And you can't really sit very level. So,

we leveled out the bathtub and have it level. We put level entrances in the house because it was pure modern with a lot of glass and skylights. And so, there was level entry. We used a lot of commercial construction, like you do in a commercial building where you could just roll straight in. There was no threshold, so it was easy to get in and out. We put marble floors down and carpet that were perfectly butted together so that it was always level.

**Marilyn Hamilton (01:53:45):**

And then I love fires. So, we created a fireplace and an art wall that had granite going up the wall. That was pretty cool. And then we put a wood box that you could come in from the outside and put wood in it. And in the inside you could pull out the drawer and you had wood and then the hearth was offset to the fireplace so that you could just put the wood in and I could roll to that area and put the wood in. And then there was a little seating area. There was a swimming pool with steps that I could transfer on and then go down. So, I think that was one of the fun things that I got to do in my life. That was a real fun one.

**Katherine Ott (Interviewer) (01:54:27):**

Are you in the same house that was in New Mobility when you were the cover girl for that? Or have you moved since then?

**Marilyn Hamilton (01:54:37):**

I can't remember if it was in New Mobility. Was it in New Mobility?

**Katherine Ott (Interviewer) (01:54:40):**

The fireplace. I remember the fireplace.

**Marilyn Hamilton (01:54:43):**

Oh, okay. Yeah, it must have been. I'm not in that house anymore. That was in Fresno where our manufacturing operation was and Bob and I lived in that house and then we wanted our own house and we moved to Carmel, California on the central coast. And so, I'm no longer in a pure modern house, but we're in more of a different style, but it's pretty cool too. I love glass houses. So, it's all glass. This house is also. And it's indoor outdoor living. It's called a Cliff May home. And so, you're in a room and you're really outside and you go to another room and it's a whole other view and you're outside. So, everything's indoor, outdoor. Everything pulls together really nicely.

**Marilyn Hamilton (01:55:32):**

And so, when I turn over and look out, I'm looking at the ocean. When I go to the back of the house, I'm in a mountain. So yeah, I love design. I love beautiful things, glass. The glass that you see behind me is from an artist out of Fresno called Kliszewski (Kliss) And he just makes these beautiful art pieces that I've collected over the years. I must have 30 of them. I just love the fun colors and everything about them.

**Katherine Ott (Interviewer) (01:56:01):**

Nice. What cool transfer things do you have for when you drive?

**Marilyn Hamilton (01:56:07):**

When I'm driving, I just transfer into the car and I've got hand controls on it. And then I love a rigid frame chair. I'm a rigid frame girl, because I don't have to take the seat cushion off. I don't have to fold up the footrest. I don't have to fold the chair. All I have to do is pop one wheel off, put it in the back seat, pop the other wheel off, put it in the back seat, pull the wheelchair and in front of me and drop it in the seat next to me. It's my partner when I'm driving. So, I'm quick. It's real easy for me to get in and out. I don't use a transfer board. I've been able stay strong enough that I can just jump in and out. That's my goal. And when I need some help, which I do, on the hills, then I pop on a power assist. And then that turns into a power aid, when I need it, a little help so that I can really preserve my shoulders.

**Katherine Ott (Interviewer) (01:57:13):**

Good. I think we've covered it all. We're at time. I was muting myself because of sirens. There's a lot happening supposedly down... I'm near downtown and there were lots of sirens getting closer. And I didn't want that to interfere. They're supposedly on the hill there, something's happening today. So, I apologize.

**Marilyn Hamilton (01:57:41):**

I'm sorry things are happening. They don't sound good.

**Joyce Bedi (01:57:45):**

I would like to ask just two quick questions, points of fact kind of thing. First, Marilyn, do you remember what year it was you met Dr. McDonald's? Your patents from 2016, is that right?

**Marilyn Hamilton (01:58:01):**

Yeah, that was way afterwards. By the time the patent actually came into fruition. I'd have to go back and look, Katherine. I mean, sorry, [crosstalk 01:58:13].

**Joyce Bedi (01:58:13):**

That's okay.

**Marilyn Hamilton (01:58:15):**

I don't remember.

**Joyce Bedi (01:58:17):**

The other question was where in Australia were you?

**Marilyn Hamilton (01:58:21):**

When we were in Australia, we were in Dandenong. It was outside of Melbourne in a small little community, and we both taught high school in different high schools there.

**Joyce Bedi (01:58:33):**

I lived in Australia for a couple of years, so that's where I was curious about that. I know Dandenong. So that's wonderful.

**Marilyn Hamilton (01:58:40):**

Oh, you do? It's a mountain community. It's really cool.

**Joyce Bedi (01:58:46):**

That's it from me.

**Jake Klim (01:58:48):**

Can I have Marilyn just do one thing? I'm not sure if we'll use it, but it's just good to have while we're all here. Marilyn, could you just say my name is, say your name and provide us your title and just do that a couple of different ways.

**Marilyn Hamilton (01:59:01):**

Okay. My name is Marilyn Hamilton and I'm a president of StimDesigns.

**Jake Klim (01:59:07):**

Just try that one more time.

**Marilyn Hamilton (01:59:11):**

Okay. My name is Marilyn Hamilton and I'm the president of StimDesigns.

**Jake Klim (01:59:18):**

Thank you so much. And I think Alison had a question too.

**Alison Oswald (01:59:21):**

Marilyn, I just wanted to ask, going back to the company Quickie, can you talk a little bit about your capital investors? Or where the seed money came from?

**Marilyn Hamilton (01:59:36):**

So, during our Quickie years and growing the company, we really didn't go after any seed money. We funded the company with our sales and the first three years we didn't take a salary ourselves, the three of us. Although we hired other people and paid them. So, it wasn't until four years in when we were going to launch the Quickie 2 Wheelchair that we went after \$250,000, small business loan. And that was really the first injection of capital into the company. We were very fortunate to be able to grow the company very strategically and quickly. And we actually invested, for financial reasons, in a lot of real estate as we were growing the company. So, we had excess income that we could actually purchase real estate. So, when we actually sold the company, we had the sale of the company, but we also had real estate that we own personally.

**Alison Oswald (02:00:46):**

And when you were creating the chairs, were you having to deal with OSHA or any federal and state regulations at the time? I know compliancy has changed over the years, but was that something you had to deal with?

**Marilyn Hamilton (02:01:04):**

We were a sports chair company. And so, we were considered fitness and we had an FDA class 1 device. And so then when we came out with the folding chair, we became a class 2 device. And then as we moved into power wheelchairs, again, it was a different classification. And so, there were the normal regulations, but nothing that was too onerous.

**Alison Oswald (02:01:33):**

It wasn't a struggle to deal with the FDA at all?

**Marilyn Hamilton (02:01:38):**

No, we were pretty good with the FDA. We had one challenge with our power wheelchair, and it was just bad timing. It's when breast implants were having problems and we could never really get through because they were focused so much on that, and other things. It was crazy that we couldn't get through FDA with our power wheelchair. And it was a big problem for us because it took us a year to get... We had a power wheelchair ready to go, our mid-wheel wheelchair. We couldn't launch it. And so, it by the time we launched it, the industry started hearing about it. And so, it wasn't the splash that we really wanted it to be. People work for you and then they move to work for someone else for one reason or another, and the word got out. So that was the biggest challenge that we had.

**Alison Oswald (02:02:33):**

The last question I have is, when you sold the company, did all the records of Quickie, all your correspondence, and financial, and advertising, and photography, did that go to Sunrise? Or do you have any of those materials about the founding of that company in your own personal archive?

**Marilyn Hamilton (02:02:53):**

Are you talking financial materials, or are you talking about-

**Alison Oswald (02:02:56):**

I'm talking broadly everything. Everything that would've gone into creating a company, the corporate records.

**Marilyn Hamilton (02:03:02):**

The corporate records moved on to Sunrise Medical. I had little advertising things that we'd done and many little things, but a lot of the things that I had and awards that I received, I left them as archives at Quickie.

**Alison Oswald (02:03:29):**

**Thank you.**

**Jake Klim (02:03:34):**

Anybody else have any questions before we stop the recording?

**Speaker 3 (02:03:39):**

Jake, did you see my text message I just sent you?

**Jake Klim(02:03:42):**

I did not. Go ahead.

**Speaker 3 (02:03:45):**

Yeah. So, if we could have Marilyn do the intros again. When someone sends a chat, the message pops up on screen. So, I just need the introductions again.

**Jake Klim (02:03:57):**

So, my name is Marilyn Hamilton? Okay. We'll do that. Two times, Marilyn, for us, please. I'm going to go back on mute. Sorry.

**Marilyn Hamilton (02:04:09):**

So, my name is Marilyn Hamilton and today I'm the president of StimDesigns, a neurotechnology company.

**Jake Klim (02:04:17):**

One more time for us please.

**Marilyn Hamilton (02:04:20):**

My name is Marilyn Hamilton and I'm the president of StimDesigns, a neurotechnology company.

**Jake Klim (02:04:29):**

Great. Thank you so much. Okay, we're good then. I'm going to stop the recording. You can stop your recording too, Marilyn, the audio-

**PART 4 OF 4 ENDS [02:04:39]**