

Retrogaming Roundup interview with Ted Dabney Sept 2010

Transcribed by ComputerSpaceFan.com

Scott:

Well Listeners, it's our pleasure to welcome to the Retrogaming Roundup Show one of the founding fathers of Atari and of the coin-op video game industry itself, Mr. Ted Dabney.

Ted Dabney was working at an engineering firm with some of the other folks that would later become some of the luminaries of classic gaming as well and that engineering firm was AMPEX. A lot of people today aren't that familiar with AMPEX because it sort of faded from prominence in the late 70's and early 80's but AMPEX was one of the biggest engineering firms of its day.

It started during World War II and they were making motors for the radars that flew on the F4 Corsair and I believe they also made dynamotors, which is a motor coupled to a generator to create a higher voltage by driving the other motor directly. Now, AMPEX was heavily involved with the space program. AMPEX went on to create some of the first video recorders.

In fact, Ted you might be interested in this, when the first moon landing occurred, the video was streamed down from the lunar lander to a tracking station in Australia. Then it was converted over to another low resolution format from the AMPEX equipment and it was beamed over for broadcast in the States and that's what we all saw on TV. Well that image was a very low resolution, the hues, the shading was wrong, and a lot of people think that was the quality of video that came down from the AMPEX equipment. Well the real video quality that came down from the Moon was actually very, very good and what happened is that video sat at the tracking station, it got filed in NASA's files and lost since the Moon landing. So that video disappeared. More recently that video was found, those tapes were found, and they didn't have any AMPEX equipment to transfer it into a digital format. So they restored two AMPEX video recorders from that era which they're actually using to transfer that video into a modern digital format which we'll all be able to see fairly soon.

So AMPEX was hugely pivotal and Ted worked with AMPEX so, Ted, since all this sort of came ... all you guys that sort of created Syzygy and Atari sort of came out of AMPEX, if you could tell us a little bit about your work there and, if you'd like to, you could back up earlier and talk about maybe any childhood passions that lead you to engineering, your education, whatever you want to sort of tell us of how you came to AMPEX.

Ted:

Well ... I got in to mathematics by a neighbour. He worked out at Hunter's Point and they were having a course in analytic geometry that he said I ought to take. So I took it, I liked it and I learned a lot from it, and kind of started the whole idea of me and mathematics. So that was kind of where it started. Then I wound up in the Marine Corps to take electronic courses and, you know, like that, so I got a job at AMPEX. I worked in AMPEX Military Products Group and my job was designing mainly video circuits using vacuum tubes. And I did that for about six years and then transferred over to Video File in Sunnyvale, still with AMPEX.

Scott:

Now Video File was a really cool thing. Would you mind explaining to our listeners a little bit about Video File?

Ted:

Well, yeah, as best I can, I was an engineer, I wasn't really a part of the systems people but Video File was a way of recording documents and video on a very large rhodium disc which was kind of like the disc you have in your computer now only it was huge and so you could have instant access to video and pictures, if you wanted mug shots, X-rays, and finger prints and all that kind of stuff.

Scott:

Speaking of which, Scotland Yard is still using that system today.

Ted:

Oh yeah?

Scott:

Yeah.

Ted:

Good grief! There's got to be a lot better systems out now with the memory. Now, RCMP was one of our clients and L.A. County Sheriff was, several hospitals, that kind of thing.

One thing that I worked on was electron beam scanning. When DoD finally had this U2 airplane flying around at 70,000 feet they had 70mm film that they needed to transfer from one point to another and we developed a way of coding the film with a scintillator and then aluminizing it so the charge would go off and then we'd scan it with an electron beam and send it off to another, you know, so now it's an electronic signal, very high quality electronic signal, 5 micron resolution, and that was what I was working on before I came to Video File. So that was kind of fun.

Scott:

Okay so that was some of the projects that you worked on there at AMPEX, how did you first meet and sort of fall in with the people that would later become your partners in forming the video coin-op industry? How did you meet Nolan and Al and those guys?

Ted:

Nolan and I shared an office. We were very close.

SoCal Mike:

What was Nolan's position at AMPEX because he wasn't in engineering.

Ted:

No, he says he was but he wasn't. I don't know what he did but he "studied things."

SoCal Mike:

He was one of the office guys.

Ted:

No he was supposed to be an engineer, I mean, he was hired in as an engineer but I don't think he was capable of doing engineering work. He didn't have the background, he didn't have any training in it. You know, he had a degree, he finished the last in his class. But a degree doesn't do much of anything, you know, unless you have some experience.

SoCal Mike:

Right.

Scott:

Well Ted let me tell you, things haven't changed.

Ted:

(laughs) Yeah I know.

Scott:

We've got people ... I work in the space flight industry and we have people that are hired due to one connection or another that aren't engineers, aren't going to be engineers, can't do their job, and tend to do very well in the company.

Ted:

Yeah, no he didn't do all that well in the company and he wasn't hired that way. That was not what was going on. He was hired as an engineer. He didn't have any political influence or anything. He just wasn't very capable. And a lot of that I found out later. I didn't know that at the time.

SoCal Mike:

Sure.

Scott:

Yeah he was ... he did produce a very effective smoke screen that is starting to blow away, dare I say? Now ... I mean, I don't want to be too harsh on Nolan because ...

Ted:

Well yeah but the thing is he brings it on himself.

Scott:

He does because –

Ted:

You know because he tells all these lies. You know the lies that he has told that I'm just now finding out they were lies. Because all of a sudden the interest that people have had in me, a lot of information has come out that ... things that he just lied about.

SoCal Mike:

Right.

Scott:

That's so. For us, it's a very different perspective. You were a colleague, you were one of the founding engineers of this industry. Now, for us, we were kids, okay? We were the dopey kids sitting in front of the TV playing the Atari 2600. So to us, all we ever knew was The Legend of Nolan.

Ted:

I know, he made sure of that. That was his whole thing. In fact, one of the first things he did at Atari is he hired a PR person to promote *him*. Not promote the company. He made sure my name never got mentioned. In fact, nobody's name got mentioned but his. You know? That's what he did.

SoCal Mike:

Huh.

Ted

You know, that was the way he worked.

Scott

And that's what we all bought in to growing up is ... we just heard The Legend of Nolan ... so as things go on ...

Ted

He wrote it.

Scott

Yeah, he did. But you know, I told you when I acquired a Computer Space and I was restoring it, when I got this Computer Space I understood The Legend of Nolan was Nolan invented Computer Space, the first coin-op video game ever, in his daughter's bedroom and that's that.

Ted:

(laughs) Have you heard the latest lie on that one?

Scott:

Oh, fill us in but I think we're probably on the same page.

Ted:

Yeah, there's a thing called AtariAge, I'm sure you guys are aware of that. Anyway, somebody was asking Nolan about some of those same sort of things and what he said, right there on the blog (forum) was "Oh, it couldn't have been Dabney's bedroom, Dabney didn't even have a daughter."

Scott:

So how's your daughter doing today, Ted?

Ted:

Oh, she's doing fine. You know what's really funny about that, my daughter and her friend spent a lot of time at Nolan's house. In fact, Nolan took my daughter with him to babysit when he made a trip to Georgia. I mean, he knew my daughter real well and here he is, saying I don't have a daughter. So anyway, I got on there and put in my bit about that. I get this phone call from Nolan and he says "somebody is on the Internet using your name."

SoCal Mike:

Hey Ted, that was a crazy thread. I don't know if you read all of that but, I mean, yeah, Nolan came on and nobody believed that it was him and then you appeared and then I think Curt basically told everybody that it was, in fact, you and then you vouched that it was really Nolan so it was just a bizarre blog or thread on there ...

Ted:

Yeah I don't know if the early ones were Nolan because you can't tell because he lies so much, you had no truth that you can base anything on.

SoCal Mike:

Right. Now, how .. I mean, Scott maybe you're going to go here too ... how did everything, you know, from AMPEX .. and then get transferred over to ... I'm a little confused about the history of Computer Space. I mean, it was originally brought out by Nutting Associates, right?

Ted:

No. Well, yeah, they brought it out but it was our game.

SoCal Mike:

But it was your game?

Ted:

Oh yeah, yeah. Well ... okay the way it started ... I don't know how intense or how detail you want on this thing-

Scott:

The more the better, Ted. We're documenting ... the more the better ... we're documenting your story so you talk to us as long as you want.

Ted:

Yeah, let me go through the story just exactly how it happened.

SoCal Mike:

Alright, perfect.

Ted:

Nolan had worked his way through college at the carnival kind of thing, so he knew games and he, you know, he was really into that kind of stuff. Anyway, while he was working at AMPEX, he heard about this game on a computer over at Stanford that he wanted me to take a look at, go with him to see it. It was called Spacewars or something. It was a neat game but it was on this big computer, you know, million megabyte kind of thing and he said, "Hey, we should be able to do that with a smaller computer and timeshare, you know, these TVs."

Well, so that was our whole idea so we got a hold of Larry Bryan, who was a computer programmer, and we formed the company Syzygy.

Scott:

Now, let me ask you one question about that. I've heard it said ... well, the Legend of Nolan ... we'll, for now, call it The Book of Nolan. The Book of Nolan sayeth that Syzygy was created by Nolan Bushnell. I've heard that-

Ted:

No, absolutely not.

Scott:

I've heard him saying Ted Dabney dba Syzygy.

Ted:

No, no, no. Larry Bryan, Nolan and I were sitting around my living room one day trying to think of what we wanted to do. We had decided to come up with a partnership. The partnership included the three of us, and we each were to put in one hundred dollars to kind of get this thing started. We knew that wouldn't be enough, but at least it was a place to start.

And while we're trying to think of a name we couldn't use "D. & B." because that was Dunn & Bradstreet, we couldn't use "B. & D." because that was Black & Decker. So Larry Bryan said, "Hey I saw this really neat word in the dictionary and it was Syzygy." So we looked it up and, sure enough, there it was: Syzygy, alignment of planets and that kind of thing. So that's what we called the company. And ... so that was it. Okay, so I started a bank account and put in my hundred dollars, Nolan put in his hundred dollars, Larry never put in his hundred dollars.

In the meantime, we concluded that there was no way we could make it cost-effective on the price of the PDP-12 or whatever the Hell the computer ... you know, this was forty years ago so-

Scott:

Yeah, PDP-11.

Ted:

Huh?

Scott:

PDP-11.

Ted:

Yeah PDP-11. It was one of them ... you know, early computers. There was no way we could time share it. The computer wasn't fast enough, we didn't ... you know, it just couldn't happen. Larry Bryan never wrote any code at all to even show us how to start this thing. So the idea kind of died.

In the meantime, Nolan had this great idea about a pizza parlor that had talking barrels and singing bears and all that kind of stuff so we started running around looking at those kind of pizza parlors and eating places. So, one day we were sitting there, and Nolan said, "You know, on a TV

set you ... when you adjust the vertical control, the picture starts moving back and forth, you know. How does that happen?"

So I explained it in detail how that happened. He said, "Could we do something like that?"

I said, "Yeah we could do that, we'd have to do it digitally though. We couldn't do it analog, we wouldn't have any control."

He said, "How do we do that?" So I went through the counters, you know, the little different counter bits on one ... on the video counter versus the synch counter. The synch counter would always have to run the same but the video counter can run a little bit faster and a bit slower.

I said, "I don't know how that's going to come out. We could go one bit and have the thing going too fast. I don't know yet."

So I breadboarded it and that was when I was working in my daughter's bedroom. I breadboarded it and sure enough it worked! The spot was moving, I was ... my neighbors are coming over looking at this little spot moving on the screen. "Oh wow! That's really good, Dabney!" So, that worked. So, Nolan and I started talking and I said you could do exactly the same thing for the horizontal as you can for the vertical.

I said, the only reason you can't the horizontal hold for the TV set is because you'll screw up the high voltage. You know, because the high voltage runs off the horizontal frequency counter. So anyway, that's what started it. We started looking at what we could do and Nolan really, really worked on it. He really worked on ... just ... you know, how we would do this sort of thing. So I helped him with all the circuit design, and we built up a breadboard and at some point, and I don't know where it was, he decided to contact Nutting Associates, mainly because there's no way we could have done anything with it, no matter how good it was. So, he went and talked to Nutting and, I guess, he worked out some kind of deal.

SoCal Mike:

So they were going to manufacture it?

Ted:

Yeah, yeah, Nutting had a game called Computer Quiz that they had been milking for years and years and years. They had a hot rod salesman that was doing a hell of a job ... you know ... just keeping the company going with that game. So anyway, Bill Nutting was really kind of desperate for something so I think that's why he got the deal with Nolan.

But we owned the game. That was the whole deal. We owned the game. They were going to manufacture it and they were going to pay us a royalty. And they're going to pay us a salary while we're building this thing up. You know, developing it.

Scott:

Well, and on the Computer Space control panel it says right there "Engineered by Syzygy."

Ted:

Syzygy engineered, yeah. I put that on there.

Scott:

Ahh! That was *your* doing?

Ted:

Yes that was definitely my doing.

SoCal Mike:

Do you remember what type of royalties or financial situation was worked out with you guys originally when it first kicked off?

Ted:

No I really, I don't know. I've seen something in print somewhere but I don't remember, I was not part of that. Nolan did all the business stuff, I did the engineering.

SoCal Mike:

He did all the money stuff.

Ted:

Yeah, yeah, except I had to keep the books. (laughs)

Scott:

Now, do you know whatever because of those prototype breadboards and all, because that would be a huge piece of video game history.

Ted:

Well that was ... the Computer Space one was done in Nutting's lab and I'm sure that that became part of his stuff. Al Alcorn had the one for Pong. But that was developed by us after the Nutting thing. Al Alcorn had the original one, and then I had the second one that got built up from that one of my neighbors stole.

Scott:

Well, that was nice of him.

Ted:

Well yeah, well whatever I didn't care. It doesn't matter to me.

Scott:

Now, Ted, you've modestly described your contribution to Computer Space as designing circuits. To sort of describe this for our listeners, Computer Space was designed before CPU, ROM, RAM, ... existed in a usable format.

Ted:

Oh absolutely. Counters and gates. Counters and gates.

Scott:

Absolutely. And there were processors out at the time, but they were, say for example, you had a board that had the ALU, the arithmetic logic unit, the MC-

Ted:

No, no, no, we didn't have, no.

Scott:

No, you didn't sir; you didn't, I was saying at the time, the state of the art. And that was quite expensive.

Ted:

I don't know, I never came across anything like that. I never even looked for it, so, maybe ... if you tell me that it existed in the early 70's I'll believe you, but I don't know that.

Scott:

Yeah, I actually got to work on a unit ... you were in the marine corps, I was in the army and I worked on a unit called the Position Azimuth Determining System. And what it was, it was an inertial navigation unit that had ... it had multi-board computers so instead of having a discrete microprocessor chip, it had an arithmetic logic unit, it had a memory controller device that controlled core real memory, you know, you're very early computer stuff. And-

Ted:

We didn't even have any memory. I don't know where you got memory. You had different sources.

Scott:

Well there was core reel memory, core reel memory existed at the time. The Apollo program used it.

Ted:

Wait you mean magnetic core?

Scott:

Yes.

Ted:

Oh, oh magnetic core, well yeah okay. Yes, we couldn't fit that into a game.

Scott:

No. (laughs) And these were all, I mean, I'm sure you remember Ted, that at the time, magnetic core memory, you'd get a seven inch block of that for a hundred thousand dollars, you know.

Ted:

Yeah, yeah, no kidding. And then it would quit working!

Scott:

Yeah, it did. Trust me, I know. But the thing about Computer Space that's so important is that the technologies of magnetic core memory, multi-integrated circuit to put together to create a central processing unit, all that was unavailable to Syzygy at the time they were building Computer Space.

Ted:

We had counters, we had MSI's.

Scott:

Yep.

Ted:

You know, we had counters. That was the biggest thing. Counters and gates.

Scott:

Yeah and the way that I have to sort of describe Computer Space to our listeners is that Computer Space is a symphony of circuits. You mentioned the counters. It's one of the basic projects that you do in digital circuits, when you're going to school, is you start learning how to do, say, a counter. Where you pulse five volt input once, you've got J/K flipflops, and it starts counting 1, 2, 3, 4, 5, 6. So it's very easy to build a very simple counter that will say, keep track of score. But then now you have to have another counter that tracks the vector of where say, the ship is pointed. And another one that tracks-

Ted:

Well no, we didn't use vectoring at all. No, it was just ... they were just counters and one counter ... you know, we'd change the speed of the video counter. We either made it go a little bit faster which means the picture moved to the right, or it went a little bit slower which means the picture would move to the left. And the horizontal was, you know, the same thing only when it went slower it moved up and when it went faster it moved down. You put those two together and you could move it around the screen.

Scott:

Right, when I say vector, I meant as in a direction. Those two combined to get a direction on the screen. So, as you were designing all these circuits that had to keep track of all the different

game aspects, and they all had to work together, who was the mastermind that sort of brought all these ... I mean, you could break Computer Space down to certain discrete circuits.

Ted:

Well, yeah, coincidence of when the rocket hit the flying saucer. You know, you had a coincidence that occurred. Nolan actually did that. He worked out all the coincidence things for keeping the score and that kind of stuff.

I helped him with the circuitry and then he would say well, how do I this and how do I do that and I would show him, you know, the basics and then he'd go and turn it into a circuit that actually worked.

Scott:

So, who made the decision on the physical layout of the circuit boards? Because it's broken down into three ... well, the one player Computer Space, is broken down into three distinct circuit boards. Who made the decision on the formatting of that?

Ted:

Nolan did.

Scott:

Okay. Now, did Nutting have any input on that?

Ted:

No, Nutting didn't have much input on anything because they had no clue about what we were doing.

Scott:

(laughs) So you were just these odd fellows over in the corner with a bunch of ICs and they had no idea what you were doing?

Ted:

Yeah they're just hoping it works because they were investing money into this thing ... you know, they were hoping to get a return on it but as far as what we did or how we did it, that was strictly up to us.

I spent most of my time building a cabinet. Because we needed to have a cabinet to display this thing in.

SoCal Mike:

Yeah that was going to be my next question ...

Ted:

Yeah, so I didn't really work ... you know, Nolan worked at the bench and I worked in the shop and I was building the cabinet and he was building the electronics.

SoCal Mike:

Was the original cabinet something different than, kind of the fiberglass contraption-

Ted:

It was a wooden cabinet. It looked almost exactly like the Pong cabinet.

SoCal Mike:

Like the Pong cabinet, okay. Whose idea was it to give the actual cabinet that went into production, where did that idea come from in that shape and that design?

Ted:

Absolutely Nolan's.

SoCal Mike:

Nolan?

Ted:

Totally Nolan's.

SoCal Mike:

Because that looked like a pricey cabinet to build at the time, I mean, the molds and everything.

Ted:

He found some guy that could do it pretty cheap.

SoCal Mike:

Really?

Ted:

I went over with him a couple of times to talk to the guy and see what was happening, all that kind of stuff. They turned out not to be very expensive at all.

SoCal Mike:

Did the company that made those, were they in the business of anything else, like making sail boats or boat holes or anything?

Ted:

No, no, swimming pools.

SoCal Mike:

Oh, swimming pools, okay, that makes sense. That makes sense. And do you know why all the different colors came out? Was it just they run out of a color and they'd start a new color or-?

Ted:

Yeah, yellow was the one we went into production with, we had no other color other than yellow. I guess Nutting changed colors later on or something, I don't know.

Scott:

Yeah the one that I've got is a beautiful sparkle blue and it just really grabs your eye.

Ted:

No that was all Nutting's doing because we were gone by then.

SoCal Mike:

About the controls, I mean, as long as we're still talking about the cabinet, it looked like that there was a few different control schemes. Of course the one player and the two player is different because I think the one player's got the buttons, the two player's got the sticks, right? But wasn't there ... I saw other pictures online of ... you guys call it like the rocket control? It's like a lever?

Ted:

Yeah it was a cast piece of aluminium that we tried to bolt to the thing but the trouble is it had so much torque that kids were breaking it.

SoCal Mike:

Oh, oh.

Ted:

And we couldn't use that.

SoCal Mike:

Gotcha, gotcha.

Scott:

So, Ted, your name comes up a little bit when it comes to woodwork. You built a board which you mailed to Curt Vendel that you used to play Go on.

Ted:

Yeah, that's when Nolan and I worked at AMPEX. He had learned this game of Go, or he was learning this game of Go and so he wanted me to learn it so he could play because he had nobody to play against because there was nobody who had played Go. I said okay fine, we'll start doing it and so we bought this cheap Go set that had this old fold-out board and we were putting the fold-out board on the wastepaper basket so we could play it and it was just too light, it was light weight, it kept bouncing around.

So I found this wood shop that was making doors and one of the things, when you make a door, is you have to make a cutout so can put a window in. Well, they were selling these cutouts, you know, for about six dollars apiece or something like that, I don't know. So I bought a bunch of them, a couple of them, and carved a Go board on it. It looked pretty good, that was real heavy because it was an inch or an inch and a quarter thick and I remember forty five by thirty five or something. And we could set that down on that wastepaper basket and it was really solid. That worked good so we used that as our Go board.

But we had a problem. Our office was kind of small. It was actually built for one person. And with the two of us in there it was really small, we didn't have a place to put the board when we were through with it. So I made another one and I put the AMPEX Video File logo on one side, put the Go board on the other side, put a nice frame around it and put a screw bolt in the top of it, a screw eye on the top of it, so we could hang it on the wall. We put it on the wall with the Video File logo out so you couldn't even tell it was a Go board. So nobody was going to complain.

Scott:

The modern day version ... the old-school version of the 'boss key.'

UK Mike:

Yeah the 'boss-key.' (laughs)

Scott:

Now you also, it's rumored, that you did the ... you built the cabinet for the Pong game that went in to the Andy Capp tavern, is that the case?

Ted:

Yeah, yeah. There was a small one in it ... it was a small cabinet that sat on top of a barrel.

Scott:

So were you a woodworker as a hobby?

Ted:

No, no, no, I'm not ... no I'm not a woodworker, I just, you know ... it's the kind of thing I've got to do it so I do it, you know.

Scott:

You get the job done.

Ted:

Yeah, but I'm not, I'm not a woodworker. But you know, I'm an engineer so basically I'd know how to measure things, how to cut things, and how to put things together and how to screw them down, you know, that kind of stuff.

SoCal Mike:

This might be a dumb question then, Ted, did you ... you know the barrel Pong machines that were in the barrels?

Ted:

Yeah, I'm the one that went to Canada and bought the barrels.

SoCal Mike:

Okay.

Scott:

Oh! Tell us about that.

Ted:

(Laughs) Well, it wasn't much to tell.

SoCal Mike:

Whose idea was it to make an arcade game out of ... into a barrel?

Ted:

Nolan. Every idea, it was Nolan's idea.

SoCal Mike:

Well, that's a strange one.

Ted:

Well, yeah, he decided that ... remember I told you about these pizza parlors that he always wanted to do?

SoCal Mike:

Yeah, yeah.

Scott:

Right.

Ted:

Okay, and with talking barrels and singing bears and that kind of stuff?

SoCal Mike:

Right, yeah.

Ted:

Okay, so he had this thing about barrels, and he thought of having a Pong game in a barrel would be a great idea. So I went off to Canada and I found out what a 'cooper' was. A 'cooper' is somebody that makes barrels. And, I uh talked to these guys about getting some barrels and wound up buying a few hundred barrels or something like that.

Scott:

That's funny because The Book of Nolan says Nolan found wine barrels and created-

SoCal Mike:

Yeah, that's what I thought, out of Napa or something.

Ted:

Well, he may have done that but we couldn't go into production with the ones he got out of Napa.

SoCal Mike:

Right.

Ted:

Okay?

Scott:

Yeah, I thought that was a little suspect.

Ted:

Yeah, I mean, the thing is, the ones from Napa in the first place they're illegal if they had wine in them. You know, because of the alcohol content, you can't really do much with them except cut them in half. If you cut them in half then they're okay. Then you can legally sell them as planters and that kind of thing but you can't sell a whole barrel, because that's against the law.

SoCal Mike:

And then, wasn't there another Pong machine they built into like a Snoopy doghouse or something?

Ted:

Oh, I don't know, that came after me.

SoCal Mike:

That came after you? I just wondered what the story was behind that.

Ted:

We had built the table Pong, you know, one that sat in a table and you could play it on either side. That was kind of nice.

UK Mike

So if I can just rewind just a little bit, you're probably going to say it was Nolan but who initially had the idea to put Pong machines and Computer Space machines out in, you know, pizza parlors for people to play and to make money?

Ted:

Okay, one of the things that we did when we were at Nutting, remember their salesman I told you was a real hotshot salesman?

SoCal Mike:

Uh-huh.

Ted:

Well, anyway Bill Nutting was not the sharpest pencil in the box. All of a sudden, when he was selling Computer Space, he was seeing how much money his salesman was making and he didn't like the idea of his salesman making that much money. Nobody ever told him that the salesman should be the highest paid person in your company, I mean that's the whole idea of being in business! So he fired him!

(everyone laughs)

Because all of a sudden, a salesman that works their buns off year after year, keeping the business going, and as soon as it gets easy, and he's making lots of money and not working very hard, Nutting fired the guy!

So anyway, Nolan and I bought his operation. He had some pinball machines and a pool table, and stuff like that out on locations in different places, so Nolan and I actually bought it from him. So we had these locations, so when the thing came with Bally and Bally kept not accepting the

Pong game we decided well we're just going to put it in our own locations. And so we built twelve, we put ten of them out, we sent one of them to Bally, and we kept one in the shop.

SoCal Mike:

Did Bally ... I had read that they wanted ... did they want you guys to make some other type of game for them at the time?

Ted:

We had a contract. See, Nolan had contacted Bally early on, but we were still with Nutting. Bally said, as long as you're associated with Nutting, we're not going to talk to you about it. But as soon as you're not with Nutting, give us a call, so Nolan did as soon as ... Nolan tried to negotiate with Nutting, you know, for an ownership of the business and all that kind of stuff, which, you know, didn't work for Nutting at all. So we started our own business. We wound up getting this contract, four thousand dollars a month for six months to develop a video game and a pinball machine for Bally.

SoCal Mike:

Was that the racing game?

Ted:

No, no, that was Pong.

SoCal Mike:

Oh. Okay.

Ted:

Okay? So I worked on the pinball machine and Al Alcorn did the Pong. In fact, Pong wasn't supposed to be a paddle game. It was an exercise for Al Alcorn in figuring out how to use this motion circuit that Nolan and I had developed. And so he put this thing together because the Odyssey thing was out and he figured, you know, just do the same sort of thing as Odyssey, and just turn Al Alcorn loose.

Al Alcorn was a good engineer, he didn't need anybody's help at all.

Scott:

So Pong was sort of an off-shoot of that original dot that you were sort of pushing around at your house.

Ted:

Uh, well, Computer Space was.

Scott:

Okay but what I mean, the concept of that video circuit. It continued on-

Ted:

It's exactly the same motion circuitry in Pong that we used in Computer Space. It was exactly the same, pin for pin.

Scott:

Ahh!

Ted:

You know, that was the crux of our whole thing was this motion circuitry, to be able to have something freely move on the screen you had control of. That was the really fantastic thing.

Scott:

So, you sort of gave us a window into the dynamic of ... you know, Nolan was working at the bench, you were over working in the shop, and all that. How close was the design team, how did you guys interact? Did you guys go to lunch together? How was this ... what was the corporate culture?

Ted:

Yeah, we went to lunch ... there was a place in Cupertino that sold 'Cannon balls' which was a meatball sandwich and so we'd go there for lunch all the time. The only interaction we had there at Nutting was when he got in a bind on how to do something, he'd ask me and we'd sketch it out and he'd say what about this and I'd say how about that. He'd say, well can we do it this way, and I'd say I don't know ... yeah I guess we could do it that way or do it that way. You know, that kind of thing. That was the interaction that we had there. Nolan actually did the design work and I worked on the cabinet.

UK Mike:

How did you kind of feel kind of as a team, then, I mean you're maybe perhaps competing against pinballs that were already out there and working on location. Did you ever have a sense of it was kind of you the video game people against the pinball people? Were you all kind of fighting for the same thing or-?

Ted:

No, no, no, no not at all. Pinball machines were around, they had been around, they were going to be around, they were built by Bally and Midway and all these different people and Gottlieb. They were all making pinball machines and we were not competing against pinball machines. All we wanted to do was develop a game that we could sell for under a thousand dollars and make some money at it. That's all we wanted to do.

Actually, all we wanted was Bally to build it.

UK Mike:

(laughs) Yeah.

Ted:

You know, that's what we wanted, but Bally kept not accepting the game, kept not accepting it. Nolan, and Al, and I were sitting around looking at each other, well what are we going to do? And I said, well as long as this thing is hanging out there, there's not much we can do. So I dictated a letter to Nolan for him to send to Bally saying, hey, we understand you're not real excited about the Pong game but ... you know, we can't do anything, you know unless you reject it or accept it. So if you reject it, then we can start on a different game because we still owe you a game, you know, you paid us a lot of money. So, anyway, they wound up rejecting the game and I told Nolan just put that letter in a really, really safe place and forget Bally.

SoCal Mike:

So there was a slim chance-

Ted:

They didn't really have the object ... they didn't have the option of rejecting the game. That wasn't part of the contract.

Scott:

So you just nicely gave them that.

Ted:

So once they rejected the game, they shut down the contract.

Scott:

Now, the Book of Nolan says that *he* brokered this deal. So you were the one that composed that letter?

Ted:

I told him what to say.

Scott:

That's news to us. See, all these little things, these little things-

Ted:

I told him ... in fact, I spelled it out, you know word for word on how he should word it so that they think it's absolutely for sure that the only thing we want to do is design them another game.

UK Mike:

Yeah, yeah.

Ted:

You know that's what's really important. We had sent them ... you know, we put the ten games out on location and almost of all them did extremely well. A couple of them didn't do *real* well because of where they were located, but we put together an income report on those things and we looked at the numbers and I said there's no way Bally is going to believe those numbers. They had been in this business too long to believe those numbers. And, well what should we do? I said let's just cut them all by one third of what they actually are.

Scott:

So you fudged the numbers the *other* way. (laughs)

Ted:

Yes we fudged the numbers. We actually submitted one third.

"Well, what about this one that's not making very much money?"

I said one third, I says if you're going to tell a lie, you got to remember what lie you told.

(everyone laughs)

Ted:

So I said we cut them all down to one third, we sent that report in. Bally still thought we cooked the numbers.

SoCal Mike:

Wow.

Scott:

Oh, if they only knew.

Ted:

(laughs) Well, they found out eventually.

SoCal Mike:

So, but I mean, so originally Pong was being developed or could have ... there was a chance that it could have come out under the Bally name, not Atari? And it would have changed history.

Ted:

Bally paid for that. They paid twenty four thousand dollars to us for that game.

SoCal Mike:

But they rejected it then.

Ted:

Yes.

SoCal Mike:

So then did you guys do a second game for them or not?

Ted:

No, no, no.

SoCal Mike:

So the deal was done.

Ted:

Yeah, once they rejected the game, and they didn't have an option of rejecting the game in the contract. That wasn't part of the contract. We were going to do a game for them ... you know, then it was their game.

SoCal Mike:

Did they finance the game, did they finance it then? I mean, they gave you twenty five thousand dollars, right?

Ted:

Yeah, yeah.

SoCal Mike:

And then the deal crashed and I'm assuming you guys didn't owe that back to them because it was never written into the contract.

Ted:

No, no, no they terminated the contract by rejecting the game.

SoCal Mike:

Yeah, yeah. So, I mean, it kind of worked out in your favor, I guess, sort of.

UK Mike:

It's a smart piece of business.

Ted:

Now, the problem was what do we do now? See, we didn't have the money to go into production ourselves. There's no way we could have done that. So, we're sitting there looking at ... Al and Nolan and I are sitting in Nolan's office and we're sitting there wondering what do we do now? And I said, either we produce it ourselves, we go into production, or we go home. And I don't want to go home.

Scott:

Now that runs counter to The Book of Nolan that says Ted Dabney panicked and left the industry.

Ted:

(laughs) Yup. Well, anyway, this is well before I left. This is before we actually even got started. Al was going over the numbers of how much this was going to cost, and this and that and everything, Nolan was saying we don't have the money, we can't do this and all like that. So, I said, wait a minute, wait a minute, we're getting the cart before the horse. Let's make the decision

of whether we want to go into business or whether we want to go home. We make that decision, once we make that decision, then we find out how to do it.

UK Mike:

Was it really as clear cut as that: if it wasn't Bally it was never going to be anyone else? No Gottlieb, no Williams, no anyone else?

Ted:

No, no, no, no none of those things were options. I don't know why they weren't. That was all kind of Nolan's thing.

SoCal Mike:

Bally probably made you guys sign an agreement saying you wouldn't work with anybody else, I'm guessing.

UK Mike:

Well what I was imagining is maybe someone going to Williams and saying, "Bally are interested in this game."

Ted:

If Gottlieb or Midway knew that Bally paid for it, they wouldn't touch it. Anyway, none of us really wanted to go home, so we decided ... our decision was to go into production. Well, I had enough money in the bank, of my own personal money, I could buy TV sets. So I told Al and Nolan I'll get the TV sets and the cabinets, and you get the PC boards and the ICs and that kind of stuff.

So, I found a distributor in San Francisco ... I can't remember the name of the company ... Sony? Or somebody. I wound up buying fifty monitors from him. Like I say, I used my own money for that. I called P. S. Albert, the cabinet manufacturer that manufactured cabinets for Nutting and I told Frank I needed some cabinets. I had given him a drawing of those twelve cabinets earlier on, but we didn't go with him, because I saved a couple of bucks by going with someone else. But he had the drawing.

So I said I'm going to need fifty of those cabinets. And he said ... I said but I don't know if I'm ever going to be able to pay you.

He said, "you can pick them up in two weeks."

I said, "We don't have a truck."

He said, "I'll deliver it."

That was the whole conversation.

Scott:

Wow!

SoCal Mike:

How much were TVs like that back in the day?

Ted:

Oh, I'm trying to remember, about ... it seemed to me, about sixty dollars.

Scott:

Now, ted before we move on too far from Computer Space, there's a couple of questions ... mysteries of Computer Space ... fairly briefly I'd just love to sort of clear up with you.

The sound circuit and hyperspace. Those were sort of important game add-ons. Who concocted those?

Ted:

Those were mine. Absolutely mine. I invented the sound circuit using noisy Zener diodes and the hyperspace one was, well, if you're going to win the game, how can you tell? And I said you just invert the video. So, we did.

Scott:

The counters on the score go up and then, because of the way that a circuit like that displays the count, you wouldn't necessarily know that you've gone to the time or to the win, so that hyperspace was a big, important point of game play in signaling that this occurred.

Ted:

Yeah, yeah, well I didn't know it at the time, I just figured well that's what we should do, we should do something, and we invert the video, that's easy enough to do. I mean, that's very easy to do. We just put in an inverter in the video line.

SoCal Mike:

Now, do you get royalties from George Lucas every time the word hyperspace is used in Star Wars?

Ted:

No I don't. No I don't. I'm afraid he just kind of usurped that all on his own.

Scott:

(laughs) So the next Computer Space mystery there, Ted, the manual that surfaced for this thing, there's a troubleshooting guide, there's a schematic. The manual sort of seemed to come together in pieces over the years. Could you tell us who composed what portions of the manual for Computer Space?

Ted:

No I can't, I have no idea.

Scott:

Okay, so maybe some of your notes got in there, you're really not sure.

Ted:

Yeah, I didn't have any notes on the game.

Scott:

Okay, alright, because that was always a big question.

Ted:

Yeah, yeah, Nolan may have had ... he must have had ... well, he actually had schematics but I think the manual came under Nutting because Nutting was still building Computer Spaces after we left.

Scott:

Right, speaking of which, and this is sort of the other big mystery ... well, there's two. Who built, say, the first several Computer Spaces produced? Was that the Nutting personnel or you guys?

Ted:

No, Nutting. Nutting built them.

Scott:

Okay, so-

Ted:

Nutting built all the Computer Spaces.

Scott:

So every one of those was assembled by them.

Ted:

Yes, every one of them.

Scott:

Okay because there is a lot of stories out there that you guys built the first ten or, you know, whatnot.

Ted:

No, no, we built the first ten Pongs. Yeah, we didn't build any Computer Spaces at all.

Scott:

Okay that rumor probably just got mixed up over the years.

Ted:

Yeah, yeah, I'm sure it did. Remember, it's been forty years.

(everyone laughs)

Scott:

Well, that's something kind of cool. Whenever people ... I collect a lot of video games in my house, it's all pinballs and video games, and whenever people come over and ... they'll look at Computer space and go, "What's that?" And I just love to tell them, "That is the first commercially produced coin-operated video game in history, 1971." Which sort of brings me to my next question; I guess sort of my last Computer Space question for the moment.

Ted:

(laughs) until you think of another!

SoCal Mike:

I've got a couple when Scott's done.

Scott:

Okay well, there we go. In 1971, November 1971, Nutting went to market with Computer Space. In September of 1972, another company called For-Play, based out of Burbank, California, introduced a part-for-part copy of Computer Space. They called it Star Trek, are you familiar with this game, Ted?

Ted:

Yup, I sure am.

Scott:

Okay, so it was in a wooden cabinet, they sort of worked out the joystick issue and they didn't have the buttons like Computer Space. Now, one of the things that's sort of a mystery to me, is my Computer space is the fifth oldest one known to exist, serial number 9076. Now, there was a lot of copy protection done on that game. When I say copy protection, they took the time to sand the identification numbers off every IC. And then they painted the tops of the ICs with silver paint. So, if you're going to want to reverse-engineer this game, you're going to have to desolder every IC and sit there and figure out is it a quad-NAND, is it an XOR, what is this thing?

Ted:

Well, in the first place, the early games did not have the painted-over ICs.

Scott:

Okay.

Ted:

So I'm sure some of them got out without ... I'm sure somebody got a hold of that. There was a guy named Stanley, down in southern California, that had seen that game and got absolutely bonkers over it. In fact offered Nolan a job that he almost took and I talked him out of it because if he took the job we were over, we were done.

Scott:

Yeah, that would have been the end of that game.

Ted:

Yeah, that would have been the end of that. So I talked him out of that, I said would you rather be a little fish in the big pond or a big fish in a little pond? And he says I'd rather be a big fish in a little pond. I said, okay listen, so don't take the job or you'll end up working for someone else. So anyway he didn't, he didn't end up taking the job. He moved on.

Scott:

So how did For-Play ... did you think they got a hold of one of the very early games before any of this, you know-

Ted:

No, no, I don't think that. No, I don't think that. I don't have any opinion about how they got what they got but I know it was a direct copy. How they copied it I don't know.

Scott:

Okay.

Ted:

I'm saying some of the first games got out without disguising some of the ICs.

Scott:

Yeah because mine, like I says, the fifth oldest known serial number and its ICs were disguised, so it must have been early on, you know, after the first few games that they decided "Hey, we've got to do something-"

Ted:

Or they paid somebody to steal the schematic. I don't know. I don't know how they got it, but they got it. They did the same thing with Pong.

Scott:

Oh yeah, now For-Play, they ripped off ... they had Sports Center, they had Rally, and Star Trek all of which were copies of early, you know, Syzygy, Nutting, Atari games.

Ted:

Uh-huh. Well they probably had somebody planted in there that, you know, they both stealed off them for them. You know, industrial espionage is certainly big business, it always has been.

SoCal Mike:

Sure, back to Computer Space, or to keep on that, you know it was featured in Jaws and Soylent Green, the movies, right?

Ted:

Yes, yes.

SoCal Mike:

Did you guys ... were you approached by the –

Ted:

No, no, no in fact, I had seen the movie Soylent Green, and I saw a Computer Space in there and it blew my mind and I told Nolan about it. I said you've got to go see the movie but I didn't tell him why. I said, you've got to go see the movie. It's a big movie. Go see the movie.

So he went to the movie, he said "What's the big deal?"

I said, "Did you see the movie?"

He said, "Yes."

I said, "Well, did you see the Computer Space?"

He said, Well, I came in a little late."

(everyone laughs)

Ted:

So anyway, no, we didn't. We weren't consulted about that at all.

Scott:

Speaking of movies, did you hear about that ... I'm sure you have, heard about the Atari: The Movie that's going to be done next year?

Ted:

I've been trying to get a hold of the producers of that because apparently Nolan has approved the script, and I know it's a pack of lies, and I've tried to let them know that if they start to tell a bunch of lies, I'm going to get them.

SoCal Mike:

Right.

Scott:

Well as you should.

Ted:

Yeah, absolutely, I mean, because ... I'll sue them and Nolan, you know, because I've been sending them emails, I've been trying to make phone calls, I've got other people doing the same thing and, you know, if they're going to ignore me, they're going to pay for it.

Scott:

That's all very serious business. I mean, if I were in your position, if I had, you know, been in on the ground floor, and knew the truth of this company that I helped build with my own two hands, I would get a piece of ass as well. I would absolutely go in there and, you know, that would happen. I would not go lightly on that. So we certainly-

Ted:

No, if that movie comes out. But I've been talking to a few people and apparently ... I didn't even know the movie was still going to be made.

SoCal Mike:

I didn't either, I thought it was tabled for a while but-

Ted:

In fact Nolan called me and told me that the people there wanted to talk to me, and that he would, you know, give them the information on me so they could contact me and I said fine. But they never contacted me. So I knew Nolan was lying. He always lies.

Scott:

And that's unfortunate. I mean-

Ted:

Yeah it really is because, I mean, like I told Nolan in an email just about a month ago, I said you're really a tremendous guy, you don't have to lie. I mean, the truth is pretty fantastic. You don't have to lie. Why do you do that? Because every time you lie, you diminish yourself.

Scott:

It is. It would be like Steve Jobs lying about Wozniak's involvement in Apple, you know? They're both special guys, you know?

Ted:

Exactly.

Scott:

What I would say to Nolan-

Ted:

Well, I'm not talking about lying about my involvement. That's not what I was talking about. I'm just talking about lies.

Scott:

The big picture.

Ted:

You know, telling lies about how brilliant he is, you know. I mean, he convinced me, that he designed the circuitry ... because I knew the matrix, that rocket ship matrix in Computer Space was a real complicated one. I mean, that was hard to do. And all of a sudden Nolan had us all saying "isn't that fantastic?" And for years and years and years, I had believed he had designed that. But I just found out, probably three months ago, that Al Alcorn did it ... or Steve Bristow did it.

SoCal Mike:

Steve Bristow, yeah.

Scott:

And for our listeners, just to sort of explain what Ted's talking about, Computer Space ... because they didn't ... to build a ROM in those days ... on our radio show, Ted, we just discussed ROMs and what they are, in one of our technical segments. In the day, to produce a masked ROM, to store all those video characters, would have been insanely expensive. You'd have to create the mask, etch the ICs, you have had to have a production house involved. They had to do this with relatively off-the-shelf parts, so what they did is they created the graphical images, the rocket and the spaceships, out of diodes an interface IC off-the-shelf, they basically built ROMs out of off-the-shelf parts. So it was an amazing circuit.

Ted:

Yup, that's exactly what happened. In fact, when it got laid out, on the board it looks just like a rocket ship.

Scott:

It does, which makes it very easy to repair.

Ted:

(laughs) Yeah, you know which diode is doing what.

Scott:

Oh yeah, and the thing is, when I restored my Computer Space it was ... it's kind of like if you ever go back and get to work on a Model-T or ... you know, like myself I love to build and restore

vintage airplanes, so to go back and work on a World War I fighter, just start peeling back the layers and seeing the genius of how this thing came to be. Computer Space was by far, hands down, my favorite experience for restoring any classic video game.

Ted:

Kind of like working on a five tube radio.

Scott:

Yes! And I know what that is.

Ted:

Yeah, there was another thing that Nolan said he invented and I just decided to program it on my computer and see what it's like and that's a game called 'Knock Out' or 'Break Out.' I don't know if you're familiar with that.

Scott:

Oh, very familiar.

SoCal Mike:

Yeah.

Ted:

Well he said he invented that. There's no way he could have invented that! You know, all of a sudden I realized what's involved, keeping track of, you know, all these different things that you're hitting and that kind of thing, he couldn't have done that! So I know that somebody else designed that for him.

Scott:

And I came to that same moment of realization myself as, like I said, I had always read from The Book of Nolan, and when I was restoring my Computer Space, I've read enough Nolan interviews, I've heard enough from Nolan, I've seen enough of Nolan, that I'm not saying I know what Nolan can and can't do but when you talk to people, and you get a feel for their engineering skills, you know what they do and don't do in a big picture. So as I was working on my Computer Space it became apparent to me Nolan Bushnell didn't do all of this. So a lot of people come to that realization over time.

Ted:

Yeah, no, there's no way he could have. I have no reason ... I always believe him ... you've got to remember I knew Nolan back when he had a junky little car, he owed money on his school, he could barely afford his rent ... I knew him early on when he was a really neat guy. I mean, we played Go, we had fun, go around to pizza parlors, he'd tell me all about his brilliant ideas he had, so I knew him then. I had no reason to doubt he'd ever lie to me. Or to think that he would lie to me, but it turns out he did.

Scott:

It's terrible because it doesn't need to be that way, that's why I'm glad we're getting your story on record.

Ted:

Yeah, yeah, no it's ... it absolutely ... the guy is brilliant! He's absolutely brilliant! He just doesn't happen to be a particularly good engineer. But his imagination and his ideas and ... I mean, all the ideas that came around were his ideas.

Scott:

Oh his robots, the robots he designed?

Ted:

Yeah, okay I've got to tell you one about Androbot, you're heard of that company?

Scott:

Androbot was exactly what I was referring to. We love Androbots in this group.

Ted:

Okay, Androbot ... that little thing was done in the Catalyst Group. And I had an office in the Catalyst Group and those guys were behind closed doors, designing this thing and, you know ... Nolan was handing out budgets and budgets of money to these guys to do it.

Well one day, they had made a copy of the schematic on the Xerox machine. We had one extra-large size Xerox machine and they left a copy there and I had a look at the schematic and I said my God this is awful! I could tell by the schematic. Or, no, it was the ... it was not a schematic it was a layout, it was a PC board layout. And I could tell by this PC board layout that this thing is not going to work. It's just absolutely not going to work. And I told Nolan that, I said this isn't going to work. I says, you're going to get it working but it's going to fail, you know, within a week! Absolutely!

The thing that I noticed is he had a transistor over here, on one side of the board, then he had the base lead going all the way over to the other side of the board. You can't do that!

Scott:

That's not how it's done. No!

Ted:

You cannot do that with a transistor or it will oscillate like a pig!

Scott:

You may as well put in a strip-line inductor in the middle.

Ted:

Yeah! All you would need is a 2k resistor or a 200 ohm resistor in series with the base, that's all you would need and that'll fix it but there wasn't a resistor in series with the base. So, anyways, I told Nolan, I said it's not going to work, I tell you every one of them is going to fail and the thing is these guys didn't want anybody to see what they were doing, especially anybody who knew what they were doing. And so they kind of kiboshed that idea and Nolan said no, no ... I said you've got to at least let me take a look at it. I said this is going to fail! It's not going to work. And he wouldn't believe me. I don't know if he didn't believe me or what or was just stubborn, but, sure enough, all those Androbots that they shipped, every one of them, failed.

SoCal Mike:

Now what year was this?

Ted:

This was ...

SoCal Mike:

Like '80? Or '79 or '80?

Ted:

Uhhhh... it must have been around '80, '79, '80-

SoCal Mike:

Because this ... when was it considered that you and Nolan kind of parted ways as far as the Atari days go?

Ted:

That was in '73.

SoCal Mike:

So even though you guys parted ways then, you still had a relationship.

Ted:

Yeah, I mean, he did the Catalyst and I helped him out with that. We did Pizza Time and he asked me to help him out with that, and I said no, I'd rather be your friend than your partner, I said, I've done that.

Scott:

But now you did do some work for that, as I understand, you built the order delivery system, order notification system?

Ted:

Yeah, yeah, Nolan had asked me to go look at ... if I wasn't going to come in with him and help him out with this thing, at least go take a look at his pizza parlor and tell him what I thought of it. He had one down there in ... I don't remember where it was ... San Jose or someplace ... I almost remember the name of the shopping center but I can't. Anyway, it was down there on Steven's Creek, so I go down there and I take a look at it and came back with a report to Nolan and I said, "Look your pizza is no good, that place is dirty and I couldn't tell him what pizza I was ordering because it was too loud."

He said, "Okay, I'll take care of the dirty," he said, "but it's got to be noisy and mediocre pizza is good enough."

I said, "Wait a minute, Nolan, mediocre is not a standard you can have. If you have mediocre as a standard anything less is unacceptable."

"Oh, no, no, no, we're okay, we're okay."

Anyway, he said you take care of knowing when your pizza's ready and so I invented this number call out system, and I said look, I'll sell them to you but as long as I'm selling them to you, I'm going to overcharge you, I'm going to charge you like Hell for them. I said, but if you ever want to build them, I'll give you the schematics, give you the parts, give you everything you need to build them yourself but as long as I'm building them in my garage, I'm going to charge you.

He said, "Okay, that's fine."

So I did, I did charge him a lot of money. And I made a lot of money. It was going good, in fact, the people at Radeon get mad at me because I wasn't cashing my paycheck. We only got paid once a month, and they'd come around six months later and say hey you've got to cash your paycheck.

Scott:

You know, I can totally identify with Ted here. When I was in the army, I was stationed in Germany and this was during the early '90's and there was a big industry in ... and it was actually legal in Germany because of the copyright laws ... in making duplicate satellite access cards for satellite TV. And I had engineered a card-writing system and I was selling these modified access cards so you would get all the channels for free, because you couldn't legally subscribe to it in Germany because it was England ... it was a whole big ugly deal with them. So I was making so much money off of building these access card devices and selling that, that I would get my army paycheck and go, "Oh, isn't that cute?" and just throw it in the drawer.

(everyone laughs)

Ted:

Yup, yup, yeah that was about the way it was.

Scott:

So you actually had financial dealings with Nolan years after Atari?

Ted:

Oh yeah, in fact I started a company called Syzygy Game Company because he wanted me to invent a game for him only, just for Pizza Time Theater. I said fine, so I invented ... I got a hold of Isaac Asimov's ... uh ... person and got permission to use his name and created a game called Isaac Asimov Presents Super Quiz. It was very similar to Nutting's except it was done with, you know, more current stuff. And I was selling him that game.

Scott:

So that was your work as well?

Ted:

Huh? Yeah! Yeah, that was all my work, yes.

Scott:

Well The Book of Nolan says otherwise. You know, here's the thing, a good friend of mine, long ago, he said something, I don't know where he got it from but it really stuck out, is that an honest man never lies. A pragmatic man never lies about something that is easily verified.

Ted:

(laughs) Yup.

Scott:

So, now, we sort of jumped ahead just a little bit to your future dealings with Nolan and all, but when it came to a close at Atari, when you realized ... I don't know how to phrase it ... what was the conversation around the Dabney dinner table when you decided not to go in the next day?

Ted:

Well, it didn't actually happen that way. Nolan had hired this guy ... you see Nolan had this idea success means money. Money means success. So if you have a lot of money, if you're earning a lot of money, you're successful. And that means you're really good at what you do. Which could well be. But the trouble is he hired this guy as the president of the company, he was an industrial psychologist ... and, you know, he was rich so he made a lot of money so he must be really, really good so Nolan hired him.

Scott:

So who was this fellow? What was his name?

Ted:

I don't remember. Yeah, it was the first president that he hired ... I guess Murichi? Mureech? I can't remember ... a guy we had, he was brought in as a financial guy ... I guess he quit or got fired or something but anyway, so Nolan hired this guy in and he's an absolute idiot when it came to business. I mean the only thing, the *only thing* he did all the time that I knew him is redesign his office. The only thing he did. You know? He redecorated his office.

When we were at the roller rink, this is what really tore it, when we were at the roller rink, you know about the roller rink?

Scott:

No sir, explain that.

Ted:

Oh! We started out in seventeen hundred square feet out at the Cole Complex in Santa Clara and when we started building Pongs, we needed more room, and it turned out that the guy next door to us had moved out in the middle of the night, he didn't pay his rent. So I cut a hole in the wall, and moved in to his place ...

(everyone laughs)

Ted:

Literally I cut a hole and moved in to his area and took over that seventeen hundred square feet. The manager came around and said "You can't do that!" And Nolan said, "We did it! You just figure out how much it's going to cost us!"

(everyone laughs)

Ted:

That was pretty good, that was fun. But anyway that was only thirty-four hundred square feet and that wasn't near enough but this ten thousand square foot-

Scott:

I've just got this visual of Ted Dabney putting his foot on the wall after he's made the final cut and just unceremoniously taking it down.

Ted:

I used the sabre saw. I put my foot on it.

Scott:

Now, did you have a cigarette hanging out of the corner of your mouth while you did this?

Ted:

Probably, I usually do! But anyway that wasn't big enough. But this roller rink down the block became available, ten thousand square feet! So Nolan and I went in, you know, took over that one and, you know, gave up the Cole Complex. But ... oh, no we didn't ... that's right Nolan kept his office at the Cole Complex and my office was down near the roller rink.

Now I was down there in my office one time, and this guy comes in with this long hair, ponytail look about him and told him to give him my job description. I said, "What? I'll give you shit! Get out of my office!" And I kicked him out of my office.

I went to Nolan, I said, "What the hell is this guy doing coming around asking me for my job description?"

"Oh! Well, he's just trying to organize-"

I said, "Look, you hire some kind of general manager without even, you know, over this area where I am, without even telling me about it." I said, "That's not right."

"Oh well, it'll be okay ... and then-"

So anyway, we ran out of room at that ten thousand square foot too and that was really bad. I mean we were just jam-packed and we had people on roller skates actually running around on the roller skate rink building Pongs.

So Nolan and I went out looking for another building and we found this building out in Los Gatos called the Cadre Building, Am Phenolcadre, and we said well let's just do that. And Nolan said oh no, we can't, we just can't justify moving out this far.

SoCal Mike:

Let's just kick the door down and just move in!

(everyone laughs)

Scott:

Ted, did you bring your hammer?

Ted:

This was a real building, this wasn't just a partition, this was a huge ten thousand square foot building. And Nolan says, "We can't really justify moving out this far."

I said, "Nolan, Nolan. Look at me, we own the company, we don't have to justify anything to anybody!"

"Oh yeah."

Anyway, all the way back, to the office, we were coming back he was dead silent. Dead silent. We're driving into the parking lot at the roller rink, and he looks around and he says, "All these guys are depending on us, aren't they?"

I said, "Yeah. Not only them, their landlords, their grocery stores, everybody's depending on us."

He said, "What's it going to be like to be really, really rich?"

I said, "I hate to tell you this, Nolan, it's not going to be any different. The only thing that's going to change are the number of zeroes."

He didn't like that at all.

(everyone laughs)

Ted:

Many years later, we're up at his house, drinking some ... he had gone to France and bought a bunch of wine and got this really good deal on Gamay Beaujolais ... actually, it's the French equivalent to Gamay Beaujolais. He got this really good deal on this older vintage. But he didn't realize the older vintages were worth less because they go bad. They're not like a claret or one of these other red wines that holds up, they go bad.

UK Mike:

Beaujolais, you drink when it's brand new. There's actually a road race that they have every year so when a new crop comes out all the people in these big fast cars race to be the first one back to England with a bottle.

Ted:

Oh, oh, okay. Well anyway, this wine was going bad, it was going bad pretty quick so I was over at his house drinking up this wine, as fast as we could, just getting plastered and he says, "Dabney, you know what I really, really hate about you?"

And I said, "What?"

He said, "You know what I really, really, really hate about you?"

I said, "What?"

He said, "Remember when you told me the only thing that was going to change is the number of zeroes?"

I said, "Yeah."

He said, "You want to know what I really, really hate about you?"

I said, "What?"

He said, "You had no right to know that."

(everyone laughs)

Scott:

And he still can't pick a good wine!

Ted:

Anyways, that was a fun story.

SoCal Mike:

Ted, can you explain a little bit, and maybe we don't want to go into this or maybe we do, but I've always been curious about the whole Kee Games setup, did you have any say?

Ted:

No, no I didn't have any say about anything, and this was after I left.

SoCal Mike:

Okay.

Ted:

Okay? But I was still around.

SoCal Mike:

Yeah.

Ted:

Nolan had this idea ... if he set up a different ... okay, I've got to back up a little bit because there's a bunch of stuff that goes on.

SoCal Mike:

Okay good.

Ted:

Remember he hired this president of the company that was a real yay-hoo, I mean a real yay-hoo, okay?

SoCal Mike:

Yeah.

Ted:

He also ... and we're over in the Cadre Building, he had gotten the Cadre Building, he also hired a vice president of engineering that he didn't know I knew but when I found out about it I told him that guy cannot – will not – make a decision! You know, he has a PhD mentality. A PhD mentality means no matter what decision you have, there's something wrong with it. So you don't make it. And then he hired this salesman, a super salesman, a guy that was our salesman at Kramer Electronics, they hired him as vice president of marketing. So I says Nolan, you and I've got to go. So, we got on our motorcycles, headed over to a pizza parlor and we sat down and I says "You've got a president that can't do anything except decorate his own office, you've got a vice president engineer who can't make a decision, you've got a vice president of marketing who doesn't even know how to *spell* marketing."

I said, you've got to get rid of these guys, you've got to get rid of them."

He said, "Well what do I do? These are friends of mine."

"I don't give a damn if they're friends of yours, you've got a company to run and these guys are terrible!"

And he was blown away the fact I knew his vice president of engineering wouldn't make ... couldn't make a decision. But he didn't realize I had worked with him for a while too (laughs) at AMPEX. So, I knew he couldn't make a decision.

But at any rate, in the meantime ... Kee Games was set up so that Nolan could have a different manufacturer ... see, in any given city, a manufacturer can only sell to one distributor. That's just, kind of, the rules of the business.

SoCal Mike:

Right.

Ted:

But if you have two companies, then one can sell to one distributor and one can sell to the other distributor. Okay? But that's cheating if it's your company. So at any rate, I said what's the story? I was in my office over at the Cole Complex and he came in and said ... I said, "What's the story?" So he told me, he says well this is just the way ... why we set it up ... and all like that.

Well, at any rate, when somebody asks me about it I told them what Nolan told me. Well it turned out Nolan had set me up so that the Board of Directors would get rid of me. In other words, I had

told stories that I shouldn't have told and so they had decided they ... you know, the Board of Directors had decided to get rid of me.

SoCal Mike:

But when he explained that to you, he didn't tell you it was a secret or-

Ted:

No, no, I said ... I told him, I said what is the story we're supposed to be telling about this and he told me. And so, that's what I warned people that asked me about it, that's what I tell them.

SoCal Mike:

Oh, so that's what he told you to say, you said it, and then they canned you?

Ted:

Yes, exactly.

SoCal Mike:

Wow.

Ted:

At any rate, that was the way that worked. And he told me that if I didn't quit, they would just transfer all the assets to a different company and leave me with nothing.

Scott:

So what were you ... I mean, when this occurred, you know, The Book of Nolan says that part of the deal that you got was the game route that was originally owned by Syzygy, and that was sort of your parting prize. What was the real package, how did that occur?

Ted:

No, no, I did get that. I did get that. But they were charging me so much money for rent on the building and the rent of the machines that I couldn't afford it.

Scott:

So, it made no sense whatsoever to do that.

Ted:

Yeah, I couldn't ... I had three people working for me, now I couldn't even afford to even pay the rent and pay them and all that so I just told them honest, I said, you know, it's over. I can't do it.

Scott:

So what was your path from there because obviously, like you said, it's 1980 ... uh, '79, '80 ... you were still having some involvement with the Catalyst Group and all, what did you do in that intervening time?

Ted:

Oh, I don't know, I don't know what the intervening time was so-

Scott:

Let's say from like when you left Atari, up until 1980?

Ted:

Well, I was probably working on that ... those coin operated games, running that for a while. All that's really kind of vague, I don't remember much about all of that. I don't even really remember how I got involved with Catalyst. I don't even know what I did, I had my office in Catalyst. You know, I'd get the paycheck from Catalyst ...

SoCal Mike:

Did Nolan ever, I mean, it seemed like he leaned on you a lot whenever there was kind of important decisions to make, even if you weren't officially in bed with him, if I can say that. So did you have ... did he ever come to you when they were going through the whole Atari 2600 deal? Did he ever come to you and ask your opinion on anything or any help of you so ...

Ted:

No.

SoCal Mike:

So you had nothing-

Ted:

No, no, no, that was all between him and Al.

SoCal Mike:

Him and Al, okay.

Ted:

Yeah, Al is a brilliant guy, absolutely brilliant.

Scott:

Yeah, I've never heard anything from Al Alcorn that contradicts himself. He seems to be pretty up-and-up. He doesn't always tell the whole story, I've heard him speak and not mention-

Ted:

Yeah he won't, he won't say anything that is going to contradict somebody else.

Scott:

Which is probably a smart business man.

Ted:

Well I don't know how good a business man he is, but he's a damn nice guy.

Scott:

Now are you still in touch with him or any of those guys from the old days?

Ted:

No, no, no, not at all. No, I'm completely out of it, I just ... all of a sudden when Nolan said I didn't have a daughter on that Internet thing

SoCal Mike:

Yeah. That sucked you back in.

Ted:

Well, yeah, that ... one of the guys that called me ... see, someone had done a whole article on me, which was kind of nice, it was published in England.

SoCal Mike:

Is it Leonard Herman?

Ted:

Yeah, yeah, yeah. He did this article on me and UK Mike may have seen the magazine, called Edge.

UK Mike:
Edge, yeah.

SoCal Mike:
Oh Edge, yeah!

Ted:
Yeah, it's in the April 2009 issue.

SoCal Mike:
Huh, I'll have to look that one up. I'll have to see if I can dig that up and find that one.

Scott:
Yeah, same here.

Ted:
So, anyway, we had been in contact and so he let me know that somebody ... that Nolan said I didn't have a daughter and then that's when everybody ... they set up this thing, a thing for me and then I started getting all these calls from Curt and all these people. That's how I started getting involved again.

SoCal Mike:
What do you think about all of us 'geeking out' over all of this history and everything, I mean, and what-

Ted:
I think it's really bizarre because, you know, I just don't ... I'm not into video games at all. I look at this thing on AtariAge and these people go on and on about all the different things that Atari is doing and I just ... it's hard to comprehend how people can get so worked up over this stuff.

SoCal Mike:
Yeah, yeah. But then, it was a job for you, just like we all have jobs and we don't think twice, you know, we don't think anything of it. But you were very fortunate, enough to be in California, I guess at the right place at the right time and-

Ted:
1:26.42

Oh yeah, yeah. I mean, Nolan Bushnell, hooking up with him and his ideas, I mean, just fantastic I knew how to make them work, he had the ideas and I knew how to make them work. It was a great combination.

UK Mike:
If Bally had said yes we might not have been talking to you now even.

Ted:
Yeah! (laughs) But you know, one of the things ... some people are okay with money and I'm just not one of those people. I started not liking myself very much; I was kind of an asshole. And I didn't like being an asshole and so having a lot of money didn't mean a whole lot to me. You know, I mean, it was fine, but ... I don't know how to explain it. It's really kind of hard to explain.

Scott:
You'd rather be true to yourself.

Ted:

Yeah, I like having the money but I didn't like the way I ... I mean, I was kind of acting like a jerk. I was kind of acting like I was important and it just didn't fit me. I don't know if that makes any sense at all.

SoCal Mike:

Oh yeah.

Scott:

Oh it does, it does.

Ted:

Because, you know, most people are out to make a lot of money, that's what they want to do and that's why you do what you do is to make money. You take chances so you can make a lot of money. But, I don't know ... and we did! We did make a lot of money.

I was doing ... I had so much money, I was paying income tax like you couldn't believe. And I'd always get these letters from the IRS saying I owed them more money. This happened every time, every year, and you know, for years and years. They'd send me letters there saying I owed them more money and I'd send them a check.

And then, one year, they decided to do an audit. And they did this massive audit on me and wound up giving me back all of the taxes I paid, plus interest! And I remember at that time the interest was a phenomenal thing, during the Reagan times, there was a Hell of a lot of interest rates, and they always paid the highest interest rate and I got all this money back. And I was like, "Wow! This is fantastic!" I couldn't understand. I don't know why but, you know, the IRS guy said, "Hey, we could go back even further if you want." And I said "No, no, that's enough for me."

(everyone laughs)

Scott:

Hey, you're playing Black Jack and no, we'll stay on these cards.

Ted:

And then, but, here's the bad part, we'd have all this money so we'd take off to Hawaii, you know, spend all this money and have a good old time. It turns out, the next year, all the interest they paid me was taxable.

Scott:

Ohhh!

UK Mike:

You were just looking after their money for them.

Ted:

And I wasn't prepared for that.

UK Mike:

So, you didn't do all this for the money, and, you know, money didn't necessarily make you a nice person but, perhaps did you ever ... in 19 I don't know 85, 86, ever walk into an arcade and think, "I had a big hand in this," you know, starting this?

Ted:

Well, I never said that, I mean I –

UK Mike:

No, quietly, did you ever take pride in that and sort of think to yourself, you know, I was-

Ted:

Oh yeah, oh no, no, no I take a lot of pride in my involvement with the Atari thing, I take a lot of pride in it. But I, you know ... anybody that wants to ask me about it, I'll be glad to tell them.

UK Mike:

Yeah, heh heh heh.

Scott:

And Ted, you were saying earlier about some of the Internet involvement you've had, and all. Have you ever seen a website called computerspacefan.com?

Ted:

No.

Scott:

Oh you should check this out. The fellow who runs this website is a class act. He is not political about Computer Space. He has the basic story as he honestly understands it to be the case. He hasn't talked to you, so he doesn't know some of the other details, but he's a really nice guy who means very well and he sort of shies away from some of the more contentious part of it and he just documents the game. So what he does is he tracks all the games by serial number.

Ted:

Oh wow!

Scott:

And he has the schematics on his website, sort of the history of the game, and if you want to visit computerspacefan.com and check it out, you will probably enjoy what you find there. And he and I have talked a fair amount, and it was kind of interesting to us-

Ted:

What's his name?

Scott:

Dan.

Ted:

Dan?

Scott:

Yeah.

Ted:

Okay.

Scott:

And he and I were emailing back and forth a bit, and one thing that's interesting to us here is that some forty years later, almost, there are people all over this country who have a Computer Space that they have ... sort of like a vintage car, or a vintage airplane, that they sought out, that they restored, that to them is a living piece of history in their own home. You know...

Ted:

Oh wow.

Scott:

It's sort of something that ... I don't know if you're truly aware of how ... you were talking about some of the people on AtariAge that discuss on and on and get very worked up about it, well

most of those people are the kind of guys that actually own a Computer Space. There are a lot of people though who do seek out the parts, who share information on restoring them, and to them it's a big piece of ... for us, this is sort of like the Wright Flyer of video games, you know? Interviewing you here is sort of like talking to Orville or Wilbur Wright, you know? It's very cool to me.

Ted:

I'm not *that* old!

(everyone laughs)

Scott:

I didn't say Glenn Curtis, but no, it's really cool to me to think that forty years later somebody might come back and say hey look that thing you did, I found one that's restored, it's in my living room, and it's really kind of cool to me.

Ted:

Well the thing is you asked me what I thought of it and it just boggles my mind.

SoCal Mike:

Now, so you don't have one, I take it?

Ted:

The ego loves it, you know. No, I don't have one, no. The only video game I have is a solitaire game that I wrote in Visual Basic.

SoCal Mike:

Yeah.

Ted:

I did write Break Out, just to find out what it was like. And that works okay on my computer.

Scott:

So, now that we have talked about the recentness of your career of coming to the forefront and people finally understanding what actually did occur, and the true history of this Syzygy, Atari, and Computer Space ... which, again, for us is sort of like the Model-T or the Wright Flyer, it was the thing that solidified the formula for the modern video game, what was your last involvement with that industry and what did you step in to, did you go back to engineering? Did you ... now you mentioned you ran a grocery store.

Ted:

My last involvement was that Syzygy Game Company that I started for Nolan. It supplied that Isaac Asimov Presents: Computer Quiz for Pizza Time.

Scott:

Right.

UK Mike:

Yeah.

Ted:

That was kind of the end of everything because they wound up owing me a whole lot of money and they couldn't pay me because Pizza Time was going belly-up. That was my last involvement with it.

SoCal Mike:

Can I ... I'm going to just jet back, just for a second, back to the beginning then again, do you know the game Galaxy Game?

Ted:

No.

SoCal Mike:

Scott, what's the ... that was like that dual side-by-side game that came out, either two months before or after Computer Space? It's the one that's now at Google's headquarters? Have you heard about this?

Scott:

Yeah, I don't recall ... boy ,I wish I'd looked that up before we talked, I don't remember all the details. I've heard of it, I remember it sort of.

SoCal Mike:

They were saying it was the earliest-

UK Mike:

It wasn't sold commercially, it was coin operated, called Galaxy Game, preceded it by two months

Scott:

Oh, the one that-

SoCal Mike:

The one at Stanford.

UK Mike:

The one at Stanford, yeah. It wasn't available commercially.

Scott:

Oh yeah, I remember, it was dime operated, it was a one of a kind. Yeah, that's why whenever I describe Computer Space to people I say it was the first mass-produced, commercially available because obviously ... there were several one-offs ... I mean, of course, Ralph Baer's system and all that. They did exist.

SoCal Mike:

Yeah, it was just interesting because they just said in 1997 it was restored and now I knew just like a month ago Google picked it up somehow and it's in Google's headquarters. I thought that was pretty cool.

Scott:

So Ted, your last involvement was the Isaac Asimov Presents, you were telling me though that at some point you ended up just saying I'm out of here and opening up a little country grocery store with your wife and all?

Ted:

Oh that came much, much later. In the meantime I worked for Radeon Semiconductor, I worked for Teledyne Semiconductor, and we even worked for Fujitsu for a little while. One of the things ... I wanted to learn a little bit more about ICs so I went to work for Radeon as an applications engineer and you learn a lot about ICs if you're an applications engineer. And I even worked for a company that made scanning electron microscopes. Stuff like that. But finally the company Teledyne Semiconductor, which was a nice company, I liked working for them, was bought by these people that were running the company and they changed it to Telcom and they were a bunch of yay-hoos and they just didn't know what to do, they didn't know what marketing was,

they had no idea. When you're an applications engineer, you're working in marketing and if you don't have a good marketing manager to tell you what to do, there's not much ... you know, so I finally decided to Hell with it and that's when I quit. The wife and I moved to Crescent Mills and bought a grocery store.

Scott:

Now, was that a refreshing change of pace for you to be out of the industry or was it or more work or how was it-

Ted:

Well it was ... no the refreshing thing was being in the Sierras instead of Silicon Valley, that was the refreshing thing. Being out there among all the poison oak and coyotes and all that kind of stuff.

Scott:

So out of all this, I mean all of your history from AMPEX up until retiring to run a grocery store, who was the biggest yay-hoo you ever worked for, and what was the coolest person you ever knew in the industry?

Ted:

I think the coolest person I ever knew in the industry was Al Alcorn. That's correct. I really liked him. As far as biggest yay-hoo was probably that guy that Nolan hired as president of Atari.

Scott:

Oh the pony-tailed fellow?

UK Mike:

The one with the nice office?

Ted:

Oh, no that was ... he hired him as the general manager.

Scott:

Oh, the redecorator. The interior decorator.

Ted:

Yeah, there you go, that's the man. Industrial psychologist or whatever the Hell he was.

Scott:

So, Ted, before we ask any final questions we have for you here.

Ted:

Oh, oh I've got to finish up, remember when I told Nolan he'd have to get rid of these guys?

Scott:

Yes.

Ted:

He did, and that's when he brought in Joe Keenan.

SoCal Mike:

Oh yeah.

Ted:

Joe Keenan turned that company around and all of a sudden turned it into a real, real company, and that's where Kee Games came from, from Joe Keenan.

Scott

He was a neighbor of Nolan, wasn't he?

Ted:

Yes, yeah.

Scott

Do you have any idea what industry he came from?

Ted:

No idea.

Scott:

Because not much is said about him,

Ted:

Nolan said he was out mowing his lawn and he went over and started talking to him.

Scott:

Huh, yeah, that's about all we know, that's about all the story was.

Ted:

Yeah, yeah, that's about what happened. He's told me that several times, so I've got no reason to-

SoCal Mike:

Back to the arcade side of things again, and again maybe you didn't have anything to do with it because I know this was probably after you left but, then Nolan started Sente?

Ted:

Uh yeah. Yeah I wasn't involved with that at all. You know where the name Sente came from?

SoCal Mike:

Well that was another ... was that another Go term?

Ted:

Yeah. See we had Hane, Sente, and Atari that we submitted to the Secretary of State when we got ready to incorporate. Because we tried to incorporate under Syzygy but somebody already had that.

SoCal Mike:

Right.

Ted:

So we submitted these three names to the Secretary of State. The Secretary Of State actually picked the Atari name.

SoCal Mike:

Oh! So you gave them three choices, and that's how-

Ted:

Yes, they were all Go terms.

SoCal Mike:

So then did Nolan sell Sente to Bally?

Ted:

I don't know.

SoCal Mike:

Because for a while there it was Bally Sente, I remember.

Ted:

No idea. He sold Atari to Warner Communications.

SoCal Mike:

Right.

Scott:

He made a few dollars off that.

Ted:

Nah, not much.

Scott:

Wasn't it like 28 mill or so?

Ted:

Wasn't quite that much.

Scott:

Ah! Another thing. So Ted, I'm sure we have loads more questions for you, but we wanted to just give you the floor. Is there any story you want to tell, anything else you want to say, the podium is yours, is there anything you want to put down on record that we have missed?

Ted:

I don't think so, I think we covered most all of it. It's been a real ego thing, for me and I don't mind telling you that. I really have enjoyed it but, no, I can't think of anything else I want to just dump out there. Other than I did want to let you know, Nolan took my advice when I told him to get rid of those people and that was one of the things that made Atari really work.

SoCal Mike:

Yeah, well it seems like he took your advice a lot.

Ted:

Yeah he did. He did but he'd never acknowledge that.

UK Mike:

He took your advice but he also took the credit for it.

Ted:

Yeah, yeah, oh yeah. Well he was the brilliant one, he was the ... oh, God, some of the things he said about me was really pathetic. You know, I had no digital skills? (laughs) He actually said that, that I had no digital skills.

Scott:

Which is kind of funny because that's your forte-

Ted:

No, no, my thing was analog.

Scott:

No, I'm sorry, analog video but when you ... your involvement in Computer space, the analog video circuit on Computer Space is very simple. All it does is displays end result. As you describe your involvement with Computer Space, and how you would quantify-

Ted:

Oh yeah, that's all digital, all digital. There's no analog in that at all, except in the TV set but we didn't design the TV set, we bought those.

Scott:

Yeah, it is, it's just that. It's a digital system. To say that you have no digital skills, and the very circuits that you assisted him in building, designed, they were in fact, digital.

Ted:

He doesn't acknowledge that I assisted him in building it! You know? See, so that's where it boiled down to. And I've got to tell you one other story. This is kind of fun. Remember we bought TV sets, we didn't actually build our own. We'd turn them in to monitors, by pulling out the tuner or disconnecting the tuner.

Scott:

Yeah, on mine the tuner is just disconnected at the RCA plug.

Ted:

Yeah well some of them you could disconnect and some of them you had to unwire, some of them we actually pulled out and Nolan tried to sell them.

(everyone laughs)

Scott:

Nolan's Discount Tuners!

Ted:

I got a hold of this distributor, what was it, Toshiba, in Oakland. And I told them I want to buy TV sets. "Oh yeah, oh yeah, oh yeah, how many?"

I said, "About five hundred."

"Oh no! No, no! Too many! Too many! Too many!"

I said, "No, I need five hundred."

Oh man, that was funny. I remember one time I was over at the Hitachi distributor in San Francisco, and the TV set didn't come out. I had ordered I think about a hundred and fifty of them or something like that for the Pongs and they didn't come in so I called the guy and I said I didn't get them.

"I don't know, they're in a warehouse out in L.A.."

So I flew down to L.A. and apparently, apparently the truth of what he told me was that the ship had got hijacked. It turned out that was true, the ship had gotten hijacked. So I was down there in L.A., at their warehouse and I said what about these TVs? I saw this great pile of TV sets and they were a little bit more expensive, about seventy dollars apiece and I says I'll buy them, I'll buy the whole thing, all of them, I gave it to him right there, a check for twenty seven thousand dollars, and they got the guy who shipped the TV sets, and got the TV sets.

Many years later, they call me and tell me I never paid them I said, "I don't give a damn what you think." I says, "I paid you, I gave you a check. You're going to have to prove I didn't pay you, you know, because I did."

By that time I was out of the whole thing anyway. But that was one of those cute ones.

Scott:

How'd they even find you at that point?

Ted:

I don't know, I don't know, other people found me that I didn't want to find me.

(everyone laughs)

Scott:

The IRS?

Ted:

Oh yeah, the IRS, I always told them what I wanted to.

Scott:

They probably got your phone number off the check you wrote them.

Ted:

Yeah, I don't know. I don't know how. But if they had the check, how could they say I didn't pay them? Anyway, I have no idea. It might have been out of the phone book. Anyway, that's about all I can think of, guys.

Scott:

Well, sir, thank you very much. SoCal? UK? Anything?

SoCal Mike:

Other than just thank you so much for your time, Ted, and like I said it was an honor talking with you and I'm sure that, you know, we're going to have tons and tons of listeners just go crazy and love to hear what you have to say.

Ted:

Scott's got my phone number, he's got my email, any questions that come up like you'd like to get answered just give me a holler.

Scott:

Oh, we'll take you up on that.

Ted:

Okay. Mike and Mike and Scott I sure appreciate your interest in me, it's been a pleasure.

UK Mike:

Well thank you.

Ted:

My ego's just really, really happy right now.

(everyone laughs)

Ted:

Anyway guys, thank you so much.

UK Mike:

You're welcome.

Scott:

Well, sir, let me throw one more log on the ego fire, if I mail you the control panel from my Computer Space, would you mind signing that for me?

Ted:

I sure will.

Scott:

Let me get that done for you.

Ted:

I sure will do that for you, absolutely.

Scott:

Alright, Ted, thank you very much sir and we'll look forward to being in touch with you again.

SoCal Mike:

Thanks, Ted.

UK Mike:

Thanks, Ted.

Ted:

Mike and Mike and Scott, SoCal and UK Mike, thank you very much.