

Guest: Steve Kordek
Interviewed by Clay Harrell
Transcribed from: topcast_show23.mp3
Transcribed by: Terry Nelson

Steve Kordek has worked in the pinball business from 1938 to 1999 at Genco (1938-1959), Bally (1959), and then Williams (from 1960 to 1999). Steve was the primary game designer for Williams during the 1960s & 1970s. He also helped designed some of the most amazing EM arcade games from Genco during the 1950s. Steve was the director of the Williams pinball department during the 1980s. With over 60 years in the pinball business, Steve has some amazing stories to tell.

First a transcription note. Any text that's marked with 3 question marks (???) is indistinguishable on the recording. Let's begin!

=== Begin Transcription ===

Clay Harrell: Today we are going to be talking to somebody that's been involved in the pinball industry since the 1930's clear up till the end of the 1990's. While he was working at Genco starting at 1937, he also worked for a short time in 1959 at Bally, then he went over to Williams in 1960 and stayed at Williams till they stopped producing pinball machines in 1999. This gentleman spans over 60 years in the pinball business and he has quite a few stories to tell.

So I'd like to introduce Steve Kordek. Again, Steve Kordek's been in the pinball industry since 1937 till about 1999. Also, Steve was unavailable to do this interview over the phone so we've gotta take TOPcast on the road and we went to Steve's house in Chicago to interview him. And now we'd like to talk to Steve Kordek:

CH: When did you start working at Genco?

SK: 1937.

CH: OK, and how old were you?

SK: (pause then a little laughter)

CH: If you don't mind – you don't have to answer that if you don't want to! (laughter)

SK: Just a second, let me figure it out, I gotta think.. gimme a chance.....11....21...31..... I was 26 years old.

CH: OK, before that, I mean, how did you get that job, I mean what did you do to get that job? I mean, is it something you wanted to be in, or did you just happen to fall into it or...?

SK: Look, is that something we can talk about this here?

CH: Is that OK?

SK: Sure.

CH: Yeah, I'm really interested in how you got, – I mean you're 26 – 27 and you interview at Genco? Or doesn't it work that way? (laughter)

SK: It was not that way. Let me tell you what happened. I was a depression kid. See, when I graduated from High School in 1930, and went to college, I started getting a background of electrical circuitry and so forth. After a year I had to quit. I had to quit because I had to go to work. I had to go to work to provide food for my Mother and Father and our family. At that time we had 9 children – 9 children and my Mother and Father. And my Father was working only 1 day, sometimes 2 days a week. My Mother was working a couple times a week at the Bell Telephone Company washing floors and everything else – making a couple of dollars. And I had, my Brothers and I, had to earn a few bucks. Now there was a time - there was a time in High School, in 1928, when I worked for Zenith. And at that time I was making \$22 a week.

CH: Was that good pay for that time?

SK: Terrific!!

CH: Really?

SK: I only got \$20 dollars. But if I worked every day they gave me an extra \$2. Then came the Depression. When the Depression came I worked many places for as much as 10 cents an hour, worked 10 hours and got one dollar.

CH: Oh man.

SK: I learned then - everybody always asks me, "What is the thing that has affected your entire life?" The thing that affected my background and my entire life was the Depression because I learned what it meant to have a dollar. So, what happened? They offered me a job with the Forrest Service. And I said "OK I'll take it for a year and let's see what happens." I did. They put me in a Ranger Station. I took care of 20 some look-out towers that handled fires all over the Bitterwood Range in Idaho. And when it came close to the end, I said "I can't stay - I cannot afford..." They wanted to offer me the job again and "you got to answer by May 1st! - because that's when we have to have an answer, whether you're coming or not."

(pause, sigh)

I came, in the winter time, back to Chicago. I'm looking every day. I go to Church, there praying. I'm looking for a job so I can stay in Chicago. My family, my brothers, my sisters, my Mother and Father - I wasn't gonna go to Idaho because if I go to Idaho, they'll never see me again. (laughter) Who in the hell's gonna come see me over there?

CH: right

SK: And this is the story everybody in the Industry knows, but you don't know: Well - I was walking one day down Ashland Avenue and it was raining like all hell and I didn't even own an umbrella. I opened up a door to a vestibule, closed the door to get in out of the rain, a woman opens the door and says, "Are you looking for a job?" "Yes, I'm looking for a job." "Can you solder?" "Yes, I can solder." They put me on the line and that's where I got introduced to pinball games.

CH: So that was the Genco factory right then?

SK: The Genco factory on Ashland Avenue.

CH: So you just literally - stroke of luck - bad weather - and rain - and a street - and you walked into it...

SK: Two and a half weeks before May - the 15th of April - that's how I entered it.

CH: And what year was that, you said 1937?

SK: 1937.

CH: (laughter) So you were good at soldering?

SK: Aw hell, I learned how to solder real fast you know.

CH: So, you really didn't know how to solder?

SK: Well, being - having some electrical background, I had no trouble with it at all.

CH: OK

SK: I got so good.

CH: So what was your first job there at Genco?

SK: Well, see, they put me on line soldering. But I was soldering very close to where the testers were testing the games. And it wasn't long that I recognized the games real well because I had a background of circuitry you know and it was simple circuitry these games. And I went out there playing a couple games and hell I could tell exactly.... I was so close to the testers that every so often when they'd have a problem, I put my hand up, "I know what the problem is. Can I show you?" I'd show them and they were surprised. I was working there as a Solderer and here I'd be showing them what the hell is wrong with the games and I was able to show - correct them and fix them up. It wasn't long that Engineering saw that. And they said "This guy doesn't belong on the line. He's good enough..., we need an electrical man. We need an electrical man in the Department of Engineering." That's when I start learning about Pin Games. And that's when I got introduced to the most important guy in the world, Harvey Heiss, who was the guy running all that, who taught me everything there is in Pin Games, and at the same time I started in Electrical (Engineering) and that's when I helped with all the Pin Games and had one hell of a time.

CH: Now, when you were doing the soldering, what were they paying you then?

SK: 40 cents an hour.

CH: 40 cents an hour, which actually wasn't bad back then, right?

SK: That was actually good. At least you got a job.

CH: And then when you went into the Engineering Department, did they give you a raise?

SK: Oh yeah.

CH: So you were doing OK.

SK: Yeah.

CH: And what did your family think about this job?

SK: They didn't care what the hell I did as long as I was working (laughter). Every check I made I turned in to my Mother so that she could buy food and stuff for the family. It wasn't one of those things where

I'd get a check and then the weekend go blow it. I'd get my check, I'd sign my check, and gave it to my Mother to buy food and everything and she'd give me a dollar, or a dollar and a half, or something....walking, cause I didn't have a car, walking and spending a little money on myself and if I need shoes or something she'd give me money so I could buy a pair of shoes for a buck and a half or something like that.

CH: So from (19)37 to December 6th 1941, you (were) in the Engineering Department soldering, right?

SK: I was in the Engineering Department in Genco up till 1957, 58.

CH: But when December 7th came, and the Japanese bombed Pearl Harbor, how much did that change everything at Genco?

SK: We had the greatest soldering group of people in the world – they could solder real well. And we started making Walkie-Talkies for the Marines. And they used to be able to solder, in a 3/4" socket, 15 or 20 positions to solder, and still put the sleeves in there and never short out. That's how good the people were. We got so good I used to train people how to solder. And we used to take people off the street, women that used to come along...had kids working in school -between times and I used to teach them. So now, war broke out. So the government says, "We want you to take charge of all the soldering, we want you to take care of all the training..." of the people and all the jobs we were going to get. So now they put me in charge of 800 people in our place.

CH: How many were working prior to the war at Genco?

SK: Oh, about six or seven hundred.

CH: Really?

SK: Yeah.

CH: So this was a pretty sizeable plant?

SK: Oh, we had quite a plant – quite a plant,

CH: Now, did you do any game design before the war?

SK: Oh, sure – sure.

CH: And what was your first game?

SK: The first game that I had complete design of was in 1947 and (19)48.

CH: OK, so that was after the war then. So before the war, Harvey was doing all the game design?

SK: I was helping him, and I never had a complete chart, but I had complete control of all the electrical work on it. I did all the electrical layouts of all the games.

CH: Did you have to draw all the schematics to?

SK: Yes we had lots of schematics. I still have some of them here.

CH: And you had to do all those drawings by hand?

SK: Yep.

CH: And that was you that was doing that?

SK: Yep.

CH: Now, tell me about Harvey.

SK: Harvey Heiss was with Genco starting way back in 1931 – 32. And he was with them from the beginning and he worked only part time because he had a regular job. But then when they started getting into making Pin Games, real good Pin Games, they hired him – completely took him away from his (regular) job - and that's when he started working and building nothing but Pin Games. That's why when I came in there in 1937, he was so glad to get somebody in there that wasn't a dummy (laughter) and at the same time he was training me and showing me how he built games and what he liked about the games, and what was the purpose of building games with certain features – I learned all of that from him.

CH: Now, what about the Ginsburg brothers? Did you know them?

SK: Oh, Lou, Dave, and Meyer – yes, three of them.

CH: And were they nice guys?

SK: Oh, everyone of them was terrific.

CH: Were they real smart guys? Did they do any game design or were they just strictly management?

SK: They were management and nothing else.

CH: nothing else.

SK: But they were very, very, very smart. They were the smartest, Jewish guys in the world. What they did was, what they gave us was annuity policies. What would happen is, whatever you were getting paid, there was a certain fee they would give you on an annuity policy and they'd say well "This policy is worth so much and so much, and we're gonna put in so much and so much, and you put in so much and so much and we will duplicate that."

CH: Matching.

SK: Matching. Right and the annuity policy had big values – lot higher values. And every time we got an increase, another new policy. Every time we got an increase, another new policy. These policies would be worth only good money if you stayed with it for 10 years. So, you didn't leave the place. Who the hell would want to leave the place when you got these god damn policies? Ten years – every time you'd get one – ten years. Another one – ten years. Another one – ten years. So now you got these things - you can't BELIEVE how much money was held into these annuity policies when we all decided...when we all left.

CH: So basically they were – they had like almost a forced savings program, with a matching percentage. It's actually a pretty good idea.

SK: Yeah. No other company had it.

CH: Interesting. Interesting. So, during the war you're making Walkie-Talkies. So all the Pin Game stuff was basically on hold, right?

SK: No way we could build those games because we couldn't get materials. We couldn't get silver contacts. We couldn't get the materials for the blades. But they let you keep building it until you ran out of the materials you had in stock. But there was no way you could buy it or get any additional material.

CH: And when did the inventories run out?

SK: After about one or two games – two games.

CH: So by early (19)42, you were basically Full War making Walkie-Talkies. Now when did the Walkie-Talkie thing stop?

SK: That stopped when we got other jobs. We did a lot of other jobs besides that. Aw, there's so many other jobs that I can't begin to tell you...

CH: You mean during the war.

SK: Yeah.

CH: OK. So then, after the summer of (19)45, the War's over, you know after August of (19)45, when did production of Pin Games, where you could get materials and inventory...

SK: (19)46.

CH: 1946. So it took a good six months before you could start making games again.

SK: Yeah, we were already making games in (19)45 but we weren't selling them till (19)46.

CH: You mean you had them all designed, ready to go,

SK: Yeah.

CH: and then you just had to wait until you could get the materials.

SK: Yes.

CH: So, was that a rough time, between, like you know, the summer of (19)45 and the start of (19)46, that kind of lapse?

SK: No. No it wasn't because we started hiring more people. We were losing people, slowly, but then we started hiring people – people that could be trained to assemble equipment. That was very important. It was different that just soldering.

CH: OK. In (19)46 what was the first game after the War that, you know, really started to sell good for Genco?

SK: Total Roll. A roll down game.

CH: The roll down game – Genco was really big on roll down games. What's the history on that? It seems like they made more roll down games than anyone else. I mean maybe United had a couple...

SK: Nobody - Nobody could duplicate it.

CH: Why?

SK: Why? Because we were the only company in the entire industry that worked everything in the coils on D.C. (Direct Current) We were not A.C. (Alternating Current) Everything was D.C. First of all with rectifiers...

CH: Yeah, the selenium rectifiers.

SK: Yeah, yeah, right.... Ah, before the selenium they were No the selenium rectifiers didn't come in until after the War.

CH: OK

SK: That's when we were able to make 'em. And since I was in charge of electrical work I was able to do tricks with the coils that nobody in the industry could do.

CH: Well, what was the big advantage, at the time, of the D.C. power coils vs the A.C.?

SK: Well first of all we didn't have to have a motor to run all the equipment. I could run it just by the coils, with the relays operating to do the work that we wanted. How could I control it? No trouble at all. I learned how to put copper washers on either the front end or the back side of the relays – one place to

hold it and the other place to delay it going in. So I had all kinds of effects and coils that I could have in the industry. We were the ONLY ONES, all the way to the end, that had D.C. in our games.

CH: Yeah, it wasn't until the (19)70's that Williams and Bally started doing selected coils D.C. Now, why was none of the other companies...

SK: Because they couldn't afford to change. They couldn't afford to change. Because they would (have to) change all the coils, all the relays, all the step-up units – everything would have to be changed.

CH: Right. All the coil stops – yeah the mechanics. Right. And I also noticed that Genco games ran at lower voltage too, like Gottliebs were running 25 volts for the solenoid and Williams was largely at 50, and you guys were about at 20 volts.

SK: Yeah, we were down to 20 and 15 volts.

CH: Right. And that's because the advantage of the D.C. allowed you to do that.

SK: That's right. We were able to do tricks with them that nobody else could – even the A.C.'s

CH: OK, so I got a print out from the Internet Pinball Database of all the games that THEY say you designed. And they say that the first one you did was in the fall of (19)47 and that was Bronco.

SK: No, that was Triple Action..... I'm sorry...hold it, hold it... Bronco? Say that again?

CH: They say that Bronco came out before Triple Action.

SK: Well I had nothing to do with it, ah..

CH: That wasn't your game?

SK: Yeah, I had a lot to do with it - you see – let me tell you something.

(pause)

In October of 1947 Gottlieb came out with Humpty Dumpty.

CH: Right.

SK: Six flippers – (obviously pointing) Two, Two, Two. (pointing again) Two, Two, Two. Comes December – first week in December, Harvey Heiss is hospitalized – cannot design a game. And they came to me and said "You've got to design a game and our Show is the last week in January! That's only 7 weeks away. You have to design a game for us, for the Show!"

CH: And that's when you did Triple Action.

SK: So then I started working on a game. And everyone always asked of me, "Why didn't you put the flippers where Gottlieb put them?" They had them 2 here, 2 here, and 2 here, and it was selling like all hell, no trouble at all. It was making tremendous money. I said, when I started building, designing my game, I said I couldn't afford to put in 4 or 5 or 6 flippers on a game. I was taught by Harvey Heiss to be as conservative as I could be. I said I'm gonna put (in) only 2 flippers and I put 'em at the bottom of the game where they have been ever since.

CH: During this time, I know you weren't working at Williams but Williams started using impulse flippers. You know where you press... it didn't matter whether if you pressed the right side or the left side,

SK: right

CH: you press either one. Both flippers flip but they just go up and come down - up and down real quick – you know you just press them and they impulse up – where Gottlieb, and just about everybody else, you could hold the flipper buttons in, and you can keep... you know there was an end of stroke switch on the coil and you could hold the flipper up.

SK: And that's what we did. We did too.

CH: Right and everybody but Williams did that. Any idea why they would have done that?

SK: I don't know.

CH: I'm just curious if you knew those....

SK: It's a lot more fun trapping a ball with a single flipper.

CH: That's what I thought too but they made it basically so you couldn't do that and I know that it was long before you were at Williams but I thought maybe you had some insight as to why Williams used these impulse flippers.

SK: No. That's all when Harry Williams was there. I started in 1960.

CH: Right, and that was when Harry was going out, you were coming in, right?

SK: Yeah right..

CH: Because you became the head game designer.

SK: That's when Harry Mabs was there. He's the one that designed the flippers for Gottlieb you know,

CH: right

SK: and he was old, he was already 70 some years old and he didn't... he was losing it and they wanted (someone) to replace him and they stuck me in there and they gave me a green good salary and I says "OK, I'll take it" in order to get in there. So that's how I got involved with Sam Stern.

CH: Now, during the (19)50's with Genco, was there any particular game that was really memorable – be it pinball or arcade – because you also helped work on – Genco had some unbelievable arcade games during that period too – their gun games, Motorama – two player basketball – champion baseball – high fly baseball...

SK: Just a second...

(CH: At this point, Steve has a 3 ring binder with pictures and information on all the games he designed for Genco through out the 1950's and I kinda go through it.)

CH: Space ??? gun game...

SK: That's all pin games after that. There it is.

CH: What's Kismet? It says Partial...

SK: The reason I say partial is because that's the one that was started by Harry Mabs before he left.

CH: Ah, OK.

SK: He had trouble getting completes when he left. And since he started it, I kinda like to always put on there and say something that at least he had something to do with it you know..

CH: Right, right, OK. Now, Genco Quarterback. I've been trying to find that games forever.

SK: Would you like to see what it looks like?

CH: Why, you have one? !! You have a Genco Quarterback? (pause – nervous laughter) You're giving me that look – I don't know what that means!

SK: I gotta keep taking pictures first of all.

CH: (laughter) So now, the Golden Nugget and the Silver Chest – those were roll downs right?

SK: right

CH: OK Sky Diver, that was a gun game. A really cool looking gun game.

SK: yeah

CH: Ahm, I don't think I've ever seen Night Fighter. Invader I've seen. Ahm, Shuffle Pool, what was Shuffle Pool? That one I'm not familiar with.

SK: Reflected see. You see these light bulbs, pool balls? You shot and what ever you knocked out, they reflected on here, from the top.

CH: So the pool balls were underneath this deck and the player didn't see them and then through reflective light, they reflected down on this almost mirror type surface?

SK: That's correct. Right.

CH: So this is like Pinball 2000 in 1953! (laughter)

SK: That's right, right. Look, look at that....

CH: Now did you design the entire....

SK: I had something to do with this myself, with Harvey Heiss.

CH: Huh. I never even seen this game – Shuffle Pool. That's really cool.

SK: There's a lot of other games you didn't see.

CH: Well – so we got Genco Golden Nugget, roll down - Silver Chest, roll down.

(CH: Just to clarify. A roll down game is a sort of slanted, long playfield that uses 3 inch balls and you basically roll the ball down this long playfield and at the end of the playfield there's holes that you're trying to actually aim for and it's largely a gambling game. If you want some more information on them you can hear about the roll down games that Rob Berk owns that were made by Genco in the 1950's in our Rob Berk interview.)

CH: Sky Diver, Night Fighter, Invader – those were all gun games. Shuffle Pool we just looked at – Match Pool was probably similar, right?

SK: Yes

CH: Two player basketball, rifle gallery.

SK: right

CH: Big Top, rifle gallery. Wild West, 1955

SK: right

CH: Sky Rocket, rifle gallery 1955. Champion, two player basketball, Quarterback, both 1955.

Tournament Pool, Deluxe Tournament Pool, Super Big Top, rifle gallery. And Squirrel Pool in December (19)55. So you did most of this stuff – it was (19)53 to (19)55?

SK: That's right. Here... (flipping more pages)

CH: Oh, ...it keeps going. Sorry (laughter) Should a known! (more pages) Should a known. The list did not end there!

SK: Darn right it didn't.

CH: OK, so then in (19)56 you're in Deluxe Tournament Pool – (more shuffling of paper) oh! (pause) well talk about that in just a second. Wait a minute, King size Tournament Pool, Super Deluxe Pool, ah Baseball Pool, Grandma Fortune Teller. So the pedestal Grandma Fortune Teller and High Fly Baseball in (19)56, you did both of those?

SK: right

CH: And then Marks Light, which was a magnesium top pool game. State Fair, rifle. Davy Crockett – that's a cool gun game. Official Skill Ball. Official Skill Ball 2 player and 6 player. Circus Rifle Gallery. Rotation Pool. Gypsy Grandma which was the Horoscope Gypsy Grandma, the one in the more squared-off, rectangle cabinet.

SK: Hm Hm

CH: Ahh, the Davy Crockett Junior model. Super 21. Oh there it is, Fortune Teller Horoscope, that's September (19)57. Motorama, which is an unbelievable game. Showboat. And then Gun Club. Fun Fair. Space Age. And Flying Aces. Now, Flying Aces. Did they even make flying aces?

SK: Who me?

CH: Well, did Genco....? I thought Space Age was like the last game before CCM (Chicago Coin Manufacturing) bought them.

SK: Would you like to see a picture of one?

CH: Yeah! Yeah, because you got `em all. (laughter) You're such a tease! (more laughter)

SK: Just want to show you something more...

CH: Now wait, here's a picture of probably the famous arcade game ever made. I mean, really.

SK: Oh yeah.

CH: The Genco 2 player Basketball. Probably the most fun, too. I have one of these. This game is unbelievably cool. Not only because it's head to head, but it blew away the Chicago Coin version because basically the Chicago Coin version, the guys, you couldn't turn them. The machine turned the guys. And the only thing you could vary was timing and how hard you pulled the shot. On this one you can aim them right and left, you can shoot for the opposing player baskets, in the top upper level baskets, and the lower level that have variable point scoring – this game was genius. And...

SK: We know that.

CH: ..and this is your baby?

SK: Well, we both worked on it.

CH: Harvey and you?

SK: yeah

CH: OK. But I mean who....

SK: Just remember there was a period of time here when Harvey Heiss was gone and we had either talked about it or decided together and we finished it up. (looking through the book) Now look at this.

CH: This one right here?

SK: What is that?

CH: I don't know. You're gonna tell though aren't ya? (pause) I'm not sure what that is. It's like a roll down style cabinet but.... that's Flying Aces? (pause) Huh, now who owns that game?

SK: Somebody owned it and sent that to me.

CH: Wow. I've never even seen that game.

SK: See, look, there it is, look.

CH: oh, Space Age... oh, that one there. This is another incredibly cool game.

SK: I had this – I had everything to do with...

CH: Space Age? It's the one game I've never been able to find.

SK: It's not a Space Age.. it's a Motorama.... And a Space Age. Space Age is this one, you see?

CH: right

SK: And then I had here....this one right here...(pause, mumbling while shuffling more pages) This is the one I had – enjoyed more than anything else – right here.

CH: What, the Motorama?

SK: Yeah. There it is.

CH: Oh yeah, Motorama?

SK: yeah

CH: Classic game!

SK: Yeah. Boy, is that a great day. I didn't look at Genco all the way across. OK, what else do you want to know?

CH: OK. Let's back up and talk about the 2 player basket ball.

SK: OK

CH: Do you have any good stories.....Oh here, let's sit down, we don't need to be standing up for this, right?

SK: Well, about a dozen of these games - and one of these I gave to my brother-in-law and he still has it.

CH: Aw, Baseball Pool. That's one I've never seen.

SK: Neither did ah...this., Robert Berk.

CH: Rob Berk's never seen this one either?

SK: Yeah, when he saw this, he almost passed out. He said, "Where's this game?" I said, "It's up near Crystal Lake in Chicago.

CH: Huh. That IS really cool. That's incredible! Where, I mean.... and you made this game and you gave it to you brother?

SK: Yeah, well we made about a half a dozen of these games and I figured, what the hell, instead of selling it, I packed it up and gave it to my brother-in-law.

CH: And, you mean, you only made six, in total?

SK: About a dozen.... I don't know how many we made. We didn't make too many of them - let's say we made a hundred of them...OK.

CH: aw, my god... I never even seen that flyer. Where did the flyer come from? Did you save that from when you were there?

SK: Yeah, I found this among my junk file.

CH: Wait, hold on.....

SK: We made the game but Chicago Coin.... read on the bottom.... we gave it to his son...

CH: Yeah, it says a "Genco Massage-o-matic. A Genco product manufactured by Chicago Dynamics", which was, of course, Chicago Coin.

SK: right

CH: Now this was a coin operated massage thing? I mean what is this exactly?

SK: I don't know what the hell it was.

CH: (laughter)

SK: One of our designers made that and then it was turned over.

CH: Now what about.... this is another kind of interesting one.... Jumping Jack?

SK: Oh yeah, we made that - we made a lot of those..

CH: Is this like a slot machine?

SK: It was like a gambling game.

CH: OK...huh... and then the Shuffle Pool, we talked about that. The Genco 2 player Basketball, I don't really want to talk about the Genco 2 player.... "Genco's new moving style swinging player."

SK: (laughter)

CH: What's this all about?

SK: Somebody on the east coast said you guys are bragging about swinging everything else, now we want to show you what it looks like to have something like this.

CH: So, who's brain child was this?

SK: Somebody on the east coast in New Jersey.

CH: In New Jersey, huh. OK. (flipping pages) And then we got the Wild West gallery...

SK: You better (get a) good look at these because they may not have this thing in another month.

CH: And here is the Quarterback.

SK: Yep. That's the one you were talking about.

CH: Yeah, and this game - incredibly hard to find.

SK: Yep.

CH: And then the Horoscope pedestal Grandma.

SK: I just want you to know that a lot of those games are hard to find.

CH: Motorama of course. (flipping pages) Showboat. Gun Club gun game, not to be confused with the Williams Gun Club pinball. Fun Fair, which, I just bought a Fun Fair.

SK: yeah

CH: That's kind of a cool game.

SK: yeah

CH: Space Age though....

SK: That is something!
CH: That game, that game's awesome.
SK: That is something!
CH: And it's built in a Motorama cabinet but I mean.... This was your baby? Space Age?
SK: Yeah, right
CH: Now, why the Motorama cabinet? - compared to using whatever, you know, a different design.
SK: Well, because we had to do an automobile here, we had to use something to ride around. The same thing I did that with, ah, what was the other one I made?
CH: Oh ah, Motorama and Jet Pilot.
SK: See the Space Age had a puck in here, see?
CH: Right, and you push the puck...
SK: When you push the puck into all these different places see...
CH: And then it spits it back out.
SK: Yeah right
CH: And you gotta take it to the next,
SK: Yeah, right right
CH: the next location, you know what, there was 1..2.... there was 5 - 5 spots and you had a limited amount of time to do this in.
SK: And the location you had to do it. You couldn't just...
CH: Right, in order. In order. Right. Right. And uh, yeah I've heard that this.... I've only known of one of these.... I've only ever seen one. I don't know who owns it now but Larry Bieza had one of these.
SK: Is that right?
CH: Yeah and, he sent me pictures and I was just like in awe. I guess there is another one in Europe too, that I've seen pictures of, but those are the only two I've ever seen. Now Motorama, you see a lot more of.
SK: uh huh
CH: Now, did you have anything to do with Jet Pilot? Jet Pilot was also in this style, in the Motorama cabinet, but it was a jet fighter that went around in circles and landed on the cities.
SK: right
CH: Or was that Harvey's
SK: I don't know. I can't remember it cause we did a lot of our stuff for ourselves you know.
CH: (flipping pages) Flying Aces, only four units known to exist... huh.... Wow.
SK: See this here, you see this name - Screwball, in 1948. It played well. Made good money. And there's not too many of them around any more.
CH: Right... yeah... good game
SK: I'm listening
CH: OK, so now - 2 player basketball - explain, where did you guys come up with that?
SK: Well, 2 player basketball, it was just one of those crazy things that, hey, basketball's a popular thing, lets do something on basketball you know. Though baseball, everybody's making baseball, baseball, lets make a basketball game. So we made a basketball game, and put it together, and it cost us a lot of money to make those little characters that were down on the bottom there that could pick up the ball and toss it. But the secret of the whole thing was how to hit that ball to go into the hands to the guy to shoot you know.
CH: right
SK: That was something that Harvey Heiss was good at and developed. But we had a man called Harry Thompson, T-H-O-M-P-S-O-N, a German mechanical engineer - was he terrific! He just figured out how to do the thing and helped us to put it together.
CH: Yeah, because there is a center tube, where the balls come up,
SK: right right
CH: and it alternates, right to left, right to left - really ingenious little mechanism. Simple, but ingenious.
SK: But it worked!
CH: Oh yeah, it works good!
SK: ...and then bingo, you toss it up there to try get it...
CH: Right, and if you put it in you opponent's basket, your opponent gets the points which I thought was Genius!
SK: That's right (chuckle)

CH: You know, because you are not only rewarded for a good shot, you were also penalized for a bad shot.

SK: That's correct. You get points for the other man.

CH: That's right. Which I thought was just genius – true genius.

SK: We got a real good kick out of that, yeah.

CH: And that game sold well, right?

SK: Yeah, it sold very well.

CH: OK, now, the gun games that you did, I mean, tell me about those...

SK: Well what happened is, we got to a position/situation one time where we thought we could make...when we saw original layout of some games with balls popping and stuff like that...we figured we could make a game with guns, and shoot for something moving around you know, and that's where we started. Our biggest product was the rifles. So we got in touch with Remington. And Remington said they would sell us them because we could use, not 1 or 2 of them but, hundreds of them see.

CH: right

SK: So they said, "Well, we'll sell you rejects". And to me, we didn't even know they were rejects. We paid only \$14 for the rifle – that's all. Fourteen dollars for a finished rifle that was welded so that you couldn't put shells into it.

CH: You mean, so the bolt couldn't lift up. The bolt was welded closed.

SK: That's correct. Right right

CH: And did it have the trigger mechanism and everything?

SK: Well, we put that trigger in ourselves.

CH: With the switch – you guys did that. OK. So you're doing these gun games and Genco did a bunch of the classic ones.

SK: Oh, we started making... We were making one-game-after-the-other. It was unbelievable the number of games that we built. We had a real good run of (gun) games. Where other companies were making baseball games and stuff like that, we decided to stay with the guns because kids love to shoot.

CH: oh yeah

SK: And then the best thing was the characters that we had in shooting. It got to a point where one time we even patented it. And I have the patent on that too. We were shooting a rolling ball (pause) you follow what I mean?

CH: Right, on a rail or something.

SK: Let's see – the ball would come up and then when it would let go, it would roll down and you could shoot it there, then it would go (back) in the other direction, and you could shoot it – if you could hit the ball as it (was), right at that position, the ball would drop down. And that was something I had a patent on it.

CH: huh

SK: And then we started making something that was even more exciting in my (estimation). We made pipes going around you know. When you knocked down the Pipes, five Pipes going around, when you knocked all them down you got a special score.

CH: huh OK Now, tell me about Motorama. That was your baby or Harvey's?

SK: Well Harvey Heiss and I started putting it together. And when he left I finished it and then I made the follow up to it.

CH: Right, the Space Age.

SK: yeah right

CH: The Space Age. Now, you used like a (19)57, I wanna say Dodge, for the car, you know in Motorama that drove around. I mean how did you guys come up with... I mean did you just like say, "We're going down to the store and get some toys!"

SK: We worked with what we could buy. All these things were not available you know. We grabbed what we could get....

CH: And it's interesting how the steering wheel actually moves the front wheels right and left.

SK: right right

CH: And then you got control for forward and back.

SK: That's right

CH: And you're trying to move, basically, to the different lighted playfield inserts all through out the game.

SK: We could talk about people today, telling how we did it – they don't believe it. I'd like to see that game.

CH: It's hard to visualize if you've never seen one.

SK: That's right. I believe ya.

CH: Tim Arnold has one and I played it. He has a Motorama and...

SK: When were you there?

CH: Ahh, that was maybe 3 years ago.

SK: Oh, I see.

CH: You know and he's got a Motorama. Now I don't know if he has it at the Pinball Hall of Fame. That I don't remember. But, he's got one. You know, Rob Berk has one. He bought that from Mr. Pacak. So now, what about the Baseballs. The High Fly Baseball, the Champion Baseball, and then the Quarterback, which used the Champion Baseball cabinet but the guy actually kicks the ball. Tell me about those.

SK: Well, you see, Harvey Heiss was good at something like that and when it came to mechanical layout, you know, and he was good at coming up with kicking and boy, he'd work like a dog to get it working. He'd stay day and night in the place just to get it working, ya know. And that took time. You just couldn't put it together and say you have it, you know. You just want to remember that the greatest baseball games were made by Harry Williams for Williams you know. And when I joined Williams and Sam Stern was in charge, every Spring he had to come out with a new Baseball game. We made game, game, game, game – Spring came, another new Baseball game. Spring, Spring, Spring – another new Baseball game. Then they got so good, they started making one for the Spring and one for the Fall, you know. And Baseball games were selling like all hell because it was a popular deal, you know.

CH: But to be honest with you, I think the Genco baseballs are way better than the Williams.

SK: Oh yeah, we had one heck of a time.

CH: Well the unique thing about High Fly and Champion is that, kinda like 2 player basketball, it uses the same ball, it goes up the tube, and then rolls down a little incline and you actually have a miniaturized wooden bat that actually you swing. And it comes off the railing and free falls in front of the bat like real baseball. It's kinda like T-ball, almost-type-thing. I just thought that's so ingenious. Now, was that you or Harvey that..

SK: Harvey did that.

CH: That was Harvey. OK. So you did that on High Fly, which was basically a pinball style cabinet, and then you went to Champion, which was the same cabinet as your Quarterback - that thing is HUGE. That thing is a monster!

SK: Well, I did all the electrical work on that. That's were the fun came in....

CH: Yeah, the Quarterback, the only one I've ever seen is ahm... Gold at Cleveland Coin had one.

SK: Oh, I see.

CH: I don't know who bought it.... oh, I know who bought it. Papa bought it. That John Papa guy bought it and that was about a year ago – cause Pacak dug it up, and that's the only one I've ever seen.

SK: That's good

CH: That's a hard game to come by. OK now, what about the Horoscope Grandma. You know, the Horoscope Grandma and the Pedestal Grandma. Was that your baby too?

SK: No, Harvey and I worked on that together and my wife made all the dresses for these things.

CH: Aww really!

SK: Yeah, she made all the dresses for the Grandma.

CH: Aww, that's great!

SK: She was, she was good at that you know.

CH: Now, the hat on the Grandma, was she modeled after anybody?

SK: No, not that I know of.

CH: OK I didn't know... because I imagine you had to have that made, right?

SK: yeah yeah

CH: Yeah, I didn't know if you had a model or something but those are among, after post War, those are the most animated fortune tellers that anybody made.

SK: Absolutely, yeah

CH: And the cutest too because they weren't huge.

SK: That's correct. They were nice... and good look(ing)... good too

CH: Oh yeah, really good looking. And you had the microphone on the front glass which was just a wood thing made to look like a microphone but it was really... it's funny because I have one of the Pedestal ones at my house, and it's got that microphone, I see people like trying to talk into it and I'm like, "No, no, it's not really a microphone! She can't hear ya." But I mean it was well enough implemented...

SK: to attract attention

CH: Yeah, to attract attention and people actually think it's a real microphone. You should see them – they're trying to talk to a one foot tall lady (laughing) behind the glass! It's hilarious, so....

CH: Now, in (19)58, Genco got bought out by Chicago Coin. Right?

SK: Say that again?

CH: In 1958, after a State Fair, Genco got bought out by Chicago Coin, right?

SK: No.

CH: OK, tell me what happened then.

SK: What happened is they transferred all of our Genco engineering staff into Chicago Coin and we manufactured gun games under our Genco name, right in Chicago. They had nothing to do with it. We were working separately and getting the same salary that we were getting as working for Genco. Well it got to a point, after a year or so, they couldn't afford to pay us anymore, and at the same time, they liked our gun games so well, they started building gun games. We were good at making gun games and they grabbed the gun games and they started making the gun games. And so, they decided to let us all go. That's when the big change took place.

CH: How did this marriage between Chicago Coin.... Because it seems like Genco just kinda.... (19)58 (19)59.... Genco just kinda evaporated... I don't understand how that happened or why that happened. So you're basically designing gun games for Chicago Coin.

SK: No, for Genco

CH: For Genco but Chicago Coin's making them? I guess I'm confused.

SK: Yeah sure, they were making them for us... they had the staff for making it.

CH: But after (19)58 (19)59 there's nothing by Genco anymore, so they just basically absorbed you guys and then let you go?

SK: Well, see (19)58 is when we made our last... when I made my last game. When I made my last game in July of (19)58, they let us go.

CH: They did let you go.

SK: Yeah. So then we had a problem. I had a very, very serious problem. There were four of us - myself, my electrical man John Barrington, my mechanical man Harry Thompson, and John Murphy who used to take care of our equipment on the line – follow me?

CH: right

SK: So they let us go. Everybody wanted to hire me. Everybody wanted to give me a hell of a salary to start. Every where I went I said, "If you want me you got to take all four of us."

CH: You got to take the whole Design Team.

SK: All four You'd be surprised that one of the first businesses we were good at making gun games. The first place I went to was Seeburg. And the reason I went to Seeburg is because they were making some real great gun games at one time. But when they make a gun game that they had to burn a thousand of them in their back yard because they wouldn't sell, and it was called Coon Hunt...

CH: right

SK: ...a raccoon going up...

CH: up the poles

SK: up the pole – they couldn't sell them in the South. How are you gonna sell a "Coon Hunt" game in the South? So when I went there and I knew they blew it, I introduced myself to them, said I had a stack of guys that know how to make gun games real good and we'd like to be hired out to you to make gun games. Well, they were very serious about it – they were glad. But after serious consideration on the Board of Directors, they had such a bad reputation, they didn't think they could sell another gun game no matter what happened. They were sorry they couldn't take us.

CH: Right, and the Coon Hunt I think was (19)55 or (19)56 and was a rail like game - which means basically the gun is a big flashlight and then the coons had little sensors in them and then it had like a juke box amplifier. And it actually made sound, when you hit a coon and it squealed, and through this juke box amplifier. And it was a tube amplifier, which was just incredible because the thing probably had to warm up when you turned it on (laughter).

CH: OK, so you go to Seeburg. And you want your whole Design Team – you want to bring your whole Design Team with you.

SK: Yeah, well they didn't even want to think about making another gun game so that took care of it.

CH: So that ended that real quick.

SK: Well, the next person that contacted me was Lynn Durrant from United. And he wanted me badly. He was the guy that was doing most of the pushing (of) the games and he didn't have time to do it. He

wanted somebody to take care.... He took me to his (place) he had there and introduced me to the babes(?) that were there.

CH: Cause United had designed some gun games – not as good as your games.

SK: No, I know it.... And he wanted to hire me. He said he'd hire me but he couldn't take the other 3 guys.... I said sorry, but I feel so responsible for.... I can have no trouble getting a job. But these guys will have a hell of a (time) getting jobs. Where are you going to get it after working all these years with me at Genco?...and we're so good.

CH: So, how did you end up at Williams?

SK: So....wait a minute (Clay chuckles) listen to me, listen to me. (pause) So, what happened? I didn't know where else to go. So I went over to see my good friend at Bally....ahh...what's his name? (much discussion at trying to remember his name) I'll think of it in a minute...(continuing) I went over to see this friend of mine – he was running it – the owner of Bally! (Steve's sounding incredulous because he can't remember his name) I went over to see him. I said...."I have a problem." He said, "What's your problem Steve?" I said I got three guys with me, that's four of us, when we were laid off from Genco. And I'm trying to get a job. I have no trouble at all because of my background in pin games, everybody wants me. But nobody wants to take these three guys. You know what he said to me? "I'll take all four of you."

CH: Really?

SK: All four of you. "And you start working on some gun games...." I said, very good - now I got a job working for BILL O'DONALD ! (Steve has finally remembered his name) And he went ahead and put me on the job and I'm working – OK?

CH: So you were...

SK: Now wait a minute – just a second. Now this is the end of (19)58.... And I'm there almost...till the end of (19)59. (pause) In the meantime...Harry Williams is being bought up by Sam Stern. Sam Stern's got...ahh...Harry Mabs. He was getting....He's old already, not been doing very well. In these situations they never approach a guy that they want. They send somebody, ya know. Somebody says to me. "Hey Steve, why don't you call up Sam Stern? He's been looking for a designer and he might be interested. Why don't you call him" I said, "No, I don't want to call him." Well he said, "Listen, he can't call you – you know that's not the way...(Clay laughs) Why don't you just call him and talk to him." OK, I called Sam Stern. He gave me a terrific offer – terrific offer. And of course I didn't get the kind of salary I would have like to have gotten when I went to Bally in order to get these four guys in, you know.

CH: right

SK: So I said, I don't know. I haven't got a contract with Bally but I was hired by Bally so here I am. So this was now, already the beginning of 1960. I went over to Bill O'Donald. I says, "Bill, I got a problem." "Oh, you got another problem again? What's your problem this time?" (Clay laughs) I says, "Bill, you know that when I came here, I came here with this group of guys, we built a couple of games for you – and basically pin games was my background – and I was getting a very good offer by Sam Stern." And I told him who – I was very honest. And I said, "He didn't contact me. I had just heard that the man that he had working for him (Harry Mabs) was gonna be leaving. And I just contacted him to find out if there's a possibility for me to have pin games (work)." And he made me a very, very good offer. He said, "Steve, tell you what I'll do. You go ahead and take that job. But don't you dare take anyone of the three guys that you brought here with you."

CH: Aw, this is the perfect Escape Clause...

SK: Because there were three guys that really got themselves working in that place and did you know they worked there for years and years and years and each one of the guys retired from Bally!?

CH: wow

SK: Each one of the guys retired from Bally. And he let me go to...Williams. And I started working there in February of 1960.

CH: So, what was the first game that you really remember in 1960 that you designed?

SK: ...you saw that in the picture...it wasn't a gun game. The first game was....

CH: Right, the Space Glider...

SK: right..

CH: ...which is the balls that pop up, and you shoot....

SK: I donated that because they already had a good reputation in the balls popping and Sam Stern said, "We wanted to make another one and we wanted you to make it." And I said, "Well, can I make it my own self (sic) and on the inside do what I like to do?" I did. And I buttons on the sides so when the ball would bounce, it would bounce off the buttons and do some scoring too, you know. He liked that so they

made that game.... So in the meantime, I was working and getting together to make pin games because Harry Mabs was already working on one game, Kismet, that I told you about. And he couldn't get it finished, just didn't get it working and everything else and I was trying to help him out. In the meantime I was trying....starting working on my own game. And the first game I made was Bobo.

CH: Now Bobo is in that funky cabinet, the drink cabinet, because it's got like a bench where you can set your beers while you're playing pinball. The "Space Age Cabinet" as Williams called it. What did you think of that cabinet design? Did you like that?

SK: I didn't care about the cabinet. I was only interested in making a game. I didn't....

CH: OK the cabinet - you had nothing to do with the cabinet.

SK: Hell no I didn't. So (pause) first year that I'm there in 1960 I made the Space Glider. I was working on it with (Harry) Mabs...on his Kismet you know, and he finally said. "I gotta quit, I'm going.." He went to Hollywood in Florida and I visited him several times, you know. And then what happened is I came out with the first game, Bobo in 1961, and in 1961 I made (counting) 1, 2, 3, 4, 5, 6, 7, 8, 9 games with Kismet. In 1962 I came out with (again counting) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 games.

CH: So you're making a game a month almost.

SK: Oh sure....we were making 300, 400 games of a run. And then (when we're) through with the run, and then they send everybody home, until the next game was ready, and then out they would go.

CH: Now, at this time, Harry Williams was gone at this point, right?

SK: yep

CH: So basically you replaced him, really...

SK: yeah

CH: So you never really got to work with Harry, right?

SK: Right, yeah, but I want you to remember that....that the money that Sam Stern paid Harry Williams for the company made him very embarrassed so he kept him on a design deal while he was working in California, and he would occasionally send me drawings or something - I never used it except one - cause I was good enough to build my own games. I said to hell with this guy, I didn't want to use his games, and I kept all those drawing of his and their all filed away. And I went ahead, and kept going. And then I had one of the people in design and engineering for putting games into production was Norm Clark.

CH: right

SK: And then Sam Stern said, "You can't keep doing (by) yourself all these games." Here - 1963 I got (again counting) 1, 2, 3, 4, 5, 6, 7, 8, 9 games. Well I said I gotta get the hell out of this thing - get someone to help me because I can't keep going the way I'm going. So then...I got Norm Clark to build games. And when he started making games then we alternated after awhile and everything worked out very good.

CH: Now, when Harry left the company, he started Southland Engineering in California.

SK: Yeah he worked over there.

CH: How did Sam Stern feel about Harry doing that, basically leaving the company but then he opens, kind of a competing company....

SK: But he never made any pin games.

CH: Right. He made arcade games.

SK: yeah

CH: He made....well, for instance Williams mini-gold was really modeled after Southland Engineering Little Pro. Do you know the story behind that at all?

SK: No No

CH: So, Sam Stern didn't have any problem with Harry doing this. It was OK.

SK: That's right.

CH: OK. So these guys were on good terms.

SK: And I was on good terms with Harry Williams too. Every time I'd go to California I'd visit him. And I got to visit with his wife. This was his third wife and she was of Polish extraction. My wife was from Poland. So when they got together they spoke Polish like two people that knew each other for years! (Clay laughs) Every time we went to California to visit my daughter we'd go, after Harry Williams' died, we went to visit her. And she's still alive in Palm Springs.

CH: So now, during the (19)60's, was there any particular game or era that was your favorite when you were designing? Because at the end, if you add up all the games you designed, you designed over 100 pinball games. I'm not talking about arcade games or gun games, just pinball games. You designed over 100 games from Genco all the way through Williams. So was there a particular era, or a feature, or a design - something that stands out in your mind as something you're really proud of.

SK: Well, the first thing I was most proud of was the Triple Action that I made through Genco with the two flippers at the bottom of the game. That was #1. The next thing I was most proud of when I made Space Mission and Space Odyssey. We made a record run of games at that time - 16,000.

CH: Sold the bejezzes out of that game....

SK: A four player game. And my next four player game was...was...ahh..(long pause)

CH: So Space Mission's the one you're really big and proud of.

SK: Oh yes. But I was just as proud, if not more proud, of the four player game right after that. And you know what was that game? Grand Prix. 12, 000 of them! 16,000 on one game, 12,000 the next run, four player game. That's the kind of reputation I had for making games.

CH: Well, Grand Prix is a great game. Personally I like Grand Prix a lot better than Space Mission.

SK: I like Grand Prix. I think Grand Prix is a GREAT GAME – with those scores on either side going up – and you build them up...I can tell you exactly how the game was....

CH: Oh yeah, I'm real familiar with the game....

SK: I would love....

CH: ...the two spinners on either side,

SK: yeah!

CH: the nice, tight pop bumper nest in the center...

SK: ohhhh!

CH: and you build the bonuses up the side

SK: ohhhh!

CH: drop it in the kick out holes. And it was also interesting, in that it was a game of incredible score. It was almost score inflation. I mean you would get a score of 5, 6, 7, 8 hundred thousand, where Space Mission or any of those other games, if you got over a hundred thousand you were pretty darn good.

SK: right right

CH: But on Grand Prix, man you could really get the points.

SK: That game – I loved that game.... Then about the last game, I'm not talking about a redemption game, the last game that I built for Williams, in my estimation, was one of the great, great games of the industry, and this is something that you have to understand when I tell you – that was Pokerino.

CH: Pokerino.

SK: Why is Pokerino such a great game? It was a wide body game and it had eleven carry over features on this game! Four player. And no matter what player it was on, whatever position he left his last game at, out of the eleven features on there he'd get it back....

CH: Right, it carried over to the next game.

SK: Eleven carryover features on Pokerino. Just remember that. That game, it took (in) so darn much money in Minnesota that the guy almost ran it, these games (by) themselves on location.

CH: You mean just Pokerino's.

SK: Only Pokerino's. That was my last game in (19)79.

CH: How many games did they make of Pokerino?

SK: Aw, I don't know. I don't know...

CH: But the production wasn't as high as say, Grand Prix right?

SK: Of course not.

CH: Grand Prix, that one really rocked and rolled and so did Space Mission. Now, you were the inventor of the swinging target right? That was yours.

SK: Yes, right.

CH: How did that come about? Cause that came about in the early (19)60's right?

SK: That's right. But the best thing I have of my design was that turning feature that went one quarter the way around, one target would be up and turn around and you hit it and then it moved...

CH: Are you talking about – it was almost like a 45 record album with two posts sticking out of it. And you hit it and it spins around? Is that what you mean?

SK: No, no, no, no, no, no. It was a

CH: What game did they use it on?

SK: (long pause) I'm trying to think...

(Clay pauses the interview then restarts)

CH: What we need to talk about is Add-A-Ball. Add-A-Ball came out...in (19)60? It was a pretty early game of yours, right?

SK: Yeah, we couldn't make it.

CH: Why?

SK: Gottlieb wouldn't let us.

CH: Awww... Did they...

SK: Just before that they came (out) with the feature Add-a-ball.

CH: Right. That they used on their flipper series.

SK: Yeah, but I said, If they can make an Add(a ball), why don't we call a game Add-A-Ball. When they saw our game on location, Add-A-Ball, they called Ginsberg and told him that they would not let us use the name Add-A-Ball.

CH: Right, and Add-A-Ball was 1961 and you changed the name to Skill Ball.

SK: That's correct.

CH: Were you basically kinda copying Gottlieb at that point? Or did you come up with this on your own.

SK: Oh shit no. We just came up with the Add-a-ball because it was a good feature. What the hell, it was a good feature...

CH: So you hadn't seen it anywhere else...

SK: No

CH: OK. Interesting. And was that your idea?

SK: Yeah

CH: The Add-a-ball?

SK: Yeah

CH: OK. Huh. And so it got changed to Skill Ball – Did that game earn well?

SK: Yeah, it worked out very good, it turned out very good.

CH: Yeah, I liked that game. That's kind of a cool game. The other one (flipping pages), what was the one I was looking for, ...Ahh...OK..here we are...Vagabond, 4 Roses, Mardi Gras, Big Deal...

SK: 4 Roses. Hey, get that 4 Roses out.

CH: 4 Roses. This is what you were talking about with the, with the spinner.

SK: There it is. There it is. See, you hit that and she turned around...

CH: Right. OK. So, it's kinda like a roto-target but laying flat like a record platter.

SK: See I had 1, 2, 3, and 4. Or I would have 1 thing, 2 things, 3 things, and a Star on another one and if you (slap sound), star was there you hit it (slap sound), you know.

CH: Right. And this is cool. This is a single player, reverse wedge head, game.

SK: This was one of the greatest games we ever sold to South America.

CH: Really?

SK: Yeah.

CH: Huh. I mean, did you design games specifically for other countries?

SK: No.

CH: It's just kind of how it worked out, right?

SK: Right right

CH: OK, now the swinging target. How did you come up with that idea?

SK: Well...(chuckles), that was something new and something different and we patented that and we kept it.

CH: Yeah, because that started in the early (19)60's and went all the way through...god..., you used that on Space Mission....

SK: Sure.

CH: ..you know. And with the side kickers, you know if you got the ball in the side kickers at the right time, it would nail the swinging target just right, and then you would advance the lights right in front of the swinging target for the big points. Now here's another classic that you did. The Heat Wave. Any good stories about Heat Wave?

SK: Yeah.

CH: Tell me about that....1964...reverse wedge head...single player...classic EM. CLASSIC EM...with the thermometer in the backglass, so you had backglass animation.

SK: Yeah, yeah. That was something new and something different. Everybody liked that. So I said, Well, lets make another one comparable to that.

CH: Yeah, Heat Wave was a real good game. Ahmm, I'm trying to see what other ones, oh, oh, tell me about..Ski Club and Alpine Club. A friend of mine, he loves...that's his two favorite Em's. Well, he like the add-a-ball version – I think Alpine Club is the add-a-ball I believe?

SK: yeah yeah

CH: He really likes that game.
(looking at more pages)

SK: Here's a Pot-O' Gold.

CH: Pot-O' Gold. Now, ok, now, Pot-O' Gold used in the backbox - you had like a separate little ball that kicked up and went down kind of randomly between 100 and 500 points. Was that your idea?

SK: yeah

CH: And why – I mean that was kinda really random.

SK: Well, I didn't make as many of those because it was not a good idea to delay a game, by having them watch and look at something that's happening in the backglass.

CH: Yeah, now why didn't you ever say that to the guys doing the dot matrix games?

SK: I don't now.

CH: You know with the dot matrix games in the (19)90's – you know where everything kinda stops and they do the little animations on the dot matrix? I know it's really cute and it looks real pretty but it stops the whole game.

SK: You know what? There's never been a game like this made, like mine.

CH: Hot Line

SK: You wanna know why? (now pointing to something) This was the H, O, T...

CH: Exactly

SK: ...and imagine these buttons would light up. L-I-N-E, so you could shoot at them and knock them all out...

CH: Right, well just to explain to people, what it is, is you've got a matrix in the center of the playfield with a bunch of rollover buttons that light, and it actually spells out...

SK: HOT LINE

CH: HOT LINE And it was probably your most complicated electro mechanical game ever! (laughs) I would suspect right?

SK: And how. But it was correct.

CH: Did you design...

SK: I'm the guy...I'm the guy that came up with that idea.

CH: And were you the guy that designed the electronics for it too?

(transcription note: since Hot Line was made in the pre "electronics" year of 1966, - the term "electrical layout" was intended)

SK: Oh sure.

CH: So you did all the electronics. So when you design a game, you're not only designing the shots, the layout...

SK: but electrical work too

CH: but also all the electrical work – you're doing that too.

SK: right

CH: And you could do this in 4 weeks. From dead start to production.

SK: yep

CH: In 4 weeks! (then loud and incredulously) How could you do that in 4 weeks!!

SK: Well that was different games than this. It was not like these. They were more simpler games at that time.

CH: They were....so at this time...because this was 1966, you're saying you weren't designing 10 games a year.

SK: ...Williams now ..you're talking about....not the game I'm talking about, going to Genco games. Now that – Genco games – was simple and easy to make because it was D.C. .

CH: right

SK: These were not D.C. . Genco games were D.C. ...these were all A.C. .

CH: Now, in the early (19)60's, I think about (19)63, Williams changed from 50 volts for their solenoid voltage down to 25 like Gottlieb. Why did they do that? Was it like a shock thing?

SK: Only because we were able to redesign the flippers and the coils in such a way that it didn't have to take that much voltage to operate.

CH: Yeah, but what would be the advantage to doing that?

SK: Well, you wanna remember it was D.C. If it was 20 volts D.C., it would be like 40 degrees(sic) A.C. almost.

CH: right right right So, did you ever say to Williams, "We should go to D.C. ?

SK: No

CH: You just knew it wasn't gonna happen.

SK: I had enough trouble making games without worrying about the electrical. Cause I would tell them what I'd want, and I'd give the layout of the electrical wiring to the games to somebody else.

CH: Now Beat Time. When you designed Beat Time, which is...kinda has The Beatles, which was a take-off on the Beatles at the time,

SK: right right

CH: ..I mean how did you feel about that?

SK: I felt pretty good. I'll tell you what. There's a story behind that. We were making...I think they released 3,000...that was a good run...

CH: right, good game....

SK: And then Sam Stern comes to me and says, "Well, I don't know, I think maybe we could sell more of these, but I'll release only a couple hundred more." I said Sam if I were you I'd release another thousand of these games, that's how good this game is! After all, I know a good game when I build one!" He said, "What are you talking about? I've already got 3,000 sold, that good for me - we'll work on the next one." I said, Don't raise it 100, raise it 1000!" He says, "Well, if I don't sell 'em, will you pay for them?" "Yeah," I says, "I'll pay for them."

CH: really!?

SK: yeah

CH: But he still didn't do it?

SK: So, he release a thousand – and sold all thousand and wished he had more.

CH: (laughter) So what happens if he didn't sell that thousand?

SK: aww..I don't know...(mumbles)

CH: (laughter) You were bluffing him weren't you!

SK: No, the game was a good game!
CH: And...with the tie-in to the Beatles...
SK: Surre, it was attractive and everything...
CH: Now, did you get into any legal trouble?, with the tie-in to the Beatles.
SK: Never, never
CH: nothing. So nobody from The Beatles contacted you?
SK: Naw, no
CH: Boy, that was the old days. OK Now, talk about the horsey (sic) games. Derby Day came out first. And that was the one where the horses were in the backbox as oppose to being on the playfield. Tell me about that. Obviously Williams had...they came up with Hayburners in 1951...
SK: These's nobody else that had that.
CH: Right, nobody else did horsey games. At least not in a pin game fashion. So, what made you go back to the (19)50's and kinda like, bring this design back and, you know, to re-release this?
SK: Oh, because we still had a lot of those god darn units laying around, maybe 50, 60 units laid out, and there was a lot of equipment in the dog-gone thing. I thought I'd give it a shot and see what happens – and it worked out real good.
CH: It sold well, right?
SK: Oh, sure.
CH: OK, because then, you had Hayburners 2 that came out, which again, was a similar....actually it was the same unit in the backbox....2 player, had the horsies (sic), slightly different playfield. Hmm, so you must have done really well with Derby Day that you bring out Hayburners 2.
SK: Well, you want to remember that Hayburners, if you look at the bottom, it had a new type of a flipper. A larger flipper.
CH: It had the 3" flipper. Now were you responsible for 3" flipper? That was your idea?
SK: No, I don't know if it was my idea but it was there.
CH: Now, how did you feel about the 3" flipper versus the older 2" ?
SK: Well, it was nicer, more fun to control. Zodiac was something I was very proud of. It was unbelievable – the constellations across the top. And I also made another one for Italy called Planet.
CH: (looking at more pages) I see that. Now, do you like this game? I've never even seen it.
SK: Oh, I like that game!
CH: I've never even seen either of these - much less play them. (flipping pages) Now what about Olympic Hockey - tell me about Olympic Hockey.
SK: Well, Olympic Hockey, what happened is, I made that game and Sam Stern didn't want to make it. He says, "I don't like the game!" I says, "Well, for crying out loud, I played like a son of a gun and it's making good." So what happened, Sam Stern was fired, and went to....somewhere. And when he went out, I decided to have this game set up. We set this up and they sold this game like all hell boy.
CH: So he denied you making this...
SK: No, no, no, no. I had it made....
CH: Oh you did.
SK: ...when he said that, "No, I don't like the game...let's go make another one.
CH: On Olympic Hockey, it's got backbox animation where the puck goes back and forth, and it's basically a solenoid that pulls in with a canvas belt that goes around on two rollers, and pulls the thing back. It's got limit switches for a goal on each end. And depending on which bumpers you've hit, either the one team scores and moves the puck to the right, or the other team scores and moves the puck to the left. Kind of an ingenious backbox animation thing – I thought it was pretty neat myself. That was all your design?
SK: yep
CH: Now, when you design a game at Williams, did you make White Woods? I mean, how did this whole design process work back then?
SK: We used to make a dozen games.
CH: Without silk-screening or with silk-screening?
SK: All finished games...and set them up and start testing them and see how they played – played them day and night. Got people...paid them to stay day and night and make records of the games to see how they scored, how many free games they got on the way we set it. And we would determine how well the material on the game would stand up – new material that might be in the game – whether it would break-down or wouldn't break-down. And after we tested that we would send maybe 4 or 5 on location...let the location see what happens. After they got on location and spent a couple of weeks there, and they were still working good and didn't break down, then we went into production.
CH: So that whole process, how long did that take?
SK: Oh, that took time – that took time.
CH: Now, were you always doing it that way?
SK: No, we were doing that for the last...oh...8 or 10 games.
CH: So, during the early (19)60's you didn't put stuff on....like have a test location to actually test games?
SK: With those we only sent out on a test. We didn't do the testing inside the house.

CH: Oh, you didn't do the testing inside the house. OK, so who was the guy that played 2, 3, 4 hundred games of Olympic Hockey or whatever?

SK: We used to pay the guys that worked in the shop.

CH: You mean on the line – the line guys?

SK: Yeah, people that didn't mind coming in and playing games, you know. And we had all these games lined up in a place where it was not engineering but away from production. And then we played those games.

CH: And they would keep like a log book of each game, what the score was.....

SK: There was a sheet there for them to keep a log on it.

CH: ...right and what the score, if they got a match, if there was any anomalies during the game – that kind of stuff.

SK: yeah

CH: right, right. Pretty cool. Now, then you did Winner. Winner was a little different. It was another horsey game but instead of having the horses in the backbox, it was actually under the playfield.

SK: And I wanted to make it out of Plexiglas, and nobody wanted me to make it. They said "You're crazy! The ball will ruin the plastic on top and nobody will be able to see the god darn thing underneath there." I said, "Let me worry about that." I screened the Plexiglas on the underside...

CH: right, for the graphics.

SK: ...for the graphics...and put it on location. And with all the beating that it took, the balls never seems to show any wear...

CH: Yeah, I've never seen one that you couldn't see the horses.

SK: That's right.

CH: It seemed to work really well, actually. (I'm) pretty amazed. So now we're getting into the (19)70's and I see this thing called Match Race. What was Match Race all about? Match Race looks like some sort of a horse game – it almost looks like a gambling game.

SK: yeah

CH: It's not really a pinball, it's not a pinball at all, it's kinda an upright game. How did this game work? I never even heard of it before. Match Race....and you don't have a flyer. Did you make this game?

SK: yep.

CH: You did make it. Was it one of those ones you only made a few of?

SK: That's right.

CH: OK. Now in Darling – and you did this in Jubilee...

SK: There's two games, Jubilee and darling.

CH: ...and it's got in the center, it's got that upside-down "U", where knock the balls over one side or the other to get the Special or the Same Player Shoots Again. Was that your idea?

SK: yep.

CH: And what was the thinking on that game? How was that received?

SK: That worked real good. Worked so good, that we made a novelty model too.

CH: (looking at more pages) This was the game I was talking about....Star Action, and again Triple Action, the Williams version. It had in the center...it had a plastic platter with 2 posts sticking up, and Williams reuses that design in Tales of the Arabian Nights in the (19)90's

SK: yeah

CH: Popadiuk...yeah that was a Popadiuk game I believe. But you were the one that came up with this design, right? What was the thinking behind this?

SK: Well, we just came up with something you...

CH: Something a little different, a little animated.

SK: ...you, you dream about.

CH: And then Skylab had the same "Jubilee Style Thing" in the center. (looking at more pages) Oh, Little Chief, I see that game a lot. People like that game.

SK: Which one?

CH: Little Chief?

SK: Oh yeah they...

CH: People really like that game. (looking at more pages) Black Gold...that's an add-a-ball or something isn't it? Oh, and then Space Mission – I have a Space Odyssey, that's a 2 player. This is a classic game!

SK: That's a beautiful classic.

CH: Classic game – Now the Space Mission – Space Odyssey – commemorated the Soyuz...or the US – Russia meeting in Space with a space station. What was that – Soyuz versus our...I guess you'd call it our LEM or...

SK: I forget what the name was...

CH: ...yeah, something like that. I mean, when you designed this game, did they put the art on after you designed the game?

SK: No. I went out and got the picture of the Soyuz and this here (pointing)....from Texas. I got it from them, who were at that time working on...joining the two in Space. And I gave that to the Artist, and they copied that. And no one ever complained about it.

CH: Now I see you have a Liberty Bell shuffle alley in here.

SK: oh yeah

CH: What's up with that? Did you design the shuffle alley?

SK: Yeah, I had something to do with it.

CH: Do you remember? What did you do?

SK: I don't know, I just had something to do with it.

CH: OK (shuffling more pages) Ah, here's one – Contact. You don't see that game much.

SK: Oh yeah...then after that it was...

CH: That's a solid state game.

SK: yeah right. Then where's the....is that....Pokerino there?

CH: Let's talk about Pokerino. So, 10 carry over features, which meant that if you were trying to accomplish something in the game, and you didn't make it, it would remember on the next game.

SK: That's correct.

CH: And was that the first game to have that many carry overs?

SK: Yes. There was never another game ever made that carried that many...

CH: ...had that many carry overs. OK. And you said that game did really well on location.

SK: Very, very well.

(CH: Later I called Steve up and asked him an additional question on the phone.)

CH: The transition from Electro-mechanical to Solid State, you know in the late (19)70's, what was your take on that? You know, you had designed all these (19)60's and (19)70's machines and into the (19)50's, all Electro-mechanical, and then they came out with the computers, you know around (19)77 – I mean, what was your whole take on that? How did you feel about that?

SK: Well, the biggest and greatest thing that happened after the Flippers – I say the Flippers were the greatest that changed the business – the next thing that was the greatest thing to happen in the business was the introduction of Solid State. Why? They were able to do something on the game we never could do in the Electro-mechanical games. We could not make a 2 player or a 4 player game and carry over features. There was no way we could do it without putting unbelievable number of relays and step-up units and so-forth. But, when we got into Solid State, hell, we could carry over anything. That's one of the reasons why I told you about that Pokerino. I was able to carry over 10 features on Pokerino - any player playing, 4 player playing, 2 player playing, 3 player playing – but I never could do that in Electro-mechanical games.

CH: So, from a designer point of view did it make your job easier or harder?

SK: Sure, it made it easier because I could put more features on a game that would be more exciting than it would have been to make it just a single player and forget about carrying over features on a single player game. Because what happens, now that I've got Solid State, hell, I could carry over all the number of features that I wanted to. And it saved me money because I didn't have to go ahead and put in the type of equipment that would have been necessary in the Electro-mechanical game, in fact, I couldn't in an Electro-mechanical game.

CH: Now, how did you feel, you know, when you were doing the games in Electro-mechanical, you did everything. You did the playfield design, the shots, the targets, the point values.

SK: Oh sure, I had to do it. What else could I do. I had no other alternative.

CH: Yeah, but now you had these software guys, basically doing that for you. So, were you OK with that?

SK: Oh sure, I didn't have no problem. I had no problem. I enjoyed working with anybody and everybody that would help me with my games if I could get them to help me. And they were able to help electrically because of the Solid State, I was glad to have them help.

(back to the live interview)

CH: What about this game Rat Race? ...that was a cocktail table with no flippers.

SK: Well, I tell you what, we had all kinds of problems with that. We did build it. And so...Match Race or was it Rat Race?

CH: Rat Race, yeah Rat Race.

SK: Ah, they just didn't have what it took.

CH: Hmm (flipping more pages) Yeah, some of these game numbers like Honey, you sold 6,000 Honey's! Jubilee, 7,000!

SK: Do you know why Honey was such a popular game?

CH: No.

SK: Because it was the first time, first time in the industry, that anybody ever put a drop target in front of an eject hole.

CH: Oh, to hide it – until you knocked it down.

SK: That's Honey – on Honey. See I can tell you that because I remember that very well.

CH: Now what about Super Star, 1972, they sold almost 4,000 of those. That must have been a good run.

SK: yeah

CH: OK. And then Jubilee sold over 7,000, which of course had that reversed "U" feature where you knocked the balls side to side. Skylab, same type of feature, boy you sold a lot of those – 3600. Star Pool - You sold almost 7,000 Star Pool's in 1974. That's a pretty good run. I mean, all these games you got some good runs. Now, the Black Gold – doesn't look like you really made that. It was a one player.

SK: We didn't make it...We didn't make Black Gold.

CH: Why?

SK: Because it just didn't...the name didn't go over (well with) the operators.

CH: Oh, right. So did it get converted into something else?

SK: No.

CH: Little Chief – you sold a crap load of those – oh my god, 6,300. And then you hit the home run with Space Mission – Space Odyssey at like, basically 16,000 on those. And Grand Prix, almost 11,000 – you really hit the home run on that.

SK: yeah

CH: Liberty Bell, you did real well with that, the pinball Liberty Bell. Big Deal. Now, Big Deal you sold over 7,000. These are good runs.

SK: Well listen, I had a reputation of having some great run games. They made money on me on those games. Anytime they made anything over 2,000 games they were cleaning up.

CH: Yeah, they were dancing in the streets....

SK: That's why...Sam Stern wouldn't let me go.

CH: (flipping more pages) Now, after 1978-79, when you finished Pokerino, you basically didn't design any more games until Ticket Tac Toe.

SK: That's correct.

CH: Why?

SK: Well because we had a chance to build something for redemption. Everybody was looking for redemption and I came up with that idea on Ticket Tac Toe. And they sold, I don't know how many, a couple hundred – everybody I talked to, they were looking for more because it was such a great playing game for such a easy, cheap price.

CH: Yeah, I talked to Camron Silver about it and he said that he had some friends that had some on location in Australia. And they said they still make hundreds of dollars a week. And he says they do great.

I guess the sales picture for a redemption game is different than a pinball game - that you have to be able to make that game over a longer period of time and sell it more slowly – where Williams was used to just make as many as possible in a short (amount) of time as possible, and sell them in mass.

SK: You see, that's the reason why it's making so much money in Australia. It's because they didn't make it to give tickets, you know. There was a way that they figured out how to make a pay-out on those games.

CH: Oh, OK

SK: It got to be a good pay-out game.

CH: Gotcha, gotcha. But why, in 1979, did you basically stop designing games?

SK: Oh, what the hell. Because, you know why? Because I let everybody else take over, and now we were in the real Solid State programs of games and everything else. And we had guys coming in like Steve Ritchie....and other good guys and they were all making games that were really, really, really big games you know. And that's what they wanted and I was not interested in making the type of games they were mak(ing)...with all the wire forms and everything on them. I said that's not my idea of making pin games. I don't like those type of games and I'm not gonna design 'em. But I was in charge of the whole damn place up until I retired.

CH: Yeah, you were head of pinball engineering, right?

SK: yeah

CH: Right. OK. So from 1979, up to when you retired in 2000, right?

SK: I retired in (counting) 19 ninety something.

CH: Up till then, you basically let the "youngsters" design the games.

SK: And then Larry DeMar handled it.

CH: Right, cause Larry was head of programming or something, right...Larry was the head programmer.

SK: He was good. I said you take care of this thing. I'm gonna sit back and watch it.

CH: And Williams had...I mean they weren't putting pressure on you to bring you back – come on Steve, let's get you to do a game.

SK: Oh, they always wanted me to do it. "Come on Steve, build one more game." I said, "You've got enough guys here, let them (do it). You're making, getting real good games, wire forms and..."

CH: Ramps and stuff, right?

SK: ...ramps. I said, shoot, I'm not going to be making games like that.

CH: Now what about multiball? How did you feel about multiball? Because a lot of those, like the Steve Ritchie games were all... like, multiball games. But none of your games were ever multiball games.

SK: Yes. I made the first one.

CH: Which one? (flipping pages) 1963. Beat The Clock. That has multiball? (flipping pages)

SK: Come on. Read this!

CH: Ah, let me see this.

SK: Looks like...you...fell asleep.

CH: I musta fell asleep on this one....(reading) "with 2 balls on the playfield at the same time."

SK: Now that is the first game that was built with 2 balls.

CH: Huh, and it was a manual ball load game. (pause) And so you would lock a ball...

SK: yeah

CH: and then get a second ball?

SK: yeah

CH: Now, how did that work? I don't understand this game.

SK: Well, I'm telling you, if you didn't see it out (there), there's your multiball game. Beat the Clock.

CH: Cool!

SK: If you locked the ball – see there were two eject holes – look (obviously pointing), 2 holes on here. If you shot the ball, you could put one here or one here. Then you got the second ball and the idea was to try and put the ball in the other one, so you'd have 2 of them together. Now you got something really big.

CH: And then it kicks them both out.

SK: yeah

CH: Gotcha. Hum. Now how come you never re-used that feature?

SK: Because after that, everybody started making multiball games and who the hell cares, you know, everybody's in that business...

CH: Yeah, Bally in particular, really got a lot of mileage out of that.

SK: Yeah, but what the heck, it was not a bad idea.

CH: Naw, it was a great idea. I think it was pretty cool actually.

(now referring to a different page)

CH: And this one came with zipper flippers. You want to talk about zipper flippers at all?

SK: Naw, no.

CH: Didn't like that feature?

SK: (mumbles negatively)

CH: Huh. OK. So you had no problems in the (19)80's just letting these guys run with the ball?...

SK: sure

CH: ...you know, the Steve Ritchie's of the world, designing the games.

SK: Steve Ritchie, Pat Lawlor, Ward Pemberton, (Dennis) Nordman, see all these guys that I had working, and Mark Ritchie was in there too. Heck, Barry Oursler was there too....hell, I brought Barry Oursler from the line, and started him, and showed him how to build games. And you should see the number of games that he built.

CH: Oh yeah, he built some great games. Now, tell me about that. You brought Barry in.

SK: yeah

CH: OK now, why? Was he a good friend?

SK: No, because I needed somebody to help me make games.

CH: And was it you didn't have enough designers at the time?

SK: That's correct.

CH: Huh. Now why Barry though?

SK: I did the same thing with Mark Ritchie.

CH: OK now, why these guys?

SK: Because I liked the way he worked on the line. He was a good tester and I figured I could talk to him. See, if I can't talk to a guy and tell him what he's doing right or wrong – that's why I got rid of Popadiuk – I couldn't talk to him and tell him what the hell he was doing right or wrong. Guys like that, I don't want...never had working for me, you know. If they don't at least take suggestions from me, they're out, you know. So, now when Barry Oursler came in and started making games, he went ahead and.....(pause)(shuffling papers)

CH: OK, so you like Barry. You got a whole folder here on Barry. (looking through folder) Oh, Barry made a lot of games. (He) started in 1978 with Phoenix, went all the up to 1996 with Junk Yard. OK, so when Barry was working on the line, he was a ...

SK: Tester

CH: He was a Tester. So, now, did you go to him or did he come to you looking for this job?

SK: I went and picked him up.

CH: You did. And what did you see in Barry that said, Hey this guy can...is gonna be a game designer?

SK: Well, that I could talk to him.

CH: That was the only thing? Good communication?

SK: That's all, yeah.

CH: But how did you know that he could design games?

SK: Well, because I broke him in. I taught him how to make games.

CH: So, aw, you brought him under your wing then!?

SK: Absolutely! I spent time with him - showing how to make games, and what's right and what's wrong and everything else.

CH: (looking at more pages) He had some (games) that....Phoenix...I got Phoenix, I actually have that game. I kinda like it. Phoenix, Time Warp....Laser Ball OK, but he hit a home run with Gorgar.

SK: yeah

CH: Gorgar was a serious game. That really did well.

SK: It was the first talking machine.

CH: Right. OK, and he did Solar Fire, another really good game. Boy, a lot of people like Solar Fire. (flipping more pages)

SK: Keep going.

CH: Jungle Lord, another popular game. (flipping more pages)

SK: Keep talking names.

CH: Ah, Time Fantasy, Cosmic Gunfight, Defender...but he hit a home run (on) the Joust. I love that game! The head to head Joust. Who's idea was that?

SK: His.

CH: That was all his?

SK: Oh sure. He got there..at a point....he was doing (it) himself.

CH: That's a great game. And Space Shuttle, of course, was the game that allegedly saved Williams.

SK: That's the one that was really good! And that was his game!

CH: Yeah. That game he hit a home run with.

SK: And how.

CH: And Williams hit a home run because they sold....Comet – another one that they hit the home run.

SK: And Space Shuttle hit a home run for Gottlieb, and for Bally, and everybody else. Did you know that?

CH: Right, because everybody rode on the coat tails of it.

SK: Sure, sure.

CH: Because pinball basically was on an upswing,

SK: right, right

CH: and all the other companies got to ride on that. Ok. Pinbot. (Let's) talk about Pinbot. Now that's a killer game.

SK: Yeah. I like that game so much I bought one for my daughter.

CH: But Pinbot....was also....did Python Anghelo have something to do with that too?

SK: Yeahhh something....(mumbling trails off)

CH: (laughter)

(pause)

CH: Ok, so now Pinbot was Barry's game, and I mentioned Python Anghelo and you kinda had a negative reaction there. What was up with Python? You didn't like Python?

SK: Python was very tough to work with.

CH: I've heard that.

SK: Very, very, very tough to work with.

CH: Kind of a crazy guy, right?

SK: Well I would say more than that.

CH: (laughter)

SK: Well you know he left and got married with a beautiful girl from Romania, you know that don't you?

CH: (No) I don't really know that much about him.

SK: She took him for everything and left him.

CH: Oh really? Oh man.

CH: And then Fire!...that was another great game.

SK: Fire!?

CH: Yeah, Fire! That did well, right? I mean, that was a really good game. I owned one of those for the longest time.

SK: I'll show you...I wanna show you something (his voice trailing off – like he's moving away)

CH: (flipping more pages) Space Station, another good one. Cyclone.

SK: Oh yeah (distant laughter)

CH: Now Cyclone was a killer game (flipping more pages - pause)

CH: Now Fire! was Barry's game but it had something to do with the Chicago fire in the early 1900's, didn't it?

SK: Fire in 1900's? That happened in (the) 1800's.

CH: The 1800's OK. That almost the whole city burned down.
SK: That's right.
CH: And this...was basically....themed around that.
SK: Well, do you know why I like this? (referring to the picture of the backglass showing a old horse drawn fire truck)
CH: Why?
SK: Cause I was brought up in an era where I used to chase after fire trucks. And at my time, this is what they used to wear. I'm talking about....I'm talking about 1915, 16, 17. They didn't have no fire trucks like we have today. This is what they used to have.
CH: With horses.
SK: We used to chase them....they'd come riding with the noise and everything else, and you'd chase after them...to see what the hell they were doing. And that's how, as a small kid, I was 5, 6, 7 years old, I'd run after them down the street. And I remember seeing these.
CH: Now when Barry did this game, was this your concept of his concept?
SK: His concept.
CH: Did he know at the time....
SK: He's the one that started...I've give credit to him for everything. I helped him with everything. But he's the one...I give him credit for that.
CH: Now what about Cyclone, now another huge hit for him.
SK: yeah, yeah, yeah...
CH: (flipping more pages) Jokerz! I see that game all the time. Police Force - see that games a lot. Bad Cats. This was like the last single ball game. Bur this was a really famous game!
SK: sure
CH: I mean, (a) really cute game.
SK: With Barry here...you're seeing games from a guy that they went ahead and knocked off – and laid off first of all the people. I was so damn made I could almost scream.
CH: Well why? Why would they lay a guy like....
SK: Well they decided to get rid of somebody, they laid him off. He was responsible for the damn company being out of business. (sarcastically)
CH: (looking through more pages) Yeah, Harley Davidson to - that was a huge hit. Hurricane – eh, not so much. Dr. Who. That was a big seller. You sold a lot of Dr. Who's. (flipping more pages) Dracula. Great game!
SK: oh!
CH: Great game! Really dark though. Really (laughs) dark game. Popeye. We don't even wanna talk about that one. (He) did Dirty Harry and WHO dunnit? and Junk Yard. And then in (19)96 that was the end, right? They laid off Barry. Hmm. And you were mad.
SK: yeah
CH: Because he was the guy that you brought up. Did you bring up anybody else?
SK: Yeah, Mark Ritchie.
CH: Who did Indiana....
SK: Ah, yeah, Mark Ritchie.
CH: Yeah, Steve's brother.
SK: Sure, yeah.
CH: Now why Mark Ritchie?
SK: I don't know but...I don't know how the hell we ever got him into engineering but he found himself in engineering and I helped him (on) a lot of games. I helped with a lot of games that he had trouble with. And he was good. He was good but he just didn't have the....the...well, I don't wanna talk about it.
CH: That's fine. He did some great games though.
SK: Well he did some good....
CH: I mean, Indiana Jones was a classic!
SK: Oh, hell yes
CH: Yeah, great game. Great game. Yeah, actually all the games he did were really, really good.
SK: Yeah, I have an Indiana Jones.
CH: You (do). It's a great game – really is. Now who else did you bring in?
SK: I didn't bring anybody else in.
CH: Just those two guys. Now it didn't sound like you got along quite as well with Mark as you did with Barry.
SK: Well, now you see, I'm not in (???) some people that you wouldn't believe.
SK: You know Mike Stroll?
CH: No, I don't.
SK: Well, he was the President of the company. And when we started working Solid State, the company wanted to get somebody that had Solid State background. So we went to California, to one of the big Solid State companies, and I met

this guy that I thought was gonna make it - and I recommended him - and they brought him in to try him out - he turned out good and he was the President of the company for several years. Mike Stroll.

CH: Hmm. OK. Who else? Any other people like that?

SK: No.

CH: How about...any of the Artists that you (may have) brought in?

SK: I had nothing to do with Artists.

CH: Nothing to do with any of the art. Hmm. Ok. Interesting.

CH: So, what did you think of Pinball 2000 when that came?

SK: Ahhh.....it was good but....we were going into something that the regular pinball players never really enjoyed playing. I used to get so damn many calls from old-time pinball players, "When the hell Steve are you going to have a game made like you used to make with drop targets and stuff instead of all this wireforms and everything and it takes me 5 games to learn what the hell (the) game is doing. I've played the game 3, 4, 5 times, I still don't know what the hell it's doing." You know? And they don't...they didn't like that. So I was responsible for helping make the last game before they went into the video games and that was Cactus Canyon.

CH: Great game. I love that game.

SK: And [emphasis] I was responsible for making Cactus Canyon.

CH: I like the individual drop targets.

SK: I was responsible for that because the front office said we have one more game to make before we get into this thing (Pinball 2000), and three guys are going to make presentations of games for us and I want you to decide which one we're going to use. All three guys came up with working white wood models. And I talked to these guys....I said....put drop targets in the game! All three guys presented games. The front office OK'd one model - not Cactus Canyon.

CH: Really. What was that one?

SK: And they asked me. I said I would do Cactus Canyon. (They said) Why would you do Cactus Canyon?.... (I said) Because it's the kind of games people would want to play! Well after a lot of kicking around [discussion]... they decided to go with Cactus Canyon. And, son of a gun, they (got) so darn many of them that even today that gall darn game is selling for a thousand (sic) dollars if you can find one.

CH: right

SK: If you can find one you can get a thousand (sic) bucks for it.

CH: It's a cool game. I really like it. I own one. I own a Cactus Canyon.

SK: Oh, I like those targets.

CH: I think the bad guy concept, with the targets, where you got to kill the bad guys on the playfield - great idea - awesome idea.

SK: That was terrific. And that's why I said it's gonna go more (sic). Now, the front office always says to me, "Geez, did we miss the boat. We should've made more of them." Well, what the hell, I was telling you (them) at that time that this is what the people outside were looking for - what people that used to play pin games are looking for.

CH: Now, what were the other designs that got rejected?

SK: Aww, they were...all those guys...crappy stuff like....stuff that Steve Ritchie was making and all the other guys, you know, wireforms and a bunch of crap in there. I never enjoyed to much playing those games. The reasons that is, because, (as) good a pinball player I am, I don't want to have to take/play 5, 6 games to find out what the hell I'm shooting for or what I'm gonna be shooting for. "Oh yes, but we light up these things and tell you what you should be going for." Well, that's good, but what do I do to get these things, you know?

CH: So the guy that designed Cactus Canyon was Matt Coriale, who was a complete new-comer, right?

SK: yep yep

CH: And he was the one that made the presentation to you?

SK: Yep (pause) no, no he did not make the presentation. He was the one who was gonna make the games and I said make it with god damn drop targets.

CH: So, he didn't actually come up....he wasn't one of the three guys...

SK: He made a model that had no drop targets and I said you make a model that has drop targets and rework the gall darn game and that's when Cactus Canyon came out.

CH: Ok. Interesting. Now, when Pinball 2000 came and Lawlor and Gomez come in with their Halopin and I'm sure you were in that meeting when they showed it to the engineering group. What did you think?

SK: Well, I wasn't gonna give my opinion, I was waiting for what everybody else would say. Everybody was crazy - Oh, great game, blah, blah, blah. Ok, it's a great game. (sarcastically)

CH: So you didn't really like the concept so much.

SK: No

CH: Too complicated?

SK: I was there to see the game off the line, you know. They even took pictures of me....

CH: Right, the last one coming off the line.

SK: yeah, off the line, so I got a picture of me (with) that - what the hell, so.... That's when I was still in charge of the department you know.

CH: So Pinball 2000 just wasn't your thing.
SK: No
CH: Now, what about Nicastro? How, I mean...
SK: Which one? Neil or

CH: Neil.
SK: Oh
CH: The youngster. The young Nicastro. Well, what's your feeling?
SK: About what?
CH: About Pinball 2000 and Nicastro and the whole management and how they reacted to it and ended up closing it, you know, before it (sic) even really got it going.
SK: Just let me tell you something. There's a lot of stories about Neil. (pause) And if I haven't got anything good to say, I don't want to say it, ok?
CH: (laughing) Come on, I wanna hear some not so good stories. (laughing)
SK: Naw, I'm sorry but I have to be very honest with you.
CH: That's fine, that's fine. So, you can't add anything to like - were they gunning for pinball, you know, to close pinball?
SK: I don't know, I don't know, I don't know.....You know when they made a couple of those games later on with the video - they turned out pretty nice. I liked that one....
CH: Revenge? Revenge from Mars? Star Wars Episode 1? Wizard Blocks?
SK: Revenge from Mars (pause) go ahead keep going.
CH: That was basically it. I mean, there was Playboy but that didn't get very far I don't think.
SK: Revenge from Mars, I think that was the one that was so good.
CH: Yeah, I like the Revenge.
SK: I think that was the best of the whole bunch. But as far as the game....I have to go by what... the front office was responsible for - for the problems that we ran into and the major problems that we ran into pinball. And it was not good designers - it was the front office that was responsible for it.
CH: So you think the problem really was not anything that you guys were doing, it was the front office just wasn't giving you the support that you guys needed - to really make this go.
SK: It's a different thing. It was not the support that they didn't give. Let's put it like this. They wanted you to do something that we, as designers, didn't necessarily think was necessary. And you can't make a pin game, every pin game, with so many new features on it that it costs so dog gone much money that you can't sell it you know. And there was demand for it, demand for it, demand for it, demand for it - which just didn't make sense.
CH: So the whole Pinball 2000....
SK: If you talk to people who were over (in) the design department....there's a lot of people who won't tell you, won't talk too much about it because they just don't want to, you know, commit themselves.
CH: right
SK: I don't want to either.
CH: Hmm. Well. You know it's kinda hard to get the...
SK: ...One of these days - you'll get the answers someday.
CH: Yeah, it's hard to get the answers - nobody wants to tell the story.
SK: Well, that's because we all work for the guys.
CH: All right. So there isn't really much that you can say then in that regard.
SK: No. Nothing that I can say much about for publication.
SK: So now I'm telling you how I lived through this evaluation...so what happens, we went to a nickel, went to a dime, then a quarter was a (???). We had to get off the dime, you know why don't you?
CH: No.
SK: Because the damn dime after...all those dimes, silver dimes would get so dog gone thin that they wouldn't even register in the (???).
CH: Right, or jam.
SK: We had to go into quarters. So now what do we do with the quarters. Well, ok. So we had to make a quarter - would give you three games for a quarter. So now we get games all played at a quarter - quarter, quarter, quarter. ...(???)... Quarters were working all right. Then we tried like hell to get half a dollars. Where the hell do you get half a dollars (???) so you have to put a dollar in it, right? So now we started putting in dollars in to the games to play so many games, so many games, so many games. And finally the darn thing goes Pop because the dollar co...
CH: The dollar coin yeah.
SK: Not a dollar coin, the dollar acceptor was screwed up, you know.
CH: Oh, the bill acceptor.
SK: Holy cripes, slowly, slowly, slowly going to pot, and there I am - first of all in charge of designing (as) vice president - and I was president, then finally, of the game design department - and then for awhile at Williams I was even on the board of directors and tried to help getting the games going - and everything was working alright. And we had, like I told you, in the (19)70's we had a great run of games because games were playing only for a quarter but the games were still

not too badly charged. But then began the....more expensive, more expensive, more expensive....shit, today, a guy doesn't get any....he's not gonna get his money back in 2 or 3 years at the rate he paid - \$4000 for a game. So it's just surprising, oh hell, that even Stern is able to last. But he isn't making games like he likes to. But he has the cheap help. And he's got ah, I don't know, designers – he must be paying them, just to (???) games that he can make, you know and stuff like that so.... I go there once in awhile. I know all the guys that are there so, I kinda hate to get involved because they ask me, "Well, why don't you make a game. You used to make so many great games." I don't....I don't want to get involved, I don't want to get involved.

CH: Now when Williams moved pinball production from California Avenue to Waukegan, how did you feel about that?

SK: Well, the only reason they did that is because the....they had to use....

CH: Did it have anything to do with unionized help?

SK: Yeah, unionized help. Especially we didn't have to....we went over to wau....You know they had three places they were looking for. One of them, they almost bought, which I discouraged them to buy – I won't tell you where in the hell it was at – the Waukegan deal was good because they could get people from Waukegan. And not only had people from Waukegan, they had them from Wisconsin! - coming in from Racine! - and working at this plant.

CH: So basically the move to Waukegan was a union busting move.

SK: Oh yeah, oh yeah.

CH: It was huh.

SK: Oh yeah.

CH: Because they didn't want to use unionized help any more.

SK: So, yeah

CH: Interesting. I thought that was the case. Once again I asked some other Williams guys and they all....

SK: There was a lot of people that went to work there.

CH: Right, right, Hum.

SK: So this is the story and the history of pinball's slow decline and going down the drain.

CH: Do you think it will come back?

SK: No.

CH: Why? Too labor intensive?

SK: The reason it won't come back is because we don't have the people out there to play pinball.

CH: The players are missing.

SK: Correct. Our great pinball players, that are in the shows, the great pinball players – they're not the kinda of guys that'll go to location and play the gall darn games. Where are they on location? Where are (there) pin games on location today? Tell me.

CH: Right. Yeah, very few places.

SK: Where can you go today to see a pin game that you can play?

CH: right. Hum.

CH: Alright Steve. Well, thank you very much. I appreciate you having me over.

SK: Oh, I had a lot of fun. I'm just glad I had a chance to talk and tell you how I feel about some of this business.

CH: Do you have games in the basement?

SK: I have two.

CH: Can I photograph them?

SK: Well you won't....you can't photograph (them), I got so much crap on them you won't wanna....

CH: Ah, I can't see them.

SK: No.

CH: What game(s) do you have in the basement?

SK: Jokerz! and Indiana Jones.

CH: Oh, so you got one Barry and one Mark game.

SK: Yeah. Not only that, I had four more but I already gave them away to my kids, you know.

CH: Ah, ok.

SK: I had a Comet I gave away to one of my kids. And I had the one that had the card game....

CH: Pokerino.

SK: No, no, it was another game. And then I had three of the greatest games that Harry Williams ever built. Fist of all, his first game – Suspense – brand new. I built that. I also had the first game that he ever had a wireform on it. And I had the first game that he ever built with a disappearing jet bumper.

CH: Gusher?

SK: Gusher, yeah.

CH: Yeah, I've got a Gusher. I've got a Sea Wolf too, with the same feature.

SK: Yeah. I donated some of these to the show in Las Vegas.

CH: Oh, to the Pinball Hall of Fame.

SK: yeah.

CH: Yeah, because you had Pinball Circus, right? That was your...I mean that was a Python (Anghelo) designed game but you had the Pinball Circus. And you gave that to the Pinball Hall of Fame, or loaned it to them at least.

SK: yeah.

CH: So tell me about the Pinball Circus. How did you feel about that game?

SK: (That) game was a terrific game.

CH: It was.

SK: Except that the guy that laid out the bottom of the playfield was not a pin game layout man.

CH: Who laid out the bottom of the playfield?

SK: It was Python.

CH: Python. Ok.

SK: And it was only laid out like a pin game player makes a game, you know. But it would have been even better. But it's a great game. It's a great, great game. Right now that game is taking in one dollar a play...in (Las Vegas).

CH: And there were two of those made, right?

SK: Million and a half dollars a piece.

CH: So where's the second one? (long pause) You're not telling me are ya.

SK: No, I know where it's at.

CH: But you're not gonna tell me are ya.

SK: no.

CH: Ok. Good for you. Just checking. I gotta keep you honest. (laughter)

CH: Alright Steve, Thanks!

CH: I'd like to thank Steve Kordek for allowing TOPcast and I to come into his home to interview him for our show. It really was nice to see the man in person, (as) opposed to doing it over the phone. It was a great time, a great interview, a guy that's got tons of pinball history and tons of stories to tell since he's been in the business for sixty years. Steve's also going to be celebrating his 96th birthday in the next month or so. So we're really happy to have him tell us all these great stories. So again, thank you Steve, and until the next time on TOPcast, I'll look for you soon.

=== End Transcription ===