Pat and Hal Suter

Interviewed by Dr. Jen Brown March 14, 2017 Texas A&M University-Corpus Christi

Transcribed by Maxwell McClure

Pat Suter: ...because of the pollution that was rampant throughout the country. And we had a series of incidences, not here, but on the East Coast. I mean, there was a big spill along the Erie River and that created all kinds of havoc because it happened at the spawning sites of some of the major fishes that had come up the river to spawn. And, uh, there was a tremendous fish kill at the time, so that was all over the paper. And then, maybe two, three weeks later, there was this big fire on the river in Ohio and that created all kinds of controversy throughout the country. And, uh, pollution really was pretty rampant. You could smell Corpus Christi fifty miles way when you were driving in if you were coming from the north because our winds come off the Gulf most of the time. Eighty-five percent of the time, we don't notice the pollution and it still exists, really. We don't notice pollution in Corpus Christi because, as I was starting to say, eighty-five percent of the time, the wind comes off the Gulf and blows it towards Victoria. But you can smell, still, Corpus Christi as you're driving in if you're attuned to what, uh, winds are bringing in and it used to be really bad. We made annual trips east through Louisiana to visit my family and back and forth to Victoria and back and forth to San Antonio. And you could tell when you were getting close to Corpus Christi because the winds were blowing the pollution away from the city. But the city was very lucky because we didn't get much of it. Most of the time, eighty-five percent they tell me at the weather station, eight-five percent of the time the wind comes off the Gulf. So, we were lucky. But anyway, after Rachel Carson's book came out, each of the industries, and at that time we had six big ones with six different heads and so forth, and so on, and they all panicked. They decided they'd better have an advisory board of some kind. So, each one of them set up their own advisory boards. And because I was leader of the environmental movement here as President of Sierra [Club] and whatnot, I got called by all of them. They wanted me to come, so I told the first two or three, I said, "Yes," but after that I said, "Listen, I'm already, uh, under contract so to speak and I'll try and help you or find somebody who will do it, but I can't do any more than I'm doing." And so, they finally got together and we had one meeting a month of all the industries. And, uh, it's luncheon meeting and they give reports of what's going on at the industry and how they are meeting the environmental standards and if they had in exceedance, and they always had exceedances. But if they had an exceedance, how long it lasted, and what they did to correct it, and how soon the corrections were made, [3:18] and once they started, and so forth and so on. So, this book, when it came out, made a tremendous difference here. And it still, I mean, I don't know whether anybody has read it in years, I haven't (laughs). I'm interested in it, but, um, it did make a big difference here.

Jen Brown: And how did you get started in working on environmental issues here?

PS: I was a chemist.

JB: You mentioned it was before the book?

JB: Mm-hm.

PS: Uh, actually, I graduated in pre-med, but I went to graduate school in chemistry and I taught chemistry at Del Mar [College] for thirty years or so. And, I got interested in it because it gave chemistry a bad name. And there are many toxic chemicals that it's not very good to be around because if you happen to have an acceptable, um, body chemistry to that particular chemical, then you can be very adversely affected. And we produce a lot of toxic chemicals here and it glows to Victoria (laughter). "Pollution is the answer to pollution" is what industries always said.

JB: Mm-hm.

PS: And it worked pretty well. But I got interested because of my career. My students were interested. There were articles in the newspaper about all the pollution out there. You could smell Corpus Christi, as I've said before, long before you got here.

JB: Hm.

PS: Yeah, it's much better now, much better. But you can still smell it.

JB: And what year did you start teaching at Del Mar?

Hal Suter: Sixty-two.

PS: Um, sixty-two, I think.

JB: Okay.

PS: Or sixty-four maybe I don't—

HS: —1962, I was in seventh grade.

PS: Pardon?

HS: Sixty-two.

PS: Okay. See (laughter) he's—

JB: Good to have around (laughter)?

PS: Nice to have around. Okay, 1962.

[5:25]

JB: Yeah, and, uh, what did you teach your students about—

PS: —I'm sorry?

JB: What did you teach your students about chemistry and the environment?

PS: Well I taught chemistry, and I taught general chemistry, and occasionally organic. But, um, we had a textbook and I essentially taught—there were actually three different professors all teaching beginning chemistry different, uh, foci. Some were pre-med students, some were heading for, uh, industry, industrial work with some sort or another, and some were chemistry majors. And so, what you taught was pretty well-geared depending on where they were heading, what the class was supposed to be about. I taught major chemistry. We had a textbook and I followed the, more or less, the textbook. I taught the periodic table, the first series of lectures were on the periodic table and why it was such a help to organize—I think there were one hundred fourteen different elements now. At the time I was over there, we were at one hundred and six.

JB: Hm.

PS: So, they found a few since then. But, um, and why it is so helpful what we call a periodic table because the elements are arranged on a table by weight or by number and the number is the number of positive charges they had in a nucleus and the nucleus is surrounded by electrons. Maybe you've had some chemistry, I don't know.

JB: Yeah.

PS: And, um, they are arranged according to the number of protons they have in the nucleus. But, that's where I taught, that's where I started from and we went into the fact that they are arranged because of the number of protons in the nucleus. You have a certain number of electrons, and they are arranged in orbits, and it is the number of electrons in the last orbit or furthest out orbit that determines their position in the periodic table because if they have one electron, they're reactive, if they had four electrons, they are not. If they have eight electrons, they are gaseous. And so, how many electrons they have in their outer orbits is how their chemistry is determined.

[7:46]

JB: And you said your students were interested in environmental issues?

PS: Very much so because partially of that book. See, I started teaching shortly after that book came out. And, um, they—we had quite a lot of pollution in the beginning and industry has done, because of political pressure, of course, public pressure, they have done a tremendous job of cleaning up their act. But you used to be able to smell the smog before you got to Corpus.

JB: Hm.

PS: Because of all this stuff that they—what we tried to do, and, uh, we used to have an aluminum plant right, an aluminum plant, across the bay over at Ingleside. And, um, I was over

there one day speaking to the workers, I guess, I don't know, some [unintelligible] [8:44] over there. And I made the statement that so many chemicals are wasted up to smokestacks of industry that if they collected them, they could really pay a large part of the cost of putting the installation in and probably even make a profit. And one of the people that was listening to the, this talk I was giving, had a carbon black plant over close to Rockport. And after it was over, he came and talked to me he said, "You know, we have a tremendous black smoke coming out our smoke stacks." And I said, "I know and if you would put in your smoke stack what we call a propelled precipitator, and that is alternating positive and negative electrical plates in the smoke stacks, and collect the stuff that precipitates on those charged plates, you would find you would pay much more than the cost of installation." And he looked at me kind of funny and he said, "How do you know?" And I said, "It has been tried on an experimental basis by numerous chemical departments up on the East Coast where carbon pollution form smokestacks is, was, and maybe still is to some extent, a tremendous problem because the wind comes from the southwest and pushes all the pollution of the industrial area along the Ohio River, and in Pennsylvania, and whatnot, and in New England. And New England was heavily polluted, so, I mean that's hundreds of miles and it would just, every time it rained, they had black snow.

JB: Hm.

PS: And stuff like this. So, they found that if they tried it, and they tried it over here at "[unintelligible] [10:34] Aluminum," and they were just thrilled, just thrilled. And the carbon black plant tried it in, uh, Rockport. I don't think it's there anymore, but they tried it in Rockport, and they said that the stuff that precipitates on the electrical plates was of such fine caliber, small particles sized, that we could use it for India ink. And they made the cost of the installation over selling that precipitation, the solid that precipitated on the, uh, electrical plates, for India ink and he was just thrilled. And I said, "Well, industry has been throwing away millions and millions of dollars because they don't want it, or didn't want, or didn't know what steps they could take to collect what was not easily collected at the surface." And it worked, so there (laughter).

JB: Um, when did you start getting involved with the Sierra Club and other conservation organizations?

PS: When we moved here to Corpus Christi, which was in the mid-fifties. I was already an environmentalist. We had moved from Florida, and Florida is big on environmental concerns. And, uh, my husband came here to work for [unintelligible] [11:54] and, uh, he was in charge of the analytical laboratory for [unintelligible] [12:02] which was out on Highway 44 at the time. Well, they moved, decided after we had been a year, or two, or three, maybe, I forget, they decided to move to New Jersey because the biproducts that they were using, and their, uh, operations were much more plentiful up there and a lot of it shipped down here, So, they decided it would be cheaper to open a plant in New Jersey than to keep up the plant down here and enlarge it to take the additional equipment. So, they moved to New Jersey, and within a year, they had been bought out by a German company and moved to Germany (laughter). So, I'm glad we didn't go, but I didn't want to be a "New Jerk." You called (laughter) New Jersey people "New Jerks" down in the political realm, which I was active into. And so, uh, we got involved in that, but I don't remember what the original question was.

JB: Oh, when did you get involved with environmental activism?

PS: Always. I was a pre-med student in the university when I went through school. When I switched over to chemistry, got married, switched over to chemistry, the, uh, effects of chemical products were just beginning to get publicity in the newspapers. Any books like *Silent Spring*, which came out a little later, but books similar to that, not as popular but similar, information was coming out and it was deleterious to one's health to breathe a lot of these chemicals, and for instance, benzene. People had benzene in their homes and they don't know that they should be extremely careful not to breathe it. It's extremely carcinogenic, and if you breathe much benzene, then you are opening up your organs in your body to be attacked again the next time you breathe it. In other words, you're synthesizing your body. And ultimately, people were getting cancers and things from benzene cleaners in their homes. [14:05] And the, uh, people producing these products, which contained all sorts of deleterious chemicals for use in the home, uh, if they knew, they were silent about it. But I give them the benefit of the doubt and assume that they didn't know how bad they were. And, um, when the publicity began to come out in the papers and the books such as this one came out, they, uh, immediately started cleaning up their acts until industry now is pretty good. A few years ago, you could smell Corpus Christi fifty miles away, and you can hardly smell it now if you go down Highway 37 because they have all kinds of equipment in their smokestacks to collect whatever is going up the smoke, up the chimney. And they found that they can pay for that equipment. It wasn't that they didn't know, but they didn't want to spend the money on something that wouldn't produce a profit. But they found out that they got at least their cost back by putting that stuff in. And, uh, (laughs) I used to attend, I don't anymore, but after books like Silent Spring came out, each industry wanted an advisory group of citizens, and, um, to come meet once a month and they would tell what they were doing and how they were doing trying to—publicity, you know, public relations. And, uh, because I was prominent, they wanted me on all of them. Well, after two, or three, or four, I forget, there, I told them I couldn't anymore. It was taking all my spare time and they had to find somebody else. Well, they wanted me to suggest somebody else and sometimes I could give them a name but most of the time most people didn't want to be associated with industry. [16:05] They didn't want their name attached, like they were afraid they would be environmentalists, that is. They were afraid that they would get the reputation that they were white washing what industry was doing by going to these meetings and they wanted to be an adversary and not a helper. And so, finally, after a year or two, we consolidated them all and so now there is one industrial meeting a month and all of the industries cooperate. And it's a pretty good-sized meeting. We meet for lunch and, um, each industry in term, or somebody arranges and programs about what's going on, and they spend a lot of money on it. I mean, these slide projections they put out cost money but [16:59] they are working on it, too, you no longer can smell Corpus fifty miles away.

JB: So, you think industry has done a good job of addressing environmental issues?

PS: Well, let's say it's a work in progress. They are trying. And, uh, a lot of the stuff they are producing is pretty toxic, so they want to try. And they—I think they are doing an ongoing, better and better job. It's better today than it was two years ago or five years ago but it's not perfect yet. But then none of us are perfect. We try to do the best we can, and we try to—if something else comes along that they can do, if I hear of something, I call somebody out there

somewhere if they are doing it, and I tell them. But, uh, since we do meet once a month, they're very anxious if, to talk to me or someone else. Um, "Have you heard anything is there anything coming out in the chemical literature?" So, I have all kinds of literature coming here and I said, "Well, nothing this month. No environmental stuff this month" (laughter). But if there is, I pass it along. And yes, they're trying and sometimes I think they can try a little harder, but they're trying.

JB: Mm-hm. What were some of the other issues that you worked on here locally?

PS: I'm sorry some of the other issues of what?

JB: You worked on here locally.

PS: Uh, oh, I don't know (laughs). I worked on all sorts of things. Of course, the environment doesn't cover just the industrial section. And we worked on the water issue when the port wanted to dig a seventy-seven-foot channel through the bay, the environmental community came up in arms and we fought that with [unintelligible] [19:07]. They were at fifteen feet, but no further. And, um, she wants to know what other issues besides the industrial issues I've worked on all these years. What other the issues? I forget them (both speaking) (laughter).

JB: What about your work with the Audubon Outdoor Club?

HS: (both speaking at once) talked about the seashore yet?

PS: Huh?

HS: You told her about the Padre Island National Seashore?

PS: No, I haven't said anything about that. That was not a chemical issue. I was on a committee that formed Padre Island [unintelligible] [19:42] and all that stuff to get Padre island. I have a plaque for that.

HS: That's the thing I remember you and dad were involved.

PS: Yeah.

HS: And they had to [unintelligible] [19:53] for the *Caller-Times*, they had to fight Lyndon Johnson to get that done.

PS: We got Padre Island when Lyndon Johnson quote unquote "went to the restroom."

HS: [unintelligible] [20:04] (laughter)

PS: We passed around a way to the restroom, but they passed the bill, he went out of town, and he passed the bill that created Padre Island (both speaking at once).

JB: Why did he oppose it?

HS: Well—

PS: —He had financial interest (both talking)—

HS: —Lyndon Johnson, now I don't want to be a historical footnote, well, you're a historian, you might—Lyndon Johnson, much of his powerbase began down here. He was the Congressional Secretary to Dick Kleberg and, you know, in those days, the [unintelligible] [20:37] was Chief of Staff, you know, for Dick Kleberg who was a congressman. And so, he had a lot of contacts here in Corpus Christi and down in South Texas, a lot of those ranchers down there were friends of his who owned, you know, the sea—Padre Island, and they didn't want it done. And so, he was, you know, vice president, presided over the [unintelligible] [21:04], well the vice president doesn't have very many things to do. They can, if they so wish be [unintelligible] [21:10] posterior, not, you know, put something on the, uh, you know, the [unintelligible] [21:16] speakers, that type of thing apparently [unintelligible] [21:18] he was—he would go to I, guess, you know, President Kennedy gave him something to do, and out of his hair and sent him on these, you know, trips abroad. In one of these trips abroad was when they brought up the seashore. And, I mean, this is, like I said, this is when I was a kid, and I remember that, you know, specifically. But I mean—

JB: —Mm-hm—

HS: —historically from the talks they had [unintelligible] [21:42].

JB: And what did you do on that committee for the Padre Island National Seashore?

PS: What do you do on any committee? I talked a lot to people, I gave lot of talks, and, uh, I was (laughs) I don't know, what did I do?

HS: That's before I was [unintelligible] [22:04] (laughter). That was little league baseball, like I say, acne, and then found out what girls were about, that type of thing (laughter) [unintelligible] [22:17] politics.

PS: I spoke to lots of clubs and stuff like that.

JB: Mm-hm.

PS: And, uh, did a lot of political work with the legislators and people on the legislature and their aides and things and all this time I was teaching at Del Mar.

JB: How did you use—

PS: —so it was in between (laughs) class—I actually got called out of class one time and I tried to get a hold of somebody who was stinking before I brought it up, who it was, but I forgotten, but anyway, he called whoever it was called at Del Mar they knew I was teaching at Del Mar and

so the department secretary came in. I was teaching a class, and she said, "You got a call from Washington D.C., some blah, blah, blah." And so, I said, "Okay, um, class dismissed" (laughter). I went and took the call and my class was hilarious (laughs). They just sat there and waited until I came back, most of them, "Who in the heck was that?" They were impressed that I just stopped a class (laughter) to go take the call. But, um, what was first question? I was trying got answer one.

JB: Oh, just your role on the committee for Padre Island National Seashore.

PS: Well, I was a member of the committee and I did whatever I could.

JB: And why did you want to get the seashore established?

PS: Well, because we need to preserve as much of the native habit, that's worldwide, [23:48] not just here, as much as the native habitat as you can and keep our ecosystem going. You can't pave everything. We have to have green space, we have to have trees, native trees, we have to have as much of the natural environment as possible or we'll sink ourselves. But, um, Padre Island, I wanted to save for my children, grandchildren, et cetera. It is a beautiful place, it is—there is no reason to but a bunch of condos down there because then the public doesn't get the feeling of a natural place and everybody, everybody, needs the opportunity and should take advantage of it to get out into nature because it relieves the emotional tension under which most people exist all the time. And, you know, if you are going to give a reasonable happy secure life, you have to be able to have some break in it from the day to nine to five grind every day, or the tensions under which you are trying to work, or raise a family, or something. And so, we have national parks all over the country. And this is a national park. It is indicative of the original situation here on the Texas Coast and I felt and lots of other people did obviously, felt it should be preserved, and so we succeeded.

JB: What was it like back then? Did you go camping out there?

HS: Well yes, what it was at that time was you had—you of course know where Bob Hall Pier is.

JB: Mm-hm.

HS: There were no roads, paved roads, past Bob Hall Pier. There were some shell roads which were for the oil service trucks like oil [unintelligible] [25:47] But the beach itself—uh, there was nothing. And the only way you could get down was called Big Shell, Little Shell, was you had to have some sort of four-wheel drive. And in the sixties, those were very, were not, very rare. You didn't have all these SUVs all over the place. Dad bought an international harvester [unintelligible] [26:12] which was his pride and joy. That's where he—what you had, you had the lugs. You had to tighten the lugs before it went into four wheel drive before it went into four-wheel drive, wasn't automatic, lot of things. So, to go down to Big Shell, Little Shell, it was quite an adventure because the only people that were down there were really hardcore fishermen, and uh, we were losing business because there was nothing. There was no Malaquite or anything like that. And I remember in my senior high school, Lady ird Johnson came down and dedicated.

And, of course, [unintelligible] [26:49] Port Aransas surfing, that was, you know, they let school's out (Brown laughs) [unintelligible] [26:56] All of a sudden, it occurred to me that we better get down there because, you know, my parents were down there and they're on the, you know, the [unintelligible] [27:05] audience I might get in trouble (Brown laughs) [unintelligible] [27:07]. So we grew [unintelligible] [27:09] past Bob Hall Pier, like I said, they were was [unintelligible] Shell road, and you sit there for about ten or fifteen miles, however long it is from Bob Hall Pier to the seashore, we weren't sure we were going to get there at all. But sure enough, out in the middle of nowhere, there was this grandstand set up. That's where they—which is now, you know, where Malaquite Beach is, but that's where the ceremony was.

JB: Hm.

HS: But there is very, very, little because what you had at that time on the beach, you had Bob Hall Pier, which was where, I think most of the people in Corpus, that area around Bob Hall Pier is where a lot of them went, and then you had Port Aransas. And Port Aransas is where all the surfers went because the waves were back [unintelligible] [27:55] all the time.

JB: Mm-hm.

HS: And so, very, very funny town. If you remember that song by Barbara Mandrell, "I Was Country Before Country Was Cool," (Brown laughs) she grew up [unintelligible] [28:11] Corpus.

JB: Oh.

HS: That's who she was talking about. See, you had two drive-in theaters. You had the [unintelligible] [28:19] down there downtown where U&I is.

JB: Mm-hm.

HS: That was the redneck [unintelligible] [28:19] the cowboys, the kids from [unintelligible] [28:30] That's where they went. [unintelligible] [28:33] which was out there at Staples and Golihar. This is where all the surfers and those type of people went. So, it was a very, very strange (laughs) town. If you grew up in the same way that type of class, demarcation or whatever, was how the beach was. And the people who thought they were the [unintelligible [28:57] went to Port Aransas everybody else went to Bob Hall Pier. But in between Port Aransas and Bob Hall Pier, uh, there was very little, you know, none of those condominiums, anything like that, so if you wanted to go to the beach and be by yourself you go off on that [unintelligible] [29:15] access road two halfway between there in Port Aransas—

PS: —There was nobody—

HS: —Nobody there—

PS: —Nobody (both speaking at once) we used to spend many a weekend camping there, never saw another soul with our little group that camped there.

JB: Oh wow.

PS: And one of the—most of the time we camped with a man who was, and his wife and two girls, he was head director of the Corpus Christi Museum, Albert Heine, and many a weekend we went access road two, and go north just a little bit toward Port A, and set up camp. And one spring break, (laughs) one spring, we had an abnormally high spring tide. So, Albert Heine was from Holland, and he had the four kids, I had two and he had two, and he had the four kids digging a trench in front of our campsite so we wouldn't flood in the high spring tide, and sure enough, we didn't flood but it flooded all around us (Brown laughs).

HS: It was like a little—who was that guy, that Dutch guy with his finger in the [unintelligible] [30:21] whatever his name was.

JB: Yeah.

HS: That's what we were (laughter) [unintelligible] [30:26].

JB: Yeah.

HS: I vaguely remember that.

JB: And so, you worked a lot against the development of Oso—

PS: I'm sorry what did you say?

JB: You worked, can you talk about your work against the development of Oso Bay and places like that?

PS: Well, as far as Oso Bay was concerned, the people that wanted to develop it into a marina apartment on stilts type thing so you could bring your boat in at night and tie it underneath the stair and climb the stairs to your apartment, or whatever it was. I mean, it was a very nicelooking affair. But from Dallas, his last name was Bass, and uh, he wanted to come down here to put this development into Oso Bay and a number of us fought him tooth and nail. And of course, we won the fight, but not on our issue, unfortunately. We were on the fight on the engineering issue, which I will get to in just a moment. But Oso Bay is the endpoint for the drainage of most of central Texas and it brings a lot of nutrients down the bay. Therefore, it is second only to Galveston Bay as a nursery area for producing the spawn of fish, and shellfish, and such stuff. And so we fought hard to protect Oso Bay, and finally, at least of today, have succeeded in protecting Oso Bay for that reason. But the, um, reason that most people supported us was not that. They did not want a marina development down there which would have but four, five story houses with power bolts coming in and out of Corpus Christi Bay and nesting underneath, it might—making all kinds of racket, and so forth and so on. And the people who were interested in the university going in over there were against it for the same reason. They didn't want a bunch of outsiders, quote, "Yankees," (laughs) and such people coming into our area and making a racket and tearing up our environment and so forth and so on. We had lots of support when we fought them. But what killed it, what killed it was that, uh, it was impractical. What he wanted to do was to make a marina and build apartment units where the boats could come in as I said and come, as I said, and dock underneath and they could go up. Well, Texas A&M had been down

here prior to this and had done quite a bit of estimation about the bay bottom and how, um, [33:14] we could alter the currents and whatnot. There was a complaint about the fact that it stunk so because of the big sewer plant down there. They finally cleaned up the sewer plant, so it wasn't so bad, and then I think they moved most of it to the creek over there. But anyway, um, we were fighting it on environmental grounds because Oso Bay is a nursery area and the spawn of crabs, and shrimp, and fish, and whatnot, all grew up in Oso Bay second only to Galveston Bay on the Texas Coast. So, we produce a tremendous amount here of the fishes and whatnot that people go out in the Gulf to get. And that was our argument to them now, who a lot of us who fought it, we fought it on other grounds. We didn't want some kind of a development out in the middle of what we consider to be a nice natural or as close to natural area as we can have here in Corpus Christi for the students to be able to go out and seine for fish and stuff like that. We didn't want all this commercial development out there. And, uh, one way or another, we had, when the city council (laughs)—they had their city hall down on the bay front there at the [unintelligible] [34:42] and they were having a meeting to vote on whether or not to support the, uh, development of Oso Bay into a marina and whatnot. This fella's proposal from Dallas, Bass proposal from Dallas, and, uh, we had organized, and I no longer remember who the key organizer was, but one of them, there was several of them who still live here in Corpus Christi, but they organized the high school students and they went down and paraded around city hall—

HS: —Oh that was Ted Jones.

PS: Huh?

HS: That was Ted Jones you're talking about.

PS: Okay, um, during the city hall meeting, of course, they voted to go for the development. It would bring money in. They didn't care about the environment. But, um, anyhow, we won the issue with Carlos Truan in the Texas legislature. And the last day—

HS: —That was Bob Armstrong.

PS: —And Bob Armstrong who was staying—

HS: —The land commissioner—

PS: —the land commissioner, but it was Carlos that carried in the legislature, and they had, uh, Oso Bay declared a sanctuary one minute before midnight (laughter). It was the last vocal bill and Carlos called us at midnight, "We got, it we got it." So, they couldn't do what they wanted to do, even though in the next morning—what was his name the city manager?

HS: Marlin [unintelligible] [36:11].

PS: Huh?

HS: Marlin [unintelligible] [36:14].

PS: Marlin [unintelligible] [36:16] called us a little past midnight that night, "You knew it was coming up didn't you?" and he was pounding (laughs), "Of course we knew it" (laughter). He was so mad he could come out of his clothes. But, uh, anyway, they never tried it again. But in the meantime, uh, A&M sent some engineers down here to test and there is no rock bottom for seventy feet. So, it would be very hard to put a development out in the water, which is what they were envisioning with the four-story apartment units or something like that. They'd have to go seventy feet to hit rock bottom to put their base.

JB: Hm.

PS: So anyway, that was one of the wins.

JB: What were some of the other wins?

PS: Oh, I don't know (laughs). That was the one that made the biggest difference here. I think some of the others were, uh—

JB:—What about brown pelicans?

[37:19]

PS: Well, that wasn't so much a chemical fight. The brown pelican became—we fought to have it declared endangered, which it was, and we were down to five brown pelicans on the Texas Coast. And then they began to migrate up from Mexico. Now the Mexican brown pelican is a slightly different species, at least their people who maintain it's a different species. It has a different nesting protocol than the brown pelican we have here. But, uh, the brown pelicans that were here would migrate to Mexico in the wintertime and then come back in the spring and nest in the along the Texas coast. And, uh, we wanted to preserve for those too. People just don't realize that sometimes the wishes of human beings for something that they like serves to destroy something they would miss more than they would miss what it was that they wanted to put there. In other words, the natural environment has a use even for human beings. And lots of people like to think that paved roads and automobiles are more important than something like a brown pelican, but they are not to the livelihood of mankind. You have to have so much of the natural environment to support all the stuff that we put in.

JB: Do you think that people's perceptions here locally have changed about the environment?

PS: Well, to some extent, but not really. Most people take the environment for granted, and uh, only when a big fight comes up do the general public take any notice whatsoever of what is going on. But, um, when something comes down, "Can I make money with this or should I be preserving that?" I still think most people will try to make money.

[39:38]

JB: Were there any issues that you worked on that you think weren't a success that the people, the developers, or the people trying to make the money won out?

HS: Packery Channel.

PS: Pardon?

HS: Packery Channel.

PS: Packery Channel, um, that's the biggest one we lost was Packery Channel.

JB: And what were you working on for—

PS: —For Packery Channel?

JB: Yeah.

PS: We didn't want them to dredge it because it changes the circulation patterns, it changes the migratory patterns of the fishes and crabs and all the other stuff that comes in and out of there. And, um, it was a big fight, but you do what you can.

JB: Mm-hm.

PS: You have to take the wins with the loses.

JB: How, um, I guess, what's your most memorable work in local environmental issues?

PS: How was my most memorable (Hal Suter and Pat Suter both speaking) (laughter). Huh?

HS: You haven't yet talked to her about the water releases yet.

PS: About the what?

HS: The water releases.

PS: No, well that was a big one too. You talk to her about the water releases. I haven't thought about the water releases in a long time.

HS: Well, um, you're familiar with released water into the end of the bay?

JB: Mm-hm.

HS: And, um, freshwater inflow is, you know, is pretty critical because you have to have, otherwise you get saline, and you don't have all the, you know—

PS: —you need all the nutrients that come in with—

HS: —the whole food the whole food chain breaks down without the nutrients. Now, it's not a problem, you know, further up the Texas Coast when you get into Houston or [unintelligible] [41:45] where it rains all the time because there is plenty of stuff. But down here, it's a big deal. And your water impoundments, which is the technical term for dam, reduce the flow. And that has all the ramifications for fishing, and you know, the recreation, everything associated with that. Well, when they built, as you know, if you live in Corpus, anytime they're always constantly worrying about water supply. And say for instance, if they bring in that Exxon plant across the way it is going to use so much water, we are going to have to be searching very quickly for another source of water. Well, we already have—

PS: They already are taking some from east Texas—

HS: —[unintelligible] [42:34] is possible, that's fairly expensive [unintelligible [42:39]. But anyway, the—when they built, uh, Choke Canyon, Choke Canyon had a provision, they had to release what was one hundred fifty thousand-acre feet a year there. Now the city claimed that this was a what was, the technical term was return flows, which they would divert the water which was used back in the bay and whatnot. But anyway, whatever it was, there was no explicit thing in the contract, no, uh, memo of understanding or any of these legal terms as to just exactly [unintelligible] [43:90] water they had released in the bay's estuaries from the Nueces River and this was done once, you know, Choke Canyon reached one hundred percent capacity, that thing was triggered. I suppose that that happened in '87? Was that when that big rain—

PS: —I don't remember the date but—

HS: —Anyway, there was a big rain there shortly thereafter we moved back down from Houston. Rumor has it the city didn't get there to open the dam quickly enough and Choke Canyon (laughs) became one hundred percent full briefly. So that triggered the whole, um, the whole thing, it sat there for a while until a group of your, you know, bay shrimpers, who were concerned about why their shrimping production is going down and whatnot, [unintelligible] [44:05] to all this water. You know, [unintelligible] [44:07] it was all about the water releases. So they formed a group very briefly and brought it to the attention of what was now called the TCEOs, they called it Texas Water Commission. And that triggered a whole bunch of things to where ultimately, uh, the Water Commission ordered this release of water. And as you can imagine, this has caused a furor here in Corpus Christi and they couldn't get it through their heads that, uh, yes, Corpus Christi built the dam, but the water behind the dam belongs to the state. It's just like, you know, a river or anything else. So, if the state says something, you have to, you have to do it. And, uh, so, my gosh, I mean, Joe McComb, who may, god almighty hopefully not become our next mayor, was on the city council at the time and he was one of the leading complainers about all these water releases. And he and Ed [unintelligible] [45:26] been the city manager who was on the city council kept trying to tell then Mayor Rhodes, "We got to order them to just shut the dam off." You know, and she, bless her heart [unintelligible] [45:39] you can't do that. You know, we don't have the authority to do that, and if we ticked off the Water Commission on this issue, there will be so many things where we have to go before [unintelligible] [45:53] pipeline that we would never get that through if we antagonized the state bureaucracy, that is—this took about a couple years. You know, the Corpus Christi City Council takes a long time (laughter) to think about things in an intelligent manner, as you may have discovered (laughs).

JB: Right.

HS: They finally acquiesced to what she was saying. But anyway, that was the only, uh, she's—they formed ultimately to figure out the logistics of the mechanics [unintelligible] [46:36] called Nueces Estuary Advisory—is it Committee, or Council, or what is it?

PS: Pardon?

HS: What is NEAC? Nueces Estuary Advisory—

PS: —Yes.

HS: What's the "C?" Is it Committee? Or—

PS: —Committee.

HS: Committee?

PS: Or Council, maybe.

HS: Or Council—

PS: —I think it is Committee.

HS: Committee—

PS: —Council is too high brow for the City Council (laughter).

HS: So, it—which determines just exactly how it's done. They are revamping it. It's been kind of dormant for a while, but this is under the purview of the TCEQ.

JB: Mm-hm. On the water issues, did local environmentalists work with shrimpers or people who were also influenced by freshwater inflow?

HS: On that particular issue, yes. She and some others knocked heads with them over turtle excluder devices at that time which that was existent in the nineties.

PS: What are you going to do with all this information you're putting in your head?

JB: Well, so we want to have a website where we put all the oral histories on there and then do a podcast. Um—

PS: —That would be nice—

JB: —so like, an environmental history podcast, different episodes on different topics and people, and then, um, hopefully, one day write about it and write a book about it.

PS: Good.

JB: Yeah.

HS: Yeah well those are the big ones I remember. Let me see what else, we had, uh, you told her about the, all the neighborhood councils which you formed—

PS: —You could tell them.

HS: Well I don't know anything about those things, I mean—

PS: —Well I don't know (both speaking at once)—

HS: —You and Joyce were on all those neighborhood committees and were all the monitoring and the industry and whatnot over there.

PS: Well, we still have the committees, but they've consolidated. When all the pollution, um, sure rose with this book here over here, um, industry panicked and each industry wanted an advisory committee composed of citizens that they hoped to be able to control but that would advise them about what the rest of the city was trying to do. And its good publicity and all that sort of stuff. So, I think we had six or eight industries at the time and each one of them set up their own committee. Well there were two or three of us that ended up on all those eight committees because for one this Joyce that he mentioned briefly she lives over there and is an activist, environmental activist among other things, she is quite elderly now, a little over one hundred but she is still living and still active. And, um, they wanted her on it, they wanted me on all those committees because I was head of the Sierra Club and other environmental groups in town and prominent this, that, and the other. [49:34] And there were two or three others that they wanted on all these committees and those of us that they were singling out from the committee, from the community, to be on their committees said, "Listen, we can't be on all of these. We will be on one or two, or consolidate, or somehow make it workable because we have our lives to live too, and it's not an industrial life. And we can do what we do without you. You may need us, (laughs) but we don't really need you. You're doing your thing already. And so, they finally consolidated, and we now have one industrial meeting which meets once a month and for lunch. And, uh, each industry in turn or some combination thereof has a program presentation. They spend a lot of time and money on these because they're slide presentations and pretty professionally done on what they're doing to alleviate pollution and whatever. Very interesting, he and I go every month and listen to them and if we have a question, of course, he will try and answer it and all that kind of stuff. It has progressed a great deal since the time of that book. Industry is trying to curtail anything deleterious that they put out in the air or the water. The water fight is another fight entirely from the air pollution. And, uh, they do their, well, we have a code, Best Available**HS:** —What, are you talking about the B.A.C.—

PS: B.A.C. and M.A.C. Best Available, what's the "C?"

HS: Control technology.

[51:23]

PS: Okay. Um, there are two things that they do. One is called B.A.C., B-A-C Best Available Control, and, uh, the other is M.A.C., Maximum Available Control. And we want them to do M.A.C.s, the maximum possible. Now, it may seem kind of, uh, it was in Congress to me that the best was less than the M.A.C.s, but anyway, the M.A.C.s available is more expensive and more intensive and whatnot. And most of the industry is trying for the B.A.C. currently. We want them to do the M.A.C., so we are working on it.

JB: Mm-hm. What do you think is the most important environmental issue facing Corpus right now?

PS: Location.

JB: And why?

PS: Well, we are heading into global warming, which means sea level rise, which means a large part of Corpus Christi is going to go underwater. And then we have a lot of people that live out around the Oso who will go underwater, a lot of people that live on along the river will go underwater, and it will interrupt the water supply to some extent, it will interrupt the environmental nesting and such stuff of the fishes and the shrimp and this kind of thing, and the people are totally unaware.

HS: They need to check out the FEMA maps.

PS: Pardon?

HS: The FEMA maps.

PS: Yes.

JB: Mm-hm.

HS: Come out—

PS: —They don't realize, most people don't realize that many citizens in Corpus Christi will go underwater.

HS: I give you a little bit of example of the problem that you have. I'm on the Marina Advisory Committee, which is basically a do-nothing committee, really because there is no land

[unintelligible] [53:21] going on. So, you just go sit around to listen to how many boat slips were rented out. But, uh, of course, the other thing is the complaints about the shoreline rerouting because it has messed up the yacht club and the art center, they can't hold their big events because there is no parking [unintelligible] [53:38]. But the other thing which you had is this combination of subsidence and this very slow, but incremental sea level rise, is that the lower steps down on the seawall are impassable or underwater, or quite often get moist and they will get, you know, the slime, the algae on there. It's a tremendous, you know, risk management or legal problem. There's people walking on there, and there is a possibility they slip and somebody, you know, busts their head, or their leg, or something like that. It is a constant problem trying to clean off that stuff.

JB: Hm.

HS: And that's, you know, come about because of the sea level rise.

JB: And Texas is sinking.

HS: Yeah, the subsidence, yes—

JB: —Mm-hm—

HS: —and that combination. So, there's concern that that's—the worry about that that has implications for the break water down there as it rises and starts to seep through the rocks and whatnot. So, there's always the in background this concern that, of course, you know, we may be the only people to know about it, (Pat Suter laughs) we talk about it—

PS: —We probably are the only people that know about it because there's no publicity anywhere.

JB: What would you—how would you address these problems then?

PS: What do you mean by that?

JB: Well if—

PS: There are major problems that were known by very few people, then they should be, at least, discussed occasionally in the public so that we can make preparation for them. I mean you don't have to get down there and raise everything tomorrow. You can get down there and look and see what needs to be done and if the sea wall is being undermined by rising water, as it is, then we need to realize that we need to keep track of that and make repairs if we can, or pop sand underneath there if we have to, or whatever we have to preserve the seawall. It would be terribly expensive to replace that seawall. [55:45]

JB: And what would you say just, um, to everyday people what they could do to address environmental issues?

PS: Well if they see something, report it. If they see a crack in the seawall, they should report it and, uh, report it to the city manager's office. I mean, that would be the simplest thing to do is tell them to call the marina office. "How do I know what the marina office is, or where the marina office is, or how to get a hold of the marina people?" People, if they are going to report it, if they are down there, the marina office is down there. They can report it down there. But, uh, most people want to hide behind a phone or something. They don't want to out in the public in complaining about something. They think they, um, I don't know, they just want to melt into the woodwork so to speak.

JB: Mm-hm.

PS: But if they see something, they should report it. If they see a crack in the wall there, if they see one of the bricks falling out, or anything like that, tell somebody. Don't just go home and complain about it because that doesn't do any good. But if you tell somebody, it may go up the chain and they make a repair. But the seawall is under siege.

JB: Yeah, um, is there any other thing you want to share about the environmental history of the area?

PS: I don't know (laughs), you think there is something we should share?

HS: Well [unintelligible] [57:19]

JB: Is there anything that we hadn't talked about yet that you—

PS: —Well we have got fifty years of history so (laughs)—

HS: —Did you talk about OPUS [Organization for the Preservation of an Unblemished Shoreline] with her?

PS: No, but I, we could. OPUS was the uh—

HS: That's where Sissy Farenthold got her start.

PS: (both speaking at once) OPUS was an organization, it's the Organization for the Preservation of an Unblemished Shoreline. It's not active anymore, but it was very active in the sixties and early seventies. And, um, the idea was to, uh, report anything you saw, alert the public to what they can do to help, and, um, be active about it, and if we needed to, we could organize a support for bond issue to repair this, that, and the other, and so forth. And as he said, Sissy Farenthold got her start with that. But, um, we met once a month, we talked to the city manager quite often, and told him what we thought needed to be done. Well, sometimes he did it, and sometimes he didn't, and if he didn't do it where we couldn't see any changes, we went back and hollered at him. But it was an organization of mostly women, and, uh, women who had time to scream and holler. You know, they weren't out necessarily earning a living or anything like that. [unintelligible] [58:58] women, really. And we had did quite a bit, really, to help preserve

down at the bay front, mostly at the bay front. But, uh, we did bring other issues up to the city manager and the city council and things like this. Over the years—

HS: —Well all those parks are y'all's legacy.

PS: What did you say?

HS: All those parks—well, all the parks, you had [unintelligible] [59:28] Park, and Swantner Park, and all those parks are what—

PS: —Well—

HS: —those things—

PS: —yeah, the preservation of the bayfront parks is really an issue, and very difficult issue we haven't had a storm since 1970. We're due.

JB: Mm-hm.

PS: And you see all those aluminum things on my windows? I put them up after hurricane Celia in 1970 because I was teaching at Del Mar at the time and I called my sons I said, "Put up the plywood, that storm is going to hit us today." And so, when I came home, they were out hammering on the—we had plywood, uh, panels that went on each window around the top and, um, they were out putting up the plywood and I said, "This is too much trouble." So, after that storm went over, I had the aluminum [unintelligible] [1:00:22] and we just have to crank them if the storm comes in. Well, you might know we haven't had a storm since I put them up (laughter).

JB: Yeah. So, did you all evacuate and—

HS: Oh no.

PS: We didn't evacuate—

HS: [unintelligible] [1:00:34] didn't have time.

JB: Oh, so you—

HS: I mean, you literally did not have, uh, they had pretty good stuff. Of course, you didn't have the Weather Channel then. But, uh, I was a lifeguard down there at South Beach, which of course they call Gee Beach. And you heard, I think it was on a Saturday or Sunday that there was a tropical storm out in the Gulf. It was supposed to go around Beaumont—Port Arthur, and, uh, way back then that room which is now where the computer is at was my bedroom because I slept out there. That's where my stuff was because I'm not going to sleep with younger brother back there at the back (laughter). He came up there and he, John, was shaking me, says, "Dad says get up," you know, "the storm is coming this way." And I said, "Okay." I got up, and first of all I tell

him, "Leave me alone, you little jerk." And then dad came and pulled me out of bed (laughter). Anyway, (laughs) I went, they were out doing the stuff, I went out and bought, you know, kerosene, and sterno, and all these other things, then came back. And it was only supposed to be seventy-five or eighty mile an hour winds, and so we'd had what, Beulah three years before—

PS: —Yeah—

HS: — Beulah was a very big hurricane which went into Brownsville. We got the upper part of it which was mostly rain. I mean, god, it was—everything looked like Venice. Everything was flooded, the whole town probably got like fifteen, twenty inches of rain in a day or two. And, uh, anyway, but you'd have this seventy-five, eighty mile an hour winds from the [unintelligible] [1:02:15] that's no big deal. But then like noon or something like that, it comes over, the winds are one hundred twenty-five, one hundred thirty miles an hour. So, we had people off gawking at us when we were putting up the plywood. But all the sudden, all those gawkers looked like those old silent movies everybody's—

PS: —banging around [unintelligible] [1:02:35]

HS: —Everybody's running around putting up all this stuff and you only had about two hours warning and that stuff, you know, came in. And I remember John and I, we got off on the roof of the garage to watch it come in. The sky was greenish color and (both speaking at once)—

PS: I was teaching at Del Mar and they came around, teaching chemistry at Del Mar, and they came around and said, "Before you leave, get all the bottles away from the windows." But they didn't tell me they were evacuating the school. This was about nine thirty in the morning. I kept my kids until eleven o'clock at the end of the class. They had their lab, we didn't know anything about it. I walked out of the building at eleven o'clock and there was nobody at Del Mar. My car was the only car in the parking lot (laughs). "Oh my lord what happened?" (Brown laughs) And we moved all the bottles away from the windows and stuff like this in the chemistry lab. But, uh, it was very eerie because the whole sky was yellow. I've never seen a yellow sky before or since. But looking towards the bay as you came out of the laboratory over there, I looked up and I thought "My god, what kind of a storm are we going into?" I came home and everybody— they boarded up all the windows (laughs) my sons had. It was—

HS: —I remember running up on the roof of the garage to watch it come in, she just about had a panic, "You two idiots, get off of there" (laughter).

PS: And I had I still had—my freezer was to be delivered that afternoon that I had bought two or three days before. They delivered it at three o clock in the afternoon and the storm hit about 3:30 (laughs).

JB: Wow.

PS: We couldn't use it for a week, we didn't have electricity (laughs). Oh, stupid things that happen.

HS: It was something else because—you know where Sutherlands is?

JB: Mm-hm.

HS: In that the that bay was a [unintelligible] [1:04:34] the whole roof collapsed. I was at Parkdale Plaza, there were roofs caved—

PS: —All the merchandise was on sale, I bought them clothes for several (laughter)—

HS: —They had, uh, these convenience stores they called "Circle K's." They had this up-slanted roof. What happened, the wind got around and created these mini tornados [unintelligible] [1:04:58] every one of the "Circle K's" roof collapsed. And they had the—friend of mine, [unintelligible] [1:05:06] His father had an Exxon station up there in Texas and Staples. Dale had to go in and spend the night with a shotgun so they wouldn't, you know, (both talking at once). And, uh, when you had trees down all over the place, and you had later went out, and almost all Pharaoh Valley was leveled. There was a newer subdivision [unintelligible] [1:05:41] you know, they—this is when they changed the building codes here, you know, you had to have much longer nails and things like that. But nearly all of Pharaoh Valley was gone.

JB: Wow.

HS: Just an eerie experience once you can get—drive around and trees, driving around and look at what happened.

JB: And this house wasn't damaged?

HS: [unintelligible] [1:06:07] Uh, so, I mean, that was a window by the way back then, a branch, bang, smashed the plywood, but, uh, of course we lost electricity very early. We were out on the—

PS: —one week without electricity.

JB: Wow.

HS: It was longer than that.

PS: No, it was a week. I went back to Del Mar—

HS: —Anyway, (both speaking at once) well yeah, but they were on the mainland, it took longer—

PS: —Yeah but we got it the same time Del Mar did.

HS: —(both speaking at once) was complete torture (laughs). They had the mainland got hit by [unintelligible] [1:06:39] flying around, sparks going through the air, and everything like that.

The house would groan one way and then the wind would shift, and it'd groan the other way. So, if it would have gone much longer, I don't know what we would—

PS: —We're due for another storm, just be prepared.

HS: It was not—it was very small geographically, very intense. [unintelligible] [1:07:02] we lucked out. But, uh, some the newer areas in town did not and what was so bad about it was this period of time without electricity, and the water supply was off, and everything like that. And I do remember, the guy was my buddy, told him I had a [unintelligible] [1:07:23] and we had heard this rumor—see they have the whole city courted off by the national guard. The national guard people all over the place, you couldn't get into Corpus unless you were authorized for work or, you know, had some proof that you lived in Corpus. And so there was this rumor that out there [unintelligible] [1:07:47] Park is at the end of the city, there is going got be a big ice truck that is going to come in. And so, you know, you can imagine living in August being in Corpus Christi without an air conditioner or water, it's not the most pleasant experience (Brown laughs). [unintelligible] [1:08:05] we are going to get up two o' clock and we are going to go out there and we will be riding the top of the line and get our ice. We went out there and it was a long [unintelligible] [1:08:14] (laughs) because of the two mile line of cars already out there. Of course, it was just a rumor because [unintelligible] [1:08:24]—

PS: —They brought ice up here to HEB and you could go up with your cooler and they keep a chunk of ice. But, uh, it was an experience. I'd just assume I'd do it again but that's when I put the aluminum [unintelligible] [1:08:41] on the window, we just have to crank them now and they're protected—

PS: —rather than get the big plywood—I had plywood sheets for each window labeled so they put it on the right window, you know, (laughter) and stuff.

HS: Yeah, I was there with some good buddy [unintelligible] [1:08:56] Texas (laughter). Just got electrify [unintelligible] [1:09:02] trash piles all over town. All over—

PS: —and twelve engineers came in with their equipment, but it took a week or ten days to clear up the city. We went down to the valley during the week that trash was just piled everywhere here. And I said, "We have got to go down to Mexico, I've got to see something that looks clean in comparison," and you know how bad Mexico can look (laughs). And sure enough, it looked clean in comparison. Oh, it was awful. Just the trash everywhere, it had blown away and you'd see a piece of a window somewhere and stuff like that and—

JB: How long did it take to get cleaned up?

PS: Well it took at least ten days to get just in this general area. Now, how it took to get all over Corpus Christi or all over the area, I have no idea.

HS: It took months because I came back home for Thanksgiving and there was still trash piles. That was late November.

PS: That's when Mexico looked clean. And every once and a while, (laughs) we'd take a break and go down and see Mexico which—

HS: (both speaking at once) I don't know why, but of course, that was—I lived in Houston, and when Alicia hit in eighty-three, that was a bigger place and took even longer.

JB: Hm, wow.

HS: So, I mean, just the economic hits you take from that kind of stuff comes, I don't think really factor it in. If you have a really, really big one hit, it's just going to be—

JB: —All that new building out in the southside and around Oso—

HS: —All that area will flood if, I mean if you have one—were you here in 2008?

JB: No.

HS: Okay, well Ike, which they had up further coast was supposed to hit here before it veered slightly because there was a cold front or something [unintelligible] [1:11:06] slightly up to the north. But, if that would have hit just south of here like they are talking about, the surge would have come here. There would have been nothing left on Padre Island. All those homes would have been gone. All the Oso would have flooded practically how far [unintelligible] [1:11:26], right?

PS: Yeah.

HS: So, all of that Oso, all that keeps crossing everything, they bought all those neighborhoods [unintelligible] [1:11:35] Botanical Gardens would have been all underwater, everything like that. So, one of these days, it will happen, but uh—

JB: —Yeah.

PS: Well, I, after one of these storms, I found out, you know, what the level of the lot is for the grass. Out there is twenty-nine feet, so then I called the weather department and I said, "How high of storm surge is there a record of in Corpus Christi?" Never anything twenty-nine feet, so I think we're okay (laughter). The streets flood, you know at the intersections and things, but it's not being flooded from the bay. If it's being flooded from the bay, you have no recourse. But if it's not coming from the bay, just from rainfall and draining in your general area, then it drains off. But, uh, all the low line areas in corpus Christi will flood if we have a storm.

JB: Yeah, wow.

PS: So, pick and choose.

JB: Well is there anything else you'd like to add?

PS: Uh, anything else you'd like to ask?

JB: I think a lot of my questions were answered but I appreciate you talking—

PS: —You can call me at any time if you want to, you know—

JB:—Sure—

PS: —on the phone and I'll answer whatever you—

JB: —Okay, thanks, I appreciate it.

PS: If I don't know it, I will say, "Sorry, I don't know it" (laughter). Maybe I will know who you could call to get an answer but—

JB:—Okay.