Tony Amos

Interviewed by Jen Corrinne Brown January 26, 2017 Port Aransas, Texas

Jen Brown: Okay, this is recording. This is Jen Brown. It is January 26, 2017. I'm here with Tony Amos in Port Aransas, Texas. Do I have your permission to record this interview?

Tony Amos: Yes you do.

JB: Okay, thanks. Um, perhaps a good starting point would be for you to tell me about your background and early life.

TA: Okay. I was born in London, England, um, and I left there when I was seventeen. I have no education because my father got a job in the island of Bermuda and he gave me the choice at the time of continuing my education, which would have meant going to university, um, or coming with him to Bermuda. And here I was faced, at age seventeen, in a country that was grim, it was cold, it was foggy, it was smoggy, it was—there was rationing still on, and, frankly, a lot of the young American soldiers, the women were more interested in the soldiers (both laugh) than they were in young men somewhat. So, I followed and I went to paradise, in fact, and the reason, my father was a tool and dye maker for the electronics industry. He had been involved before World War II in developing television, with the inventor of television, the man the English, John Logie Baird, that's who we say, I say we, the English say invented television. My dad worked with him in the twenties and thirties, and he was—he had one of his colleagues, or bosses, was a man called J. H. Harries, who was trying to, assembling a team of scientists and technicians to build a color television set in 1954. It was going to be available to everybody and it was going to hang on the wall like a flat screen, which was really revolutionary. My dad was one of the key members of that group who went to Bermuda, and he got me a job there. And I actually spent eight years there and learned an awful lot because as far as studying, I was running the chemical laboratory and then going into all sorts of various processes to deal with making cathode ray tubes and electronics and so on. So that was a really good background for me, but living in a small island at a fairly young age, paradise kind of paled a little bit, so I decided to go west, and I had some contacts in New York. Bermuda's a place where many of the resaerch vessels from the U.S. would go, in particular, one called the *Vema*, a famous research vessel of Columbia University, and, uh, this friend of mine who was a technician on board the ship, said, look, they're looking for people at Columbia, would you be interested in looking for a job there? I did, I went there and I went for an interview with a man called—now I forgot, how can I forget? Anyway, his name will come to me in a minute. I presume you edit these tapes a little bit?

JB: Yeah, we can go back and add his name in, it's not a problem.

TA: Sam Gerard. How could I forget? Sam Gerard, or Robert Gerard, he interviewed me, and he looked at me and said, well, Mr. Amos, you already have a beard, you already look like an oceanographer (Brown laughs) he said, so where would you like to go, the Indian Ocean or the

Antarctica Ocean. I thought for a bit, and I said, towards the Antarctic. I ended up making, um, 35 trips to the Antarctica, spanning several years. I also went to the Indian Ocean and every other ocean and most of the world's seas. My career has essentially been in oceanography.

JB: Um-hm.

TA: By the way, I should also say, during that period of my eight years in Bermuda, I got married to my wife, who's next door, and we've been married for fifty-nine years, but we had a period then where we weren't doing so well together. We were still young, and so on, and we split for a while, but we came back after my first trip to Bermuda. So that--but the interesting thing was that—and I should say right off the bat, I have no degrees, I never went to college, even though I have worked for universities for fifty something years, and attained some status there because my knowledge of electronics. When we first went out to sea in the Antarctic on a ship called the Otan(??), which was United States Antarctic research vessel. At that time, it was the old-fashioned way, using what are called Nansen bottles, deep sea reversing thermometers, where you attach a bottle to a cable that's on a winch going over the side of the ship, and there are three thermometers, and they're very accurate thermometers, and you would suspend a weight beneath the first bottle. No, you don't need a weight on the first bottle, you send the first bottle down to whatever depth, you have to work out what depth you want it, then you put another bottle on, and that one has a weight on it, and then the next one, and then the next one, until you covered, first, what we called the shallow area of the deep, which is about 1,500 meters, that was shallow ocean. Then, the deep cast went from there to five or six thousand meters, and what you did, when all these bottles were in place, you sent a messenger down, which was simply a piece—a weight that clipped onto the cable. When it went down, it hit the first bottle, the bottle turned upside down, while it did that, it collected a sample of sea water, and the thermometers recorded the temperature. They're called reversing thermometers, and, in fact, when I do my surveys of the beach right now, I still use a deep sea reversing thermometer.

JB: Oh, hm (laughs).

TA: I wade into the sea, and leave it in the sea for a couple of minutes and then reverse it. So, that was the old-fashioned way. That had been in vogue among oceanographers since [Fridtjof] Nansen's time, which was in the 1890s.

JB: And what years were you working in oceanography?

TA: I started—oh, it was a momentous year because Kennedy had just been assassinated, and we went off no more than a week or so after that event, so the world was in chaos, and we were going to South America where they really liked Kennedy because he had shaking hands across the ocean and so we had a lot of, instead of meeting hostility, we met some friendship among the people in Chile, in particular, at the time. This was the pre-Pinochet years. We went from Valpraiso, Chile, down to the Antarctic, and back again, and the first cruise was sixty-seven days aboard the ship, a very long period to be at sea, and especially just about the roughest sea in the world. But, I ended up making, I did crews eleven, twelve, thirteen, and fourteen, all at once. I was down there for ten months in all.

JB: Oh, wow.

TA: But, um, after that period, I was, being a technician, marine technician, I was given this new instrument that was being developed, that instead of doing all this putting bottles, which took hours and hours, and you had to stand on the platform, in danger of getting washed over the side. It was an electronic way of measuring the ocean. My son always asked me, what do you do, daddy? And I was said, I measure the ocean. I think he often thought I got a ruler and was measuring. Anway, so, now, with this new instrument, we could continuously monitor the temperature and the salinity, all the little intricacies of the ocean's circulation, and you could read it in the laboratory on board the ship. It transmitted the data through a cable, an electronic cable. There were only three of them in existence. One went to Scripps Institution of Oceanography, the other went to Woods Hole, and the third went to Lamont Geological Observatory, which was where I worked at Columbia University, and I got to use it. When I did get to the Indian Ocean, probably in '65, I think, you know, I've written about a lot of this stuff.

JB: Um-hm.

TA: In '65, I got to take this to sea aboard the *Robert D. Conrad*, which was one of the other one of Columbia University's ships that spent its time at sea, and we were in the Indian Ocean, maybe three or four hundred miles from any country, any shore, and we came across what I call a line in the ocean, where, for as far as you could see, there was some kind of, something happening in a straight line for horizon to horizon. When we got close, it was waves coming in one direction, and even though it was calm, there was no wind waves and waves coming in another, and there was a lot of activity there, there was turbulence, there was a lot of biological activity, small sharks, and sea snakes, and fish, and in particular, for the first time, which influenced me later on, I saw garbage at sea, miles and miles from land. I saw Coke bottles, I saw wine bottles, I saw other stuff, but in looking at this, I got permission from the chief scientist of the ship to do a series of—by the way, ship's time, as they call it, on board these research vessels is very valuable. They work twenty-four hours a day, and even our small ship that we had here, the *Longhorn*, it was probably \$6,000 a day just to have the machine, and the bigger ships, it was \$25,000-\$40,000 a day just to run the ship, and the scientists had to get that kind of money from National Science Foundation, or whoever was sponsoring the research, in order to do that. So, I was asking for some valuable time, but the man, the chief scientist, a man by the name of Mark Langseth, who now, by the way, has one of the most sophisticated research vessels named after him, Marcus G. Langseth. He died several years ago, and so I got permission to lower my machine as we went across. What we discovered, basically, was that this was fresh water coming from the great rivers of India, the Irrawaddy, and the Brahmaputra, and all these other rivers in Sumatra, coming out into the Indian Ocean and meeting with the salty water, and that created some turbulence, and some internal waves, and so I got all that information and Mark said to me, why don't you give a paper? I said, well, I can't give a paper, I'm just a technician. And he said, no I encourage you to give a paper. In the 1966 meeting of the American Geophysical Union in Washington, DC, I had my fifteen minutes to give my paper. I was dreading it. I was dreading, in particular, they give five minutes for questions (Brown laughs), I knew that there was some lions of the oceanography world sitting out there, Henry Stommel, there really big time people, the Russians were there. I remember somebody got up after my talk, and said, essentially, although not in these words, bull. Bullshit, he said. It was a Russian (both laugh) because the secret of

these machines was the accuracy, and it was thought at the time, you could never get the accuracy with an electronic instrument and twenty thousand feet of cable where you have to transmit information.

JB: Hm.

TA: This thing, by the way, this instrument always now causes people to giggle because it was called an STD, and that was for Salinity Temperature Depth, and nobody at the time had any idea what the other meaning of STD was.

JB: Hm.

TA: So I became the STD guy, and I have notebooks on notebooks of how we tried to modify this, and keep it running, and different versions, and so on. That's how I really made my career. Ultimately, I became a research associate at Columbia University and I published some papers, in fact, quite a few papers, including I managed to make *Science* twice and *Nature*, which is, as your probably know, kind of the key to success, but it's interesting, at the time, I was criticized of not having enough single-author papers, but now it's completely different, but now papers in the science world are collaborative efforts, sometimes with dozens of authors.

JB: Hm.

TA: So, I did strive to get some single author papers and succeeded. Perhaps not as, as—how can I put it, as brilliant as, um, as some of the other oceanographers, but I think I had the ability to assimilate. For example, we worked on—and that's when I came here, we worked on the environmental impact of deep ocean mining.

JB: Hm.

TA: And that was a big scheme that was going to gather up all these manganese nodules, and smelt copper, cobalt, nickel, and other strategic metals out of it. And it was a big deal, it occurred in the Atlantic Ocean, some pilot programs, and in the Pacific Ocean, which is where the nodules were, and they literally carpet the floor there. I don't know if you know or do not know, but the whole thing was a ruse by the CIA, and it was broken in the *New York Times*, to raise a Russian submarine, and the big vessel, the big barge that we thought was to contain all the manganese nodules was actually to put the submarine in and hide from the public (Brown laughs). What happened was, when they got the submarine to the surface, it broke in half, and the half with the secret machine, which is what they wanted, a coding machine, went back to the bottom and they were left with, I don't know how many, it's in the newspaper article, all the dead Russians (someone comes in the room). They had already planned on—they had Russian flags and they buried all the Russians back at sea. But it gave us an opportunity to use some of this equipment in an area where we perhaps we would have never got that kind of time to do.

JB: And you didn't know about it until you saw the newspaper?

TA: And I honestly think that the mining people from some big mining companies, they were either the best liars, if you like, in the world, or they believed it too. The manganese nodule—in fact, there's a reawakening of that now.

JB: Hm.

TA: I'm now getting emails from London, there's a big conference on deep ocean mining. I did write to them and I asked them if they were interested in a historical paper about them. I said, of course you would have to come up with some financial help, so they didn't go along with that. So that was—now, why did I tell you this? Why did I start this?

JB: You said that's how you got here.

TA: Ah, yes, because the man whose program it was, Oswald Roels, became the director of the University of Texas Marine Science Institute. At the time, there were two so-called sister laboratories, the one in Galveston, the Galveston Geophysical Laboratory, and us. They had a joint director in Austin and one office, but I think just one person, and each of these two places had a director. Roels was the director of ours, and somebody from Lamont actually became director to the other place. So that's how I got here, and how, in fact, I got—Roels, my wife, by the way, worked for Roels as his executive assistant in Columbia, and he persuaded her to come here and because I had done some collaborative work with him independently. He said, you know, we could probably find you a job here too. The reason why I got into this whole business was he had asked me to go out to look at the data of the Florida coast, the hydrographic data, to see what kind of temperatures and to see what the structure of the water was, and I almost immediately, at the NODC, National Oceanic Data Center, where the data was stored in magnetic tape, I noticed there was a gross error in the temperatures that were quoted for this very area. Somebody had made a mistake, a big mistake, and nobody had really noticed it. I had to correct that, and I think that impressed him a bit that I found that, and that's really how I got to become—I got here. Although there was a small physical oceanography program here, I was still able to pursue my Antarctica things, so I did everything from going to sea for manganese nodules, going to sea for looking at anomalous sea water at the bottom of the Red Sea, looking at, what else, um, what's called where you pump water out from the bottom of the ocean for mariculture, to perhaps, the more nutrient-rich water. It was deep ocean mining, it was offshore, offshore, ODEC. I'm trying to remember all these acronyms. Anyway, I've had really a variety of things. Now, to tell you about what kept me here for all that time. After about a year, I was not too happy with what was going on here, with my living here actually. Earlier in my life, I became interested in birds, and in fact, at sea, whenever I went to sea, in my spare time, I would stand at the bow of whatever ship I was on and look and count birds. I started probably one of the very first bird surveys in the Antarctica Ocean surrounding Antarctica in 1966. We had a semi-mechanical device, well, mechanical device, called a bathythermagraph, or BT, as they called it. Every hour on the hour, one of our group would go on deck, normally you did a fourhour watch, and you'd lower this, it looks like a torpedo, from a small winch at the side of the ship, while the ship was underway, it would go down to about a thousand feet. This machine had a little needle that scribed the temperature on a gold-plated glass kind of plate, that you put in each time. One way went temperature and the other way, there was a tube that contracted or expanded with the pressure, so you got a picture of the depth of the ocean and the temperature.

Sometimes you'd go out there, and sometimes it was downright dangerous. You were supposed to call the bridge and say, okay, I'm going on BT watch, and they'd say okay, but they never checked to see if you came back (both laugh). I got the people during the daylight hours, just ordinary technicians, to look at the birds, and I drew up some of the really common birds, the wandering albatross, cape petrel, and these sort of pretty easy to see, not the subtle ones, got the people to fill out a little log sheet to see what they saw during the fifteen, twenty minutes it took them to do that.

JB: Hm.

TA: I'd been interested in birds, and at Lamont, where I lived in Piermont, New York, I used to out into the nice little park, called Tallman Mountain Park, in the early morning and do some bird watching, and then come to work. I did work at Lamont, I've got a couple of publications on the birds of Lamont, what was there, and some behavior, the ducks. When I came here, there were no woods, there were no tress, there were no hills, and almost, in my opinion, there were no seasons. It seemed to me to be a bland environment. On the other hand, my opportunity here to work as the oceanographer at the University of Texas Marine Science Institute was sort of valuable, and I had two events occur. The one was, on one late April day, I looked out the window of my house, and I counted forty-four different species of brilliantly-colored birds, all the songbirds, the tanagers, the orioles, the things that come through during the migration. Secondly, I had already met with some influential Texans who actually persuaded me to stay. They said, Tony, we really need people like yourself to stay and contribute to the Texas science and history and so on, so I had decided—I had already got my job back, on paper anyway—decided to stay, and it actually turned out to be the best move. That was forty years ago, by the way.

JB: What year did you get here?

TA: '76.

JB: Okay.

TA: At the same time, I also discovered the beach, and I started in 1978, now what I call Beachops, which is my survey of the beach a Mustang Island gulf beach, a certain stretch of beach which I do repeatedly and every other day (phone rings). I think my wife can get that. Oh, you probably don't want that in your—

JB: Oh. [end of recording #1]

[start of recording #2]

TA: (unintelligible)

JB: Okay.

TA: So, I started this survey of the beach because I saw these For Sale signs on the island road, and I knew this place was going to develop. And I thought, here is this seven-mile stretch of beach. It had never really been pristine, except before man came along (Amos laughs), but pristine compared to some of the other areas of the beach. I thought, it would be interesting to see—so I've always been interested in how things change, over long periods of time. In fact, my last real oceanographic paper was "Ten Years of Variability in the Elephant Island Area in the Antarctic." So, um, so interested in the annual variability, how certain birds come at certain times of the year, and also in the long term, what will happen when this starts to get more and more used, and more vehicles and more trash and more. Then, I got involved, I started finding well, there was a huge Ixtoc oil spill, 1979 to 1980. This was, at the time, the largest oil spill the world, the world had even known. It was down in the Gulf of Campeche, and the rig that blew spilled oil into the ocean for nearly a year, 290 days, and it stayed down in Mexico, but ultimately came up here. So, of course, it coated our beach with an amazing amount of oil. I gave a paper at the American Ornithologists Union about the oiling of shore birds on a barrier island beach because I had already had a couple of years of looking at the birds and counting them and knowing how many there were, and knowing which were the endangered species, the piping plover, and, then after the oil spill, knowing that there were a lot of oiled birds, and how they fared, and so on. Fortunately, it occurred here when most of the birds were on their way south and not going back north to breed, where even a small amount of oil on their breast feathers would transmit to the eggs and cause some problems. But I also found that there was this area here at UT, where there were these old concrete tanks, where one of our previous directors had done some ecotones, as he called them. He used these concrete tanks with sediment and water and would follow the more or less captive environment of clams and things, but they weren't being used. When I started finding sea turtles that were in distress, I took over some of these tanks, and that became what we know call the Animal Rehabilitation Keep, or the ARK.

JB: And what year was that?

TA: That was, the ARK first got its permit, or I got the permit in 1981 or -2, I think my first real reports were in 1982 and there are shelves of them. In fact, I've got to do some sorting and see what we got. But I also—ah! Once I got into sea turtles, not only was I just counting them, what sea turtles came in dead or alive, but I I was also looking at the environmental conditions that brought them here, and some people in Florida, the people who really are the experts on sea turtles, were especially then, National Oceanic and Atmospheric Administration asked me if I needed funding. So I got some really modest funding to do what I was doing to keep the ARK going, which, by the way, we called the Turtlearium then. The Animal Rehabilitation Keep was my wife' invention, and it's been known as that. I had these sea turtles, I have dealt with over 6,000 sea turtles now, over the years, already this year, we're up to number ninety-four, ninetyfive maybe. We've had a cold spell and a lot of those have been released already because it warmed up. But I've left out a big point. Because the Kemp's ridley is the turtle that everyone knows about, the most endangered of all the sea turtles in the world, the national seashore [Padre Island National Seashore], Donna Shaver down there at the national seashore, attempted to get coverage of those beaches, all the beaches in Texas, especially during the nesting season, and there was one glaring omission, and that was San Jose Island. That's the island to our north, and that's privately owned, and because I had some dealings with some of the people on the level of these wealthy families in San Antonio and so on, and Fort Worth, I got permission from the Bass family to go over there on a regular basis, and do sea turtle surveys during the nesting season. But because I'm addicted to counting things, and I couldn't just drive a beach and not look at what was going on, I also started doing the birds there, the trash, because I got into trash by this time, and how the beach changed, how wide it was, which I've been doing here, by the way, on this island. I had the contrast of the heavily-used island, Mustang Island, especially during spring break and July Fourth and so on, with this island where there's essentially nobody.

JB: And what differences did you see on the two islands?

TA: Well, the first difference was the amazing amount of birds over there, shorebirds and wading birds. I realized there was no way I could have counted all those birds, so what I did was I specialized in four or five, what I considered critical birds, that's the piping plover, which is actually on the endangered list; the snowy plover, which probably should be on the endangered species list; the Wilson's plover, which I discovered some interesting things about it; the red knot; and the American oystercatcher. I can deal with that. The changes are the number of birds, and the changes are also the kinds of birds which you see there. For example, Wilson's plover, we think the population of Wilson's ployer is somewhere around six thousand dollars worldwide. Six thousand dollars (Amos laughs), sorry, tape (speaking to the recorder, both laugh). Six thousand individuals. What happens is they breed on barrier islands, especially in the areas where the dunes start coming down to the sand. What I noticed was there may have been a handful of nesters every year, their behavior is different from the other birds in that they mass together before they migrate south, so even though all of these birds did not nest on the island, they congregate in these groups, and at one time, I counted what was probably a sixth of the world's population of Wilson's plovers on San Jose Island, 1,200. I suspect nobody has ever see 1,200 Wilson's plovers before in one place.

JB: Hm.

TA: That happens in July, in early July, and by the end of July, they're gone. I was counting a few Wilson's on Mustang Island, but now they're gone. I never see a Wilson's on Mustang, and I think that's due probably to the disturbance. So some birds have thrived here, but most of them are on the downward trend. After over 5,000 observations, which I've done here, and nearly a thousand on San Jose. The way we do San Jose, what I've been doing is, I do Mustang Island every other day, and I always stick to every other day because, the reason is, if you do something every other day, there will be a Saturday one weekend and the next there will be a Sunday, it would be no good to do the birds on this island if you only worked nine to five, Monday through Friday, because one of the critical factors is the number of people, and the number of people multiples when the weekend comes along, their activities change, so I've always done the, but in order to not mess around with that, I do it every eighth day on San Jose Island. It's quite a production. I have ATVs, we have a special boat called the Shalewater(??), that has a little ramp and it just fits the ATV. We have a boatman, and we drive it over to San Jose, lower the ramp and drive it out on the island, and the very southern tip is called the gummint(??) land, I learned that from Texans, gummint(??), which is primarily for disposal of dredge spoil, which they do every now and again, so that's government land, and I have actually made a road across the island to get to the gulf shore. We drive the ATV across there when it's offloaded from the boat, then go north, and it's a forty-mile roundtrip in an ATV. It's quite an adventure.

JB: Yeah. Do you have employees or volunteers to help you?

TA: I do. I have both. I have employees of the ARK, part-time employees, and there is a group here called—they been around for ten years now, quite essential to our operation, called Friends of the ARK, and they help us do fundraising because we have quite an operating budget just to keep things going with the birds and turtles, and also to get money for that.

JB: How did you deal with donations and fundraising when you first started?

TA: Well, I would turn the checks over to our accounting department, but now, um, and that was really a pain sometimes, especially when we had—I mean, the accounting department is essential, of course, to the UTMSI and UT in general, but when we had a fundraising deal, let's say we do have an annual fundraiser, Fall for the ARK or Spring for the ARK, or whatever we call it, and we'd get all these checks and things, and every check as to be processed. Friends of the ARK, what they do, they do all that, and they present us with one big check. That really works out very well. They also supply volunteers to do, especially the nesting surveys, so our ATVs also run up and down Mustang Island, and it's a big thrill when they find and deal with a Kemp's ridley nest. It's such a thrill It's a thrill even though I seen quite a few. That's essentially—and I do have an endowment. It's called the Anthony F. Amos Endowment for the Operation of the Animal Rehabilitation Keep, we're trying to bring that up. I have some, as I say, some influential and well-to-do friends from San Antonio, in particular, the McAllister's, Edith McAllister and her daughter Taddy. On Taddy's birthday, every year, she would have her friends bring her checks instead of gifts, by that, we were able to build what's called the pelican enclosure, a big thing. So we've had some help from that way. We have small foundations and small family foundations that give us a thousand, or two thousand, or five thousand every year, and and we have, this is really, really interesting, we have some people give \$10 a month, every month, they send a check with the proper stamps on in, not just franked, a handwritten thing to the ARK. That's how we've managed, but Friends of the ARK is very important to us. So that's how that works.

JB: Could you talk about some of the memorable successes you've had working in animal rescue?

TA: I can. Perhaps the, huh—it's truly numerous. By the way, I haven't told you, but I am also the local caller of the Texas Marine Mammal Stranding Network. I've done that since 1980. At one time, along with Tapply from Texas A&M, I held the only permit to deal with marine mammals, that was in the 1980s. So, I've been involved, and in fact, I noticed I say, and in fact, and I'm not sure if that's really what I mean (both laugh) because I hope it's in fact and not in fiction, but some of this might be. I've dealt with over eleven hundred marine mammals, and, to me, that's been a blessing in some ways and a curse in other ways because it is really, really difficult when we get a live stranding of a marine animal, a marine mammal. Let me go back to—oh, I was going to say, I've been really fortunate in perhaps seeing and being close to and touching, in many cases, I believe twenty-one different species of dolphins and whales and manatees that occur in the Gulf of Mexico. It's really remarkable. I don't even think many marine mammologists have probably not been able to do that. But the most memorable, perhaps,

was Harley the Spinner Dolphin. And it was in April 2004, I know this because I just wrote about it. I got a call, let's see, here's what I can't quite remember, if I actually came across, I think there were two people in the water with this little dolphin, and I was doing my survey, and so I got in the water with this small spinner dolphin. Spinner dolphins are quite rare, there's probably only a handful that have ever stranded here. Ultimately, we, through TMMSN, and the marine mammal stranding network, we got Harley off the beach, we brought her here to what we now call the Barnacle Bill tank, which is the big concrete tank. We managed to get her—we walked around the tank because when a dolphin strands and you put it in another tank, they often just sink and they can drown, they're weak, and they're scared by the environment, so we walked Harley around in the normal fashion and ultimately got Harley to feed, and had to force feed her for a while. It was a female, a young female, no chance of releasing her to the wild. She would have become shark food. We had Harley for eleven months, before we were able to finally transfer Harley. We got permission from NOAA to do this, to the Mote Marine Laboratory in Sarasota, Florida, which is a dolphin hospital. They do put their dolphins on display, but they don't teach them tricks or anything. The public is allowed to look at the ones, other than the ones that are in critical care so Harley went to Mote Marine. But the adventures we had during those eleven months were legion. We had to, first, we knew the only way we could get Harley to Florida, would be to fly her there so we had to find a special aircraft. We found that in Austin, it was a Swiss aircraft, it was kind of the turbo prop version of an executive jet with a single jet on it, and a wide enough cargo door that we could do something to get Harley. But we had to train Harley, we didn't want to train her too much, but we had to train her, first to know us, and secondly, we had to train her something as simple as to swim into the stretcher because we had to get her out of the tank and our veterinarian would have to take blood and do these kinds of things. Then we had to train her to, once she was in the stretcher, to go into another tank, a small tank that was portable, and then to be driven around the campus, and then to be driven around town, and then to get used to this process that we knew would have to happen. We had the plane come in, just on a reconnaissance trip. My wife and I helped build the special tank that we had, and ultimately we got Harley on a memorable flight. It was just after a Norther hit and this plane was capable of flying at 25,000 feet, and it took four years to get to Florida. Right at the beginning, Harley went berserk in the tank. We could only have a certain amount of water in there, and I thought, this could be terrible, but she calmed down, and we had myself, we had one of our marine mammal stranding people, had our veterinarian, who sat next to the pilot, and the pilot. We all had to be weighed, we were on the critical level of what that plane could do. So we got Harley to, and Harley was there for several years. She did die there. I never really found out why, but she had several years. I never got the full reason what she died of, but the most amazing thing was—oh, and Harley had a football, a little plush football that she played with and that was her toy and she would mouth it and toss it. By the way, she also learned how to do her spins in that tank. I have some incredible video of Harley. I'm in the tank, I'd feed her, and then all I had to do touch her, or not even touch her, and she would spin. It was the most dramatic thing you'd ever see. But, anyway, she'd play with a football, she had a couple of floating balls, big ones, that she'd toss around from time to time. She'd get angry, she'd try to get out of the tank. In fact, she did get out of the tank one time at 2:30 in the morning, when one of our volunteers, but when we got her to Mote Marine, we took her football with her, and she was playing with it, and something about five o'clock in the morning on the second day, I was on watch and I watched Harley mouth this ball and it went down and down, and she swallowed it. So we had to get their

vets, and we had a session where we had to extract a football from Harley's gullet. Fortunately, it didn't go down very far.

JB: Wow.

TA: So, anyway, Harley came out of the tank at 2:30 one morning. I got a call from the volunteer. I've never got up more rapidly and got out there, and between the two of us, we managed to lift Harley back into the tank. She got an injury to her rostrum, which remained with her as a scar. She would kind of go up on the side of the tank, and we had to put all sorts of top pilons, but anyway, the big story was—oh, I got to spend, you know we had snow here for the first time ever on Christmas Day 2004, and our person who was on night watch because the cars couldn't make it, so I got my sleeping bag and slept on the platform outside of Harley's tank. She didn't pay any attention to me, but but there was snow all around. That was one of my memorable things. I could go on forever, but five days after we deposited Harley, Ranger the bottlenose dolphin came in. We had Ranger there for another five months. For sixteen months, I dealt with dolphins and that was when I decided I just couldn't do that any longer. The Texas State Aquarium was getting into the marine mammal business. The problem is that they have captive marine mammals, and they cannot take the risk that any dolphin that comes in has got a disease that could be transmitted to their dolphins. Even though, we—I say we—use their facility, it's isolated from the rest of the facility. We don't deal with live dolphins. I do, still, but only in I was just putting out some forms from the latest (looking through papers), from the latest dead dolphins that we've had, so I'm still doing that. How did we get on to that?

JB: Oh, I was just asking about successes or challenges

TA: They were both successes, we were able to release Ranger, which was great. He got into shallow water, and became emaciated, but we released him out there. He had a number on his fin and he's been seen quite recently, actually. That was more than ten years ago. But what about, okay, uh, let's do this one in sea turtles. You know the University of Texas Marine Science Institute does a lot of work in the local bays and estuaries, and they were out there, there was a group, two people were out in the boat, and they saw this really big sea turtle. They called me up, and we went out and managed to get a boat, and in fact, the lighthouse keeper was always on hand. By the way, he's been a volunteer, although he's a different man now, both lighthouse keepers. I could call them up and say, look, we've got a pelican with a broken wing, and he can't fly, and they'd say, all right, where is it? And they'll come if they can in the boat from the lighthouse. So lighthouse keeper's boat and another boat and the boat that saw the turtle. And when I saw it first, I knew this was going to be one we could just easily lift out of the water. It was entangled in a huge amount of really thick monofilament line and a great big float about that big (gestures about a foot wide). This is longline fishing equipment that got entangled around one of its limbs, its left limb. Really fortunate in that it hadn't been entangled for long, so it hadn't started to bite into the flesh, which often happens, but sometimes the limb will be atrophied and they get gangrene and they fall off, I mean, it's really bad. So, we managed with the help of several people to get this animal, it was a green sea turtle, into the boat, took it back to the ARK, and we got it into a small tank, well not that small, it's about as big as this room (about a 15 feet by 20 feet room), one of the old concrete tanks that was emptied of turtles at the time, and I had noticed you could see a little bit of a tail sticking out beyond the carapace. Now,

the only way you can tell the sex of a sea turtle is when they're adults, and then the male's tail can grow as long as that (holds hands up to show about eight inches), and it has the reproductive organ in his tail so he could wrap it around the female, and that's how that works. That only develops when they get to reproductive age, which in the case of a green, might be thirty years. I thought, ah—by the way, we weighed and it was two hundred pounds, so I thought this might be a young male green sea turtle, and we put it in the tank and did what we could, measured it, weighed it, and took all the stuff. The next morning, I went to look at it, there were about sixty eggs floating around in the tank. About half of them had been crushed by the turtle herself, so obviously it wasn't a male, I made a mistake. We did collect all those eggs, none of them were viable enough, they'd been in saltwater, but then we realized we had to get that turtle out of there because they can have up to one hundred twenty eggs. We did not want her to lay again in the tank. With Donna Shaver's help, we put a satellite on her, and we released her, so we could track her, we tracked her all the way. She went down to Mexico, decided not to cross the border, then went really rapidly all the way across the Gulf of Mexico, through the Florida Straits, out in to the Atlantic, and in the Atlantic, she got entrained in a hurricane, moved further north, but managed to turn around ended up in Biscayne Bay, of all places. And that transmission lasted for a year. She milled around in Biscayne Bay. We think that what she did when she went down to Mexico briefly was perhaps deposited the rest of her eggs. So that was one of our great success stories. We've had many. One very recent one, and this had a real mystery involved with it, too, was a Kemp's ridley, the Key West Aquarium, that's a sea turtle place, and they had, with with the Gloucester, Massachusetts university, what's it called, anyway, it's a technical university, they had to put in a proposal—this turtle, by the way, had one limb missing, they put in a proposal to make an artificial limb for this turtle, which they did, and they called it Lula, or Lola, Lula, I think. There was a lot of publicity about this, they were going to use it. This was now an adult Kemp's ridley female turtle with an artificial limb, and the publicity said the turtle came from Texas. I thought, if it came from us, we'd know about it. So I went through our results, through our records, and this turtle came in about that size (holds fingers up about three inches wide), it already had the limb bitten off by something, by a fish, and we had grown it up to that size (shows about six inches) and released it, but it had come back, and we then donated it, with of course, we had to have state permission to do this, we donated it to the Dallas Aquarium. No, no, I'm sorry, to the Texas State Aquarium, and it lived there for a while, and then they, as the way aquariums and zoos trade animals all the time, they traded it up to the Dallas Aquarium. The Florida people got it from the Dallas Aquarium, and that was a bird(??). We called it R2-D2 (Brown laughs) because when we tagged it, because we put a little pit tag in it when it was it was that size (motions to larger size from before) because when it's that size (motions to smaller size from before), it's too small to put a tag in it, part of the number had an r-2-d in it, so I called it whimsically R2-D2, but it became known as Lola, and it's okay it's Lola. That had to be, probably, twelve years later when it showed up again. In other words, that animal, with one limb, of course, it had been in captivity, but it had survived. And also I have had sea turtles nest on the beach that I may been the one that released them twelve, thirteen, fourteen years ago. How about birds? Oh, we've had some great birds. We've had Goofy, and, um, we had a brown pelican with one wing, and that was Goofy, and another one with one eye, and we kept them together, they were like pals, and we kept them for years and years. They eventually died as the birds don't have such a long-lived experience. We released a great blue heron that hung around for years. We wouldn't feed it, we'd feed it occasionally when it looked like it really needed it, but it got its own food mostly. Oh so many. I told you about (coughs) ah, two birds that come to mind. A

ring-billed gull that I called One Footed, a very romantic name (Brown laughs), I noticed during my beach surveys that its foot, its right foot, was missing, but it could get along, it hopped around on one foot and put its stub down every now and again. I always, one of the things I note every time, are all the dead birds and all the injured birds that I see, so that's part of the record. The next year, I noticed the same bird, it was obviously the same bird, so I started following it, getting the position of where it was, and I followed that bird for twenty-two years.

JB: Wow.

TA: Or, at least eighteen years I followed it, and decided it was already four years because they have plumage changes. Anyway, twenty-two years. But then perhaps even more remarkable, by the way, I left some rather pointed notes. The last time I saw One Footed, I noticed that she was, I don't know if she was a male or female, but those gulls go all the way up to the Great Lakes to breed, so this animal made every year the trips back and forth, so I noticed her laying down with her belly flat to the sand, and I thought, oh, that's unusual. I think she's not very well, and I put in my notes, shall I capture her? It was almost an aesthetic thing, or not aesthetic so much as anyway, I didn't know whether I should do that. I decided to try and catch her, but she could fly, and the next day I saw her again, and she was obviously not in good shape, but she flew off, and that was the last time I ever saw her. In 2002, or 2003, I saw, there was a program on the piping plover to band them, to put these different colored bands on their legs. They breed up in Saskatchewan, these particular ones that come down here, or the Great Plains, or even the Great Lakes. There's an East Coast population, but we seldom get that. They were banding them to try and discover where they went during the winter because they don't stay up north very long. I saw this particular bird, it was the nineteen that I saw with bands on it, so I called it Bird Number Nineteen. I saw that same bird this year. I have seen Bird Number Nineteen every year for fourteen years, and this probably the longest-known lifespan of a piping plover. Because we got low tides, she's probably back in the back flats right now, oh, it's a him, I know it's a him because when it was banded, they knew it was a male. I hope he will come back before he flies up north again so I can say that will be the fifteenth year that he'd come. (phone beeped) Was that you or me?

JB: That's yours.

TA: Okay, if you'll excuse me.

JB: Oh, sure.

TA: Bird Number Nineteen is quite remarkable. Let me just reply (sending a text message). I have these silly, what do they call those, emojis on my phone that appear there. I thought I might just, if you're interested, I might just show you (looking for papers in office), to give you an idea of—Are you recording still?

JB: Yeah, it is recording.

TA: Okay, well, stand down for a second. (unintelligible, rustling papers) Some of the other things I do, I write a weekly article for the *South Jetty*, I've been doing that since 1982, I predict the tides. I make my tide calendars. This is the January 2017.

JB: Oh, you make those calendars?

TA: Yes, yeah.

JB: Oh, yeah.

TA: Do you get to see these?

JB: Uh-huh.

TA: These do several things, they give phases of the moon, they give daylight, daytime, they list the actual time of the highs and lows, and they also do, and I'm particularly proud of this, because this was an interesting programming thing. Each year, it knows when daylight time is.

JB: You created the computer programming?

TA: Yes, I did. It says March the 12th, if you'll notice, on March the 12th, the line for the day is one hour shorter than the actual day because that day is actually only twenty-three hours. So this does that. I found it hard to know how to illustrate that because the days don't shrink when you lose an hour, you don't at all, so then, coming back, unless one of our presidents messes it up again, so now on Central Standard Time, you see there's a heavy line that's one hour greater, you see it's twenty-five hours.

JB: Um-hm.

TA: So that took some doing.

JB: You write in your columns, and then I read in that recent piece [in the South Jetty] on you that—you talk a lot about the human-induced changes to the environment and trash.

TA: Yes

JB: How would you say that's changed over time?

TA: Well, there have been some changes. Hang on a second (walks into other room). Stop it birds, what's wrong? (walks back into room) I don't know if you read also, that I sat on two National Academy of Sciences National Research Council Committees on trash on the beaches. This was the result of one of them (holds up book): *Clean Ships, Clean Ports, Clean Oceans*, and this was the most recent one (holds up copy of *Tackling Marine Debris*). Well, it's interesting. I do believe there's been a slight, somewhat of an improvement, but one of the challenging things that I've had, also I haven't told you at all, are you on still?

JB: Yep, it's on.

TA: I was on the beach one day, and I had found some items of trash. I was looking at one of them, and there was a man on the beach who talked to me for a while. He said, what have you got there? I said, well, I got this plastic ring. I said, and I know where it came from. I said this is a write-protect ring and he said, I think I know about those. And what it is, is in in the old days, of when you recorded your data on magnetic tape, when the seismic industry, which is offshore doing all this prospecting for oil and salt domes and things, they were going through one reel of twenty-five thousand feet of tape in, maybe twenty minutes. So each time they got a new tape off, in order to prevent that tape from being written on again, the regular IBM tape, you pulled this plastic ring out, and therefore, when you mounted it on the tape reader, the probe would not allow it to be written on again, so they'd save their data. But they used to toss them into the sea, and in fact, I had in the very first Texas Adopt-A-Beach program, which started in 1986, I was asked to help them perhaps formulate the data sheet, which I did, and one of the items was writeprotect rings, of all things. But the outcome of that little meeting was the guy turned out to be in charge of the Minerals Management Service, MMS, office in New Orleans. He said, look, my agency is responsible for the rigs out there and the environmental impact of the rigs, and he said this is bad news that they're tossing it into the sea. He asked me if, well, I can't remember if he asked me or whether I solicited, so I then wrote one of the few actual grants I managed to get to do this. What it was, was that I've already done—I don't know if you're aware of MARPOL, Marine Pollution Act, it's an agreement by sea-going nations, that there are certain things that you do not throw into the ocean. I think MARPOL annex one might be radioactive material, annex two is probably chemicals, but MARPOL annex five is plastics. I'd already done some detailed trash measurements on the beach prior to the enactment of MARPOL annex five so I managed to get some money to do another couple of years after annex five. The outcome of that, by the way, was there was virtually no difference I could tell from my data, and I had some help on that. Instead of doing what I call beachops, which is where I go on the beach and count birds, I adopted that program to count different items of trash, and there are several publications, Solid Waste Pollution on Texas Beaches: A Post-MARPOL Annex Study, and this is before and after, but what I did here, was to, this is how, I even knew where on the beach all this stuff was occurring, but I decided it's no good, if you're measuring something to do with what man does, you only do the manmade stuff, so I did everything.

JB: By everything, you mean?

TA: I mean I did manmade and natural stuff. I got a list of what I, there's another volume. This is the data volume. Hm. Well, okay, automobiles, camp cars, camp people, dogs, dogs have increased, horses, now they've banned horses from the beach right now, Portuguese man-o-war, you got to do the natural stuff as well, cabbage head jellyfish, pen shells, driftwood, coconuts, fishing and seismic floats, write sticks, that's for the offshore fishing industry, dead fish, fishing line, produce sacks, green bottles from Mexico, shrimper plastic pails, hard hats, write-protect rings. There, write-protect rings, they died off, plastic sheeting, cardboard cartons, light bulbs, fluorescent bulbs, (unintelligible), tubes of grease, one-gallon milk jugs, egg cartons, plastic bottles, that has seen an incredible change, glass bottles, beverage cans, cans, but not beverage cans, fruit, miscellaneous plastic pieces, styrofoam, foam, not styrofoam, plastic bags, miscellaneous metal pieces, cloth and clothing, shoes, paper products, balloons, toys, we're

ending son, aluminum beverage cans, six-pack rings, disposal drink cups, and lids. There are still thousands of lids on the beach.

JB: That's a lot of trash.

TA: Yes, it is. Yeah.

JB: Do you think people's views have changed here locally?

TA: Well, I do know this much. In some ways, it was annoying, on that seven-mile stretch, I counted all the trash, but then when people became more aware, I suppose you might say good Samaritans, or people who would pick it up, and at one time, I thought, hey wait a minute, that's my trash (Brown laughs), but I then decided, well, that's part of it, that's what's happening. Mustang Island, the gulf beach, except immediately after the big days, and they're still disgusting, is pretty clean, and also there are some other aspects of it. We've had unusual beach conditions, and for the last two years, we've had no Sargassum weed. Nobody's really quite sure why, obviously other than that it's a change in the currents. In fact, now the Caribbean is getting it. Some of the islands in the Caribbean are getting so much Sargassum weed that it's ruining their tourist industry, whereas ours used to collect on the beach, and when those mats of Sargassum are floating around, the trash is among them, marine trash is among them, too. Let's see if there's one other thing (looking for a paper).

JB: Has the community here been receptive to your writings and work with the environment and animals?

TA: Well, I would think so, yes, I think so. No doubt.

JB: Has there been any change over time?

TA: You mean in the perception of it? Um, well, I think—okay, let me tell you how I came to think in terms of all those stuff on the beach. Before National Public Radio came on the air here, I had to listen to something while I was doing my, so I used to listen to C101, I think it was, a rock station, and other stations, too, but C101 would give the beach forecast. They would, ah, today, there are two rows of surf at four feet, the weed is good, drivable, and so on, and I'd look at my beach, and said this isn't the same beach that I'm on. So I decided I would do my own beach, kind of, appraisal by seeing how many of those things there actually really were occurring. I came up with a list of forty-four different things. Some of them, well I do have some here (looking for papers). Here's one of my present beachops surveys. By the way, all of my stuff is coded with four-letter codes, or it could be less than four letters. My wife thinks that these are not logical, what I've done, but I've done them for so long, but ornithologists do have standard abbreviations for the birds, but they're my own. L-Gull is laughing gull, ring-billed gull, herring gull, willet, black-bellied plover, rudied(??) tern, sanderling, Forster's tern, great-tailed grackle, and then piping plover, and so on. Then, camp car and people. These are when I saw the banded piping plovers, there's number nineteen, with an exclamation mark, and that's the exact position where that was (pointed to longitude/latitude numbers). But then, I have down here, this is a list of stuff, seascape, trichodesmium, algae, grass, Sargassum, mangrove, hyacinth, some of

the these have become impractical, like dragonflies and butterflies. That's interesting because people often remark, oh there are a lot of butterflies on the beach, but they don't really know when. They say, oh I see that all the time. I get that a lot. Oh, I see that all the time. Well, actually, you don't.

JB: They only come in certain seasons?

TA: It's not here all the time. But anyway, these are the forty-four, now I have restricted myself to what I call the "gang of five" because I can't count these things numerically, see these are uncountable things, but I can count beverage cans, no, what I call single-drink containers, these days that would include an aluminum can, which you almost never see, to the water bottles, and unfortunately, people seem to go berserk sometimes, and I see people with containers about this big (holds up hands about ten inches), and that apparently is like single-drink stuff. You can go to the local 7-11 stores and buy a 64-ounce container of sweet stuff (Amos laughs).

JB: Yeah. Styrofoam, or—

TA: So, that's one of them, single drink. The next one would be five-gallon pails that either contain or once contained chemicals. The green bottles of bleach from Mexico, they often have turtle bites in them. These are Clarasel(??) and Cloralex, the two popular brands of bleach in Mexico. I had first thought that they came from domestic Mexico, but it's not, it comes from the shrimping industry. They use the bleach to treat the shrimp for something called blackspot, and whereas our shrimpers use sodium metabisulfite, which they buy in six-gallon pails. What else is there? Egg cartons and one gallon milk jugs. I used to call it the breakfast suite, and it came from shrimpers. You'd have egg cartons and milk jugs together, and that was what I called the breakfast suite. So I count those now, but I've seen a dramatic reduction in some of those, too. Except, if you ever read my articles annually, you'll see I somewhat rant and rave when we get, because I wonder, why on earth don't people—instead of thinking, we'll they'll clean it up, there will be somebody to clean it up, why don't they see—I got pictures that'd make you never want to come to this beach. You'd never want to be on this beach, with people as well, people sitting on a garbage dump. So I wonder why people don't see this and why people don't take away what they bring. That's the thing. After spring break, it's the same as it is every year, and we have a great crew of people here who come from the city of Port Aransas. As they're depositing it, they're picking it up.

JB: What would say to people, um, in—

TA: Well, I once congratulated two women who were collecting cans, and I suddenly realized that what they were doing was only collecting the aluminum cans, and they were chucking everything else back down on the beach, because they were going to get some money for that. Let me see if I've got (looking for papers), just a second. Can you just turn that off for a minute?

JB: Sure.

[end of recording #2. While he was searching for papers, Tony told me that he had calculated the tides all the way to 2025.]

[start of recording #3]

TA: ...they published my tide tables.

JB: That's great.

TA: Well, I could do, but I probably won't have time, to do that some more (searching for papers). Standby. You're not supposed to be in here (one of the birds flew into the room). Let's see (searching for papers). This, by the way, is my little computer I take with me. It's sort of dying (still searching). I'm not quite as bad as this usually. Oh, this. They made this called the Panasonic tough book, and it really was tough. And then, like all things, they ruined it by making it bigger and do more things, and really this is almost a single purpose.

JB: And you bring it out with you every time?

TA: Yes, I do (searching). Ah, well I can show you this. I've been writing up a treatise for people who can look at my data, so they know how to do it because I'm, you know. But here is a, a long while ago, beachops number 1,464, it was taken Sunday the 27th, September 1987, start time, end time, start miles, end miles, and at each mile, I make these various notes, heavy thunderstorms. Simple notes, but, laughing gull, eighty birds being fed by kids, used a new psychrometer and so on, miscellaneous, injured birds, all the photographs I took, the weather, the amount of debris, this is all those forty-four things, and so I did that. I have all these bound, and there's the total, in a simple way, so the start time, the distance traveled, the dry bulb(??), the wind speed, the sea surface salinity, the dune line, the dune line to the shoreline, the number of camp cars, camp people, shorebirds, and these are the numbers of birds, 295 sanderlings, 536—but that's not what I wanted to tell you.

JB: How many beachops have you done, would you guess?

TA: I've done 5,160. I just worked it out the other day, that's how I know. I've got into a bit of trouble, the computer that I used to take was the best computer in the world, Hewlett-Packard. It wasn't really almost a computer, it was a handheld calculator, but it did exactly what I wanted. When they became superseded with other, more sophisticated things, I kept buying them, I could get them on eBay, then they came collector's items and the eBay price became exorbitant, so I had to abandon that, and in abandoning that, then I reverted back to the log sheet, which I wish I hadn't done because now I got the problem of figuring out how to—let me see if I can do this, so we want to go to (looking on computer and talking to self) It's under, where is it under? Hm. Beachops. Well, maybe it's under here. Okay, so we'll try beachops two, and then we'll go to, ah, wrong way, go to there, ah, done it twice, just a minute, codes, now do I have—hang on, (unintelligible). All right, so we'll go to file, we'll just hit F5 and see what happens. Try and see if this works. All my equipement's old, too. Okay, so what I'm going to do is drive e, I know that. File is number, is I'm going to do piping plover, p-p-l. Ha! You're going to see the everything diagram.

JB: Okay.

TA: So any of these things that I've counted, and I regret that I might not have enough time to deal with them all, I can plot in the same way. Well, you'll see when this comes out. I'm using, this is a line printer. I had to buy up this old HP, which is also a line printer. There we go. So, what this is, here's 1978, when I started. This is up to 2014. Each one of these squares is a week. The density of color within them is proportional to the number of things that I did, averaged, because I do more than one thing in a week. If there's a complete blank, it's because I was in the Antarctic and couldn't do it, or elsewhere. Notice in the last many years, I haven't done that so much at all. Well, 2001 was the last time I was in the Antarctic. If there's a zero, it means I did surveys, but didn't see anything. This is January, there's a low number in January. They completely disappear between the breeding season. They go up north, then they come back with a vengeance. But, now, look at the trend here. See, this is dropping off, and I know that for the last couple of years, it is dropping off even more. So that is the trend of piping plover on the beach, and I think that's very real. I could do the same thing, by the way, I had seen 121,356 piping plovers.

JB: (laughs)

TA: That, I can guarantee, is more than anyone else.

JB: Yeah, wow.

TA: Well, I can't guarantee. There might be some nutcase out there.

JB: Seems like a wonderful resource for researchers.

TA: Yes, I'm hoping that—I am having some people from your university [Texas A&M University-Corpus Christi] helping me. I realize that I'm not going to be able to do it, and I don't want it to go so that it completely disappears, so I have to try and write these things about what I mean by this, and I've already done one installment on how to read the stuff. But now I got to do San Jose Island and tell them how to do that. So, anything else?

JB: Well, is there anything else you want to share? This has been very great.

TA: I don't know. Let's see, what else, oh, well, I'm the official US Weather Service observer for this area, and I've done thirty years of that, which makes our records are now official weather records. And that's here, that's over there at UT, so I do that, and somebody from Texas A&M—no, the Texas Water Development Board, but I think they are working with people at College Station, asked me if I would run what's called an evaporation pan, which I do, measuring the evaporation. So all this stuff goes together. I'm just intrigued on how things connect to each other, you know?

JB: Um-hm.

TA: And a little bit overambitious at times, do too much stuff, but that's what I do. But you could fault me for not writing a lot of this stuff up, but you know what's been my, not my mouthpiece, but my, is the *South Jetty* newspaper. I've written everything, I've even written

because when I came here, I had aunts and uncles living in England, and I remembered a couple of my aunts and uncles, Uncle Sid and Aunt Gert, and Uncle Alec and Aunty Molly, Alec and Molly, Sid and Gert. Sid and Gert lived in a place in London, which was a pretty depressed area, row upon row of houses and rather grim and grimy looking, especially then. They had a dog called Bing, but they had no children. And I thought to myself, later on here, that when they go, those people will be totally forgotten. There was nobody. They had no children. We don't they had any friends, so I'm going to immortalize them. So, they're in the South Jetty now, so at least they're in print. Molly and Sid, I mean Molly and Alec, they did have a daughter, Pamela, Pam, and I think Pam might be gone now because she was older than us. So I've started writing about my life in England, I've done quite a lot on that, and I'm thinking now of my next, let's see if we've got, let's see if I got my last, I'm sure I do, I'm going to go to Word, that's Word, open file, open. See what this does. Ah, is this it? Here we go, no 121. Ah, I don't have it. Why don't I have it? Where has it gone? Maybe it's up here. Ops. There it is, ha! (looking on computer and talking to self) Okay, this is what I wrote, this is what my dad wrote, I just read his memoirs, and he wrote about the things he'd seen in his lifetime. The first thing is rather English. "During my years, I lived through Edward VII's reign, King George V, Edward VIII, King George V, and Oueen Elizabeth II, long may she reign. I've seen the advances of photography and color slides, large-screen cinema, sound and later color. I've seen the coming of wireless and crystal sets, had wonderful times with radio valve sets receiving high-powered short wave stations from Europe, television and computers, lived through two world wars, the coming of Hitler, victory in Europe, the atomic bomb, victory in Japan, the coming of blues, jazz, bop, the Beatles, the Rolling Stones, et cetera. Several small wars around the world, new countries and new flags, dictators rise and fall. In transport, stream trains, electric trains, not so good high-speed trains, trams, trolley buses, steam buses, open-top buses, aircraft, airship, sea planes, large transport planes, V-1 flying bombs, V-2 rockets, the Concord flying at twice the speed of sound, large aircraft carriers, and atomic submarines. Vast oil tankers and the QE2, changed to carry troops during the Falklands War. Space exploration and man on the moon. All of the above, thought out and made during my lifetime. That was my dad.

JB: Wow.

TA: A lot of those overlap of course.

JB: This is the, uh, next one coming out?

TA: Yeah, that's right, yes. I'm always behind deadlines. One of the biggest influences, apart from the aunts and uncles—by the way, Aunt Gert and Uncle Sid had this dog called Bing and I was allergic to dogs, and they thought if they hid it in the bedroom, I wouldn't get allergic to it, but that wasn't the case. I'd start to rub my eyes, and then they'd all come up (motions about puffy eyes). Anyways, apart from the aunts and uncles, we were bombed during World War II, and the, the V-1 he was talking about, these were the ones just aimed at London and when they ran out of propellant, they dropped and blew up. So the children of London were evacuated, not all of them went, but a lot of them went, and I was one of them, my brother and I, and we went to Devonshire, and spent nine months in Devonshire, which was, even though I was only six or seven at the time, it was my—that's probably how I got to, um, there was this beautiful woods right near where we were staying and it was great elm trees, and oak trees, and a little stream

going through it, and a funny old bridge called Iron Bridge, there was no traffic or anything. There were always little mushrooms growing and ferns and you could look and see fish in the streams, and birds in particular. I think that's what really got me interested in what I've been interested in.

JB: Wow.

TA: So I think I'm about talked out.

JB: Yeah, well thank you. I'll turn off this recording here. [end]

Transcribed by Jen Brown