

*Oklahoma Innovations* Radio Show

Air Date: January 30-31, 2010

Guests: Michael Dean, Oklahoma History Center

[ Music ]

From the OCAST Radio Network, this is *Oklahoma Innovations*, a weekly science and technology radio magazine brought to you as a service of OCAST, the Oklahoma Center for the Advancement of Science and Technology. OCAST is the state's only agency whose sole focus is technology, its development, transfer, and commercialization. OCAST mission is to identify and fund promising research in technologies that allow Oklahoma to compete in a global market economy from our own backyard. This program features some of the state's most gifted and talented scientists, inventors, entrepreneurs, manufacturers, and business leaders who all have one common goal, developing technology-based economic growth for all Oklahomans. Now here are your hosts, Gary Owen and Steve Paris.

>> What a program we have lined up for you today, history buffs. If you are an enthusiast about the history of Oklahoma, this is going to be a really cool show today. We're going to talk about the history of technology by Oklahoma entrepreneurs.

>> We are, Gary. But that's not the only thing we're going to talk about. We have Michael Dean, who's the director of public relations at the Oklahoma History Center, and --

>> He's got some great stories.

>> Oh, I said I've been amazed just this morning the stories I've heard. We want you to make sure you stay tuned so you can hear some of these great stories, not just about technology but about Oklahoma history.

>> That's right.

>> And you'll find that it's fascinating.

>> It is.

>> The little tidbits that you didn't know that you're really glad you found out.

>> These are those little water cooler stories --

>> Yes.

>> -- that you'll be talking about at the office next week. I heard on the radio the other day. Did you know.

>> That's exactly right.

>> It's going to be fun. Michael Dean is a broadcast colleague of mine. We've gone each other for many, many years. And, of course, if you've been in and around major radio in Oklahoma over the years, you would have heard Michael Dean and heard his voice on many, many different types of shows, news, sports --

>> Absolutely.

>> -- you name it. And he's a permanent fixture of the Oklahoma Historical Society. So we'll be talking with him momentarily. What's going on, Steve?

>> Gary, there's a lot going on. But one of the things -- you know, this is a little bit of a downer story, but let's think of it in a positive way. We have announced at OCAST that our next competition for applied research and for student intern competitions, we're going to have to cancel them. And everybody knows about the troubles in state government, the financial issues; and that's what this is all about. So when you have budget shortfalls, you have to make -- you have to account for that. And so we're going to have one solicitation and roughly worth \$1.9 million worth of research that we're not going to get to do this year in Oklahoma because of budget considerations. Don't blame anybody for that. That's just a situation that Oklahoma is in right now. It's part of both a national and a worldwide story. So if you want to know more about that, you can look on our web site or contact us and we'll tell you, you know, about the competition. And, of course, as soon as money's available, we'll go back to our normal solicitation process to where we hold competitions. And, as you know, we use peer review.

>> Of course.

>> That's the reason we call it competition. We don't just give the money away. You have to compete for it, so. You know, there's another very positive program you need to be aware of, and it's going to be February 23rd through 24th at the Norman Embassy Suites Hotel and Convention Center. It's the Oklahoma Entrepreneurs' Conference for 2010. And if you want to know about entrepreneurship, if you want to hear some keynote speakers and some people here in the state who are doing a lot working with entrepreneurs and promoting entrepreneurship in Oklahoma, then you need to be at that meeting. And it's sponsored by the Oklahoma Department of Commerce, the Greater Oklahoma City Chamber, the Tulsa Metro Chamber. And, you know, you get together with those groups and you're going to find out a lot about what is going on in the entrepreneurial scene. And we have some of our colleagues over at i2E who are going to be involved, too, so.

>> Now, this is the type of conference if you've been thinking about starting up a business or maybe have a business right now and you're looking to expand, this will be a great opportunity for you. It's something for you to attend. Other than that, at OCAST we're just kind of floating along like a lot of state agencies right now, I'm sure.

>> Well, when you say floating along, we're about as busy as we ever get right now.

>> Really.

>> We're preparing for the legislature to come to session, and we have an obligation of presenting the information to them so that they can make decisions based on what they need or what they think we need and what we should be doing. Of course, the factor that's there this year that normally is not there is the very severe budget crisis.

>> Sure.

>> You know, statewide, we're down an estimated \$1.3 billion out of the total \$7 billion budget. So that puts a little bit of a damper on things. But, you know, we've been through this before. Maybe not to this depth, but we've been through this before. We also come out of it, and that's the day we're looking for.

>> You've got to ride the waves, so.

>> You bet.

>> In science and technology news from around the globe this week, first of all, something, you know, I always like to find -- when I find one of these stories, because I always find them fascinating and we can talk about dinosaurs and those kinds of things. One of the earliest feathered dinosaurs seems to have been a successful glider, according to scientists. Researchers believe modern birds are descended from dinosaurs, and examples of feathered dinos have been found dated to 120 million years ago. In an effort to determine the flight abilities of the animals, researchers built models of these early birds and launched them into the air. The result? They glide nicely. The ancient bird called the microaptor had feathers on both its arms and legs. Fossils were found in China, and a joint team from the University of Kansas and Northeastern University in China have been studying it in hopes of learning how bird flight began. And since modern birds don't have flight feathers on their legs, researchers weren't quite sure how to position those microraptor legs. I said microaptor. It's actually microraptor. Sorry about that. Well, anyway. Intel is going green, friends. Not your microprocessors but their plants, apparently. Intel has said it's on course to account for over half its power from green sources this year. The company is signed up to eight solar power projects at its sites that will generate 2.5 megawatts. This and a 10 percent increase in offset credits for 1.3 billion kilowatt hours will account for over 51 percent of Intel's energy use. Isn't that cool. Well, you've probably heard by now that Apple has released record-breaking quarterly results with revenues rising \$15.68 billion, that from 11.8 billion in the first quarter of last year. Tim Cook, Apple's chief operating officer says that the news of the growth in the desktop market was particularly exciting. And, of course, overall, 58 percent of Apple sales come from outside the U.S., that due to the popular iPhone and particularly in Asian countries. In Europe, it's just going gangbusters right now. So the only falling product line was iPod with sales down 8 percent on the quarter. That surprises me, considering iPod was a big Christmas item, you know. Researchers announced a new project this past week to sequence all the genes in childhood tumors to try to discover previously unknown causes of cancer. They also hope that they can use the research to help tailor treatments for children to spare them radiation and chemotherapy that may do them little good. U.S. newborns are arriving a little smaller. This is puzzling new Harvard research. They can't explain why. What they're saying is that women who have weight problems tend to produce heavier babies, and obesity seems to be soaring. Yet, the study of nearly 37 million births show newborns were a bit lighter in 2005 than in 1990. Now, you know, they go way back that far, I guess, to maintain this research. And this, of course, ending a half century of rising birth weight. The change isn't big, but the average birth rate of full-term babies is just under seven and a half pounds. That's a drop of 1.8 ounces researchers reported in the Journal of Obstetrics and Gynecology. And that's surprising, considering doctors' warnings about nine pound or bigger babies. So, anyway, that's what they tell us. People with early lung cancer, they're saying if they quit smoking could double their chances of survival. This is a new study. British researchers analyzed previous data from ten studies examining how long smokers survived after being diagnosed with lung cancer. Of course, we know lung cancer is the top cancer worldwide, and the prognosis is usually poor. Well, until now, there's been little proof that quitting smoking after developing lung cancer makes any difference to survival. But they're now saying people with early lung cancer who quit smoking could double their chances of surviving.

>> Wow.

>> That's interesting stuff. Now, those of you who are password concerned when you, you know, try to make a safe security password on your computer, listen to this. This is a really cool story. This comes from a web security firm, Imperva, which examined data uncovered in a recent

breach of a site called RockYou.com. According to Imperva, 32 million passwords were exposed in the hack of RockYou. This is a company that develops apps for sites such as Facebook and MySpace. Of those 32 million passwords, there were a dismaying amount of repeaters. And the most commonly used password? 123456. [ Laughing ] And there were variations: I love you princess, rock you, and one called ABC123. So, folks, you've got to make your passwords --

>> You've got to get a little more creative.

>> Steve's got our innovations in history.

>> Thank you, Gary. It was January 24, 1899, when Humphrey O'Sullivan, a nice Irish gent, patented the rubber heel. On that same date in 1922, Christian Nelson of Onawa, Iowa patented something quite sweet. It was an ice cream confection that we commonly know as the Eskimo Pie. Eliakim Spooner patented the seeding machine on January 25th, 1799. And it was G.D. Dows who patented the ornamental soda fountain on January 25th, 1870. The marble fountain featured a double-stream draft arm and sold for \$225.

>> Wow.

>> And it was January 26th, 1875, George Green, Kalamazoo, Michigan patented the electric dental drill for sawing, filing, dressing, and polishing teeth. Ouch.

>> Ow.

>> [Buzzing sound] And this one we all know about. January 27, 1880, Thomas Alva Edison of Menlo Park, New Jersey patented the electric incandescent lamp. And Carl Taylor of Cleveland, Ohio patented the ice cream cone rolling machine January 29, 1924.

>> The ice cream cone rolling machine.

>> That's it. January 30th, 1894, C.B. King of Detroit, Michigan interested in all things pneumatic earned himself a patent for the pneumatic hammer. That's the heavy jackhammer that runs on air and makes quite a racket.

>> Yeah. Should have pulled one of those up, just to drive you crazy.

>> I wish you had. This is one of those interesting points we probably all had something to do with this, given our close proximity to Dallas, Texas. January 30, 1858, the first two-way moving sidewalk was put into service at Love Field in Dallas, Texas. The length of the walkway through the airport: 1,435 feet. And I think I remember riding on that thing. Do you?

>> No.

>> Oh, okay. Those, Gary, are just a few of our more remarkable innovations in history for the month of January.

>> That is awesome. That is very cool.

>> Yeah, it is. Good stuff.

>> Hey, now -- you know, we in Oklahoma have a lot of interesting history. If you've never been to the Oklahoma History Center, this, let me tell you, is an architectural masterpiece. And we have a guest who is a radio figure, Michael Dean. And coming up in our next segment, he's going to be talking about, number one, the history of the museum, and give us -- kind of bring us up to date on what's new and exciting. If you've been to the museum but haven't been there in quite a while, he'll bring us up to date on that. But what I'm looking forward to, this guy is like

you. You know, you used to be with travel and tourism. And you have a lot of interesting things about different sites in Oklahoma. And Michael has some wonderful tidbit stories. These are things that most people don't get to hear about, stories about prominent figures in Oklahoma. And he's also going to have some interesting innovation history.

>> Exactly.

>> Now, some of these Steve and I have talked about on the program before. But I've got a feeling Michael's going to have some other things attached to those stories. So stick around. If you want to learn about some of the things in Oklahoma history, here on *Oklahoma Innovations*. We'll be right back.

[ Music ]

>> As you drive across Oklahoma, you can see thousands of gas wells sprinkled throughout the countryside. Many of these wells don't produce enough natural gas to justify pipelines. But, without this access, thousands of well sites are abandoned. With the support of the Oklahoma Center for the Advancement of Science and Technology, one company is creating a portable device transported on a flatbed truck to process natural gas at well sites. This technology optimizes the amount of gas that can be captured and releases no byproducts into the atmosphere. This idea provides new opportunities for small oil and gas producers while bringing us one step closer to energy independence. Supporting innovation. That's what OCAST is all about. OCAST is looking for small business owners serious about investigating new products, services, and processes. For more information, call OCAST toll free at 866-265-2215, or visit their web site at [ocast.ok.gov](http://ocast.ok.gov). Investing in research and development. It pumps new life into Oklahoma's economy.

>> You're listening to *Oklahoma Innovations* with Gary Owen and Steve Paris on the OCAST Radio Network.

[ Music ]

>> Thank you for joining us this week on *Oklahoma Innovations*. And we have a -- this is a program you're going to want to turn your dial up for. Because this guest, first of all, is a very good friend of ours. And we have been trying to get him locked down on this program --

>> That's right.

>> -- for quite a while, and finally we were able to get him.

>> We're there!

>> We're here.

>> Michael's in the building [laughing].

>> He is. Now, if you've never been to the Oklahoma History Center, you're going to want to listen to this program; because Michael Dean is a wealth, number one, of information as far as history; but he's also going to enlighten you about the museum. First of all, Michael, welcome to the program.

>>Michael: Thank you, Gary. Pleasure being here. Steve, pleasure being here. It's great!

>> Glad to have you, my friend.

>>Michael: And I've been looking forward to this for a long time. It's just a matter working schedules and that sort of thing.

>> You know, there's probably two people in Oklahoma who don't know who you are. And, for that benefit, we need to let them know just exactly who Michael Dean is. And you're known far and wide, especially here in central Oklahoma and the Tulsa area, which, you know, we're heard in Tulsa too.

>>Michael: And in what I like to think of as God's country. That would be Southeast Oklahoma.

>> There you go. Exactly. So tell us a little bit about Michael Dean and where you've been and how you got here.

>>Michael: Kind of a very brief thing, I was born in Muskogee. We didn't live there long. My dad worked for the Army Corp of Engineers, so he was working on the Fort Gibson Dam. That's where I was born. I lived in most towns in eastern Oklahoma and eastern Kansas that have dams, meaning that, when I was growing up, I was one of those dam kids, d-a-m. [ Laughing ] And was one of those amateurs. So I graduated from high school in Broken Bow. We lived in Broken Bow for a couple of years. And there I met a fella, we're going to be -- we've been friends for all these many years now. We'll be lifelong friends -- Bob Burke

>> Oh, sure.

>>Michael: And I know that you know Bob. Yes. Bob and I graduated from high school together, and we both began working in radio at KBEL In Idabel our junior year. So we worked there our junior and senior years, and then I was a freshman at Oklahoma State. Mother and dad moved to Tulsa. Starting working in Tulsa radio at KVOO and then KTOW in Sand Springs. And spent a lot of time working in Tulsa. Later, a friend of mine bought a radio station in McAlester; moved there and lived there for five years and back to Tulsa. Then spent a brief time up in Kansas, but I missed Oklahoma. I was news director in some stations in Wichita, Kansas. And then move back to --

>> Kansas being the first of the rectangle states, right?

[ Laughing ]

>>Michael: They have an interesting history. I went to a lot of football. I did a lot of sports back then. And I'd go to their football games, and they'd play the national anthem and they'd play the state song. Well, you know, we have the best state song of any state in the nation.

>> Yeah, I think so.

>>Michael: Absolutely. How could you get any better than Rodgers and Hammerstein writing your state song. So I never got used to standing up for the national anthem at football games and basketball games in Kansas and they do the national anthem and then they'd do the state song, which was a slow, somber version of Home on the Range.

[ Laughing ]

>> Which, by the way, was written in Oklahoma.

>>Michael: Yes. Written by an Oklahoman.

>> Shawnee, Oklahoma. You bet.

>>Michael: So they owe their state song to Oklahoma and an Oklahoman. But, anyway, came back to Oklahoma City in 1986 and worked in radio here until '93. And went to work for the Department of Environmental Quality when that agency came into existence; worked there for ten years. And I've been over at the Oklahoma Historical Society for seven years. And I think, you know, you can't work in broadcasting, especially in broadcast news or any kind of news and not have a particular affinity for history. I'd always loved history and always knew that we had a great history in Oklahoma, far more than what most people would expect and far more than what they teach for that one semester your freshman year in high school when you get the required Oklahoma history. So going to work for the historical society seven years ago, working with Dr. Blackburn and Dr. Zwink and the other people there has just been literally a dream come true. We have a tremendous, incredible history that most people aren't really aware of, even if they're Oklahomans. And I've learned so much in the seven years that I've been over there. I thought we had a great history. I didn't have a clue of how great and how interesting, how fascinating, and how broad and diverse our history is in Oklahoma. And it's just -- so I'm having absolutely the time of my life. It's a dream job come true.

>> Do us a favor real quick before we move to some of the stories. Just give our audience a real quick overview of the museum. Because this is a -- you know, since it was rebuilt and so forth, it's beautiful.

>>Michael: Right. We had been in the Wiley Post building since 1930. And that building was designed by Solomon Layton, the great architect who did the state capitol and Central High School and a number of county seat buildings around the state. The building was designed by him in 1928, '29, to house the Oklahoma Historical Society. By the 1950s, we had outgrown that building. It's a small building, about 50,000 square feet. And we had about four or five thousand square feet of exhibits. We had as many as 150, maybe 175 artifacts or objects on display in that building. We'd outgrown it by the 1950s. And so, in '99, the legislature began the process for building the new building. And I went to work for the historical society in 2003, and we were just starting phase two of the construction of the History Center. We moved into that building in 2006, and we were in it for 2007 for our centennial year. It's a 200,000 square foot building. We have over 50,000 square feet of exhibits in the building, more than the total space we had in the old building. We have thousands of artifacts on display. We had warehouses, four warehouses around Oklahoma City that were storing the almost a million artifacts that we have in our collections that we didn't have room for in the old building. They are now all down in the basement of the history center in areas that are temperature controlled and humidity controlled and are designed for the storage of various kinds of artifacts, whether it's fabrics and textiles or it's furniture; it's old vehicles -- we have a Model T, and we have a stagecoach that was used -- it's on display right now -- stagecoach that was used as a stagecoach to make the run between Oklahoma Station -- that was the little wooden train station that the Santa Fe built north of the Canadian River, and it made a run between there and Fort Reno and the Darlington Indian Agency. So, anyway, we have all of these things on display. We tell the story of Oklahoma in that building. And we're able to change artifacts on a regular basis, because now we have everything combined into one building. What you saw a year ago is not what you would see today.

>> What amazes me, Michael, is there is so much technology involved. You've got airplanes. You've got space capsules. You've got some of the things you've mentioned, all having to do with technology as it relates to the development of Oklahoma.

>> And technology as it relates to museum design, as well. Over in the old building, we had a video. It wasn't interactive. It was a monitor with a DVD player that looped a DVD over and over again. That was it. That was all we had in the way of technology. We have 256 interactive audio and video components in the exhibit.

>> Awesome. Awesome.

>>Michael: And they help us tell the story of our state and of the territories that existed before we became a state.

>> We have so much to talk about with Michael Dean, public relations director for the Oklahoma Historical Society. So stick with us here on *Oklahoma Innovations*.

[ Music ]

>> There's more to learn on *Oklahoma Innovations* with Gary Owen and Steve Paris on the OCAST Radio Network.

>> The stress of finding a job after college is compounded for recent graduates entering a tough job market. But thanks to the Oklahoma Center for the Advancement of Science and Technology, more students connect with the state's most advanced technology companies while earning income and valuable on-the-job training. Through the OCAST R&D intern partnerships program, students gain experience in the industry, work with mentors, and operate specialized instruments. Intern training leads to starting salaries 12 percent higher than Oklahoma's average per capita income. OCAST is investing in Oklahoma's best and brightest. Creating jobs, investing in our future, that's what OCAST is all about. OCAST is seeking internship partnership opportunities that will allow Oklahoma students to gain hands-on experience in science and technology careers. For more information, call OCAST toll free at 866-265-2215 or visit their web site at [ocast.ok.gov](http://ocast.ok.gov). The future of Oklahoma looks bright.

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>> Research and development, technology transfer, and commercialization, creating high paying jobs in Oklahoma. It's what OCAST is all about. This is *Oklahoma Innovations* on the OCAST Radio Network.

[ Music ]

>> I am a native Hollywood, California boy; and I'm proud of it. But today I am outnumbered by two Muskogean -- [ Laughing ] -- in the studio today, and there's no way I can get around it. We are delighted to have Michael Dean with us with the Oklahoma Historical Society, and he's been talking to us about this wonderful complex located on 18 acres across from the capitol

building. The History Center is a beautifully designed, self-guided exploration of Oklahoma past to present. And, before we go on with Michael, our producer, Debbie Cox, has asked us to give a little plug here. If you are an ABC network fan of Extreme Home Makeover, Steve, you've got some information there that she wanted us to pass on to our listeners.

>> Very brief information. And February 1 is the next date that you need to be concerned about. It's called Door Knock Day. It's the day that a family down in Norman will be notified that they're going to be chosen by Extreme Makeover, a famous television show that I'm sure everybody's heard about. They're going to have a food and blood drive. If you want more information on how to participate, let me just give you a quick web site here. It's [www.idealxtrmehome.com](http://www.idealxtrmehome.com). That's [www.idealxtrmehome.com](http://www.idealxtrmehome.com).

>> And the blood drive is -- whose doing that, Debbie?

>> The Red Cross.

>> The Red Cross is behind all this. So it's legitimate.

>> Yes.

>> Okay.

[ Laughing ]

>> Very good.

>> All right. Now, before the break, in fact, during the break, Michael, you were telling us about an outreach plan in Tulsa; is that right?

>>Michael: We have announced last spring, and we are moving forward with this plan. We intend to build the Oklahoma Museum of Popular Culture in Tulsa in the Blue Dome District. And, at the time that we made that announcement last spring, the media asked us, How can you do that when the state's facing a budget crisis? Well, we went through that when we were building the Oklahoma History Center, and we built the premier museum of any state's history in the country. And we think we can do the same thing in Tulsa. And Tulsa's ideally suited for that. You look at all of the people who came out of Tulsa in music, in entertainment, authors, photographers, cinematographers. It's a tremendous story, and it's one that we really can't tell in its total scope in Oklahoma City at The Oklahoma History Center. And so we came up with the idea of building a museum in Tulsa. Tulsa deserves a museum of the same quality as the Oklahoma History Center and a museum that tells that unique story about Tulsa and northeast Oklahoma.

>> That's what we're applauding today.

>> Exactly. And if anybody thinks the Oklahoma History Center doesn't have a statewide mission, this is proof positive that that's exactly what you're focused on.

>>Michael: You know, one of the things I talk about -- I do a lot of speeches. You probably are surprised to hear that. And -- but one of the things that I explain is that I am from the Oklahoma Historical Society, the Oklahoma History Center, not the Oklahoma City Historical Society and it's not the Oklahoma City History Center. It's the history of our entire state, from Altus to Miami, from Guymon to Broken Bow and everything in between. So that's the story that we tell at the History Center. But we are doing outreach and we're trying to do more outreach because, given the price of gasoline and such, a lot of people from the far stretches of our state, from

Broken Bow, McCurtain County or from the Panhandle find it difficult to come to Oklahoma City now. So we're taking our story to them.

>> I have a comment that I want to pass along, and I want you to elaborate on this in your notes here. Explore Smithsonian-quality exhibits that bring to life the voice and visions of Oklahoma.

>> Yes.

>> In your own words --

>>Michael: We are a Smithsonian affiliate, which means that we meet the exacting standards of the Smithsonian Institute and the storage of the artifacts that we have and the display of the artifacts we have and in the way that we tell the stories of those artifacts and how those artifacts relate to a given exhibit or a given gallery. And they have very exacting standards, and we meet those standards. We are a Smithsonian affiliate. So, if you're a member of the Oklahoma Historical Society and you go to Washington, you get a discount on getting into the Smithsonian. If you're a member of the Smithsonian Association, then you get a discount at the Oklahoma History Center.

>> Good to know.

>>Michael: Yes. Absolutely.

>> Fantastic.

>>Michael: And, hand in hand, not all museums are able to meet those standards. There are only, I believe, five in Oklahoma. Maybe six now; I think there was a sixth. But, anyway, we're one of the museums that meet those standards.

>> Yes. So what that points out that, when you build a museum, when you start a museum, you know, it may sound like a simple process. It's not. It's very complicated. It's done in a very scientific way and done with the interest of preserving history.

>>Michael: Yes. And the stories that that history tells.

>> Sure.

>>Michael: And the way that we tell those stories.

>> Well, we've got this segment and one more, Michael. So we want to talk about some of the stories.

>>Michael: Yeah. You know, there's -- Oklahoma history is replete with men and women who were involved in technology in various forms and fashions. And let's begin with a date in history -- February the 3rd, 1903. That morning -- that was a Sunday -- and that morning, the first electric streetcars rolled out of the car barn on 13th Street and down Broadway. And a writer for the Oklahoman Reporter was there, and this is what he wrote. He was standing on the corner of what was then Broadway and Grand. Grand Avenue is today Sheridan. He was standing on that corner and he was standing next to an old man who had been a boomer and had been involved with David Payne in the boomer movement before central Oklahoma was opened up for settlement. And he wrote that, The old man looked forward, threw his hands in the air in amazement, leaned forward with his eyes fixed on that object until it disappeared over the hill. And then he shouted, Well, by thunder, they've sure got them cars toted by lightning. [ Laughing ] Visibly shaken, the boomer made his way to the nearest saloon and ordered a four-finger

quantum of fire water to calm his nerves. [ Laughing ] The reporter for the Oklahoman. You know, but that was begun by Anton Classen and John Shartel. They were lawyers who came into Guthrie in the weeks following the land run in April of 1889, and they both eventually came to Oklahoma City in the mid-1890s. And in 1895, John Shartel went to the city council. And he told the city council that they ought to issue some sort of franchise for a streetcar system. You can't imagine how Oklahoma City was growing at that point. On April the 21st, 1889, there were approximately 10 to 12 people living in what became Oklahoma City. The next day, on the day of the land run, by that evening, there were 10,000 people living in Oklahoma City. And Oklahoma City was growing by about 120 percent per year through the 1920, 1925. And so, in 1895, recognizing this growth, John Shartel went to the city council, asked the city council to issue a franchise for a streetcar system. And they didn't do it. In 1902, they did. Here's what happened, and this is how technology plays into our everyday lives. People walked to work. You couldn't ride a horse to work and park a horse in front of a building for 8 or 10 or 12 hours and leave it there. So you had to walk. People would walk upwards of a mile and a half but not more than two miles to get to work. By 1902, 1903, the city had grown beyond that two-mile radius of people being able to walk to work in either downtown Oklahoma City or what was then called Packingtown. That was the stockyards area that we call today. By 1902, 1903, there were six packing plants over there in Packingtown. And, so, Anton Classen was interested in this. He was also a lawyer but he, by 1900, had started the Classen Company; and he was building houses. And these houses they were building were at that two-mile radius where people wouldn't walk to work. So they needed a streetcar system for people to be able to get from their home to work and then back in the evenings. And so, in '02, the city council issued a franchise; and Classen and Shartel joined forces and wound up with that franchise, organized the Metropolitan Streetcar Company, Metropolitan Railway Company, later became the Oklahoma Railway Company. And, in '03, they started running streetcars. Anton Classen, if you go back and look at the ads that he was running for his subdivisions he was building, all of the subdivisions he advertised as having good car service. That didn't mean automobiles, because Henry Ford hadn't invented the Model T at this point. That meant streetcars.

>> There you go.

>>> A great story. You mentioned the boomer. In the technology industry, we often refer to it as disruptive technology. Sounds like he had a bit of an experience with a disruptive technology.

>>>Michael: Oh, he did. Yeah. Absolutely. He was, you know, in amazement. You have to remember, really, even in 1938, they had a 50-year anniversary of the land run in 1889. And there were still a large number of boomers who came in or Sooners who came in the land run in 1889 were still alive then because, when they came here, they were 10, 11, 12, 15 years old. 1938, they were in their middle ages.

>> Most of them were associated, I think, with Payne County.

>>>Michael: Yeah.

>> That was where that originated.

>>>Michael: Yeah.

>> You've got other examples. We're down to less than a minute for this segment. But, you know, let's make a quick run-through of some of the other ones.

>>Michael: Well, Sylvan Goldman, who owned grocery stores in Oklahoma City in the mid-1930s, invented the shopping cart.

>> Of course.

>>Michael: Carl Magee, who came here as editor of the Oklahoma City News, the newspaper owned by Scripps Howard in the mid-1930s, invented the parking meter because of parking congestion in downtown Oklahoma City. Wiley Post invented a number of navigation instruments that were used on every airplane on the face of this planet until recent years with the advent of GPS. The tools that he invented and created for aerial navigation were still in use. And, on small planes, they're still being used today. And the thing about Wiley Post was he dropped out of school in the sixth grade and he was an ex-con and he suffered from chronic depression.

>> Wow.

>>Michael: It's an amazing story.

>> Michael Dean is our guest from the Oklahoma Historical Society and the Oklahoma History Center. More to come on *Oklahoma Innovations*.

[ Music ]

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[ Music ]

>> Back in 1892.

>> You were there.

>> I was there.

>> We're delighted to have Michael Dean, public relations director for the Oklahoma History and Historical Society and History Center. You've got two titles here. You know, you're part of the Historical Society; you're part of the History Center. But it's all one.

>>Michael: Yeah. It's all one. Yeah. The History Center is owned by the Historical Society and is the home of the Oklahoma Historical Society. But we wanted to brand the building as the History Center, the Oklahoma History Center so people would talk about it and they'd just simply say, Oh, I was at such and such at the History Center last week or I saw this exhibit at the History Center. And people would know, Oh, that's the Oklahoma History Center on NE 23rd Street just southeast of the state capitol in Oklahoma City.

>> We got some more stories we want to squeeze in here, because we have listeners that I know that, on Monday, are going to go, You know, I heard Michael Dean on that Oklahoma radio show say, Did you know. So you've got some other stories you want --

>> Well, all of us have heard about Pawnee Bill.

>>Michael: Right. Gordon Lillie.

>> And you had an interesting story to tell about him earlier when we were talking.

>>Michael: Well, you know, if you look at entertainment, there are innovations both in technology and in entertainment that date back to Oklahoma and Oklahomans; and Gordon Lillie, Pawnee Bill, was one of them. Back in the 1890s, the turn of the century, the most common form of entertainment, the most popular form of mass entertainment were the wild west shows. He had lived in Kansas. And when they were moving the Pawnee Indians through Wichita, Kansas through to what would become their homeland here in Oklahoma, he met some of them, became close friends with them, and learned to speak the Pawnee language fluently. And then he came with them into north central Oklahoma and settled with them. He had grown up reading the dime novels about Pawnee -- about Buffalo Bill, about William Cody, and was a big fan of his and eventually met William Cody. Cody hired him to work with him on the Buffalo Bill Wild West shows. Cody was a great showman but not much of a businessman. And the show was in financial trouble and, eventually, Pawnee Bill took over the show, bought out the show; left for a while, started his own show, the Pawnee Bill Show, and then combined the two shows together in 1907, 1908, 1909, 1910. And was very close with Pawnee Bill. The Pawnee Bill ranch, which we own, by Pawnee Oklahoma.

>> Beautiful place.

>>Michael: Yeah. Beautiful place. And, you know, the home is still there. It's in beautiful condition. The outbuildings, the blacksmith shop, the shops where they worked on the rolling stock are still there. And he was quite into that technology. After he got out of the show business, he had some oil wells on the property. He had a refinery on the property and was really ahead of his time both in show business or in entertainment technology at that time. And then and how he operated the ranch at a profit at a time when a lot of ranches weren't very profitable. So a pretty interesting guy. In Tulsa, there was a fella who came along in the early 1960s named George Kravis. George Kravis's father was Raymond Kravis, and Raymond Kravis was one of the very wealthy independent oilmen in Tulsa and, in fact, was the second largest benefactor until recent years to the University of Tulsa behind William G. Skelly, who's also an oilman of some repute. George Kravis growing up was interested in radio and in technology. And, in 1962, Raymond Kravis built George Kravis a radio station, KRAV. Interesting call letters; that's how the name Kravis is spelled, with an IS on the end of it. Yeah, I worked there in the early '80s, in 1981, '82, '83. And George, being interested in technology, any time some new equipment came along, either for the control rooms, audio, whatever, he would go buy two or three of them, put one of them on the air and then the other one or two he would give to the engineer at KRAV to take apart, to figure out how it worked and how if he could make it work better. And so George was --

>> He's thinking ahead.

>>Michael: Yes. He was always on the forefront of technology in broadcasting in Oklahoma and right up till when he sold the radio station to Cox Communication, who owns it now. But an interesting guy. And he was just -- he was fascinated with technology, with electronic

technology. I remember one year for Christmas, Sony came out with these new little cube clock radios. Well, he bought everyone on staff a cube radio. We were the first ones in Tulsa to have these little cube clock radios. So that was George Kravis. He was just a fascinating, fascinating guy who's been up to the History Center and he's seen our exhibit on broadcasting and has donated some things to us. So we're really indebted to him.

>> Which is a very cool exhibit, by the way.

>>Michael: Yes, it is.

>> You know, as you were talking, I was thinking in terms of the technology and the history that's being made today --

>>Michael: Yes.

>> -- that probably is not yet a part of the Oklahoma History Center. The one that came to mind was a researcher at OSU, Oklahoma State University, Steven Trost, who developed a technique, you know, when the bridge collapsed over on Webbers Falls across I40.

>>Michael: We were there that weekend, by the way.

>> Were you?

>>Michael: At Lake Eufaula, yeah.

>> Oh, my goodness. But he developed the technology that I think he saved the companies about \$43 million and saved them like 40 or 50 days in getting that bridge rebuilt. That's going to be a history story for you some day.

>>Michael: It is. And those are the kinds of things that we're collecting today. You know, what you think wouldn't be history until it's been 30, 40, 50 years in the past isn't. We are trying to capture those kinds of stories as they happen or right after they happen; because, once they've happened, they're history. And, you know, 50 years from now, somebody's going to want to know about that technology and how it came about in association with the bridge collapse at Webbers Falls. I think he was also involved in the I35 bridge collapse in studying that up in Minneapolis-St. Paul a couple years ago.

>> I think he was. And they're using his methodology as kind of a standard now that, when something like that happens, they come to Oklahoma to find out, How did you do that.

>>Michael: And those, you know -- that's our history. That's our history today. What happened yesterday is history today.

>> We haven't even talked about aviation. And we could talk for hours on that.

>>Michael: We've been on the forefront of that from the very beginning. From Clyde Cessna, who lived out of western Oklahoma, was building little airplanes which he would crash on a routine basis; eventually moving to Wichita, Kansas and building what were called Wichita Wonders. And Wiley Post, I mentioned a moment ago, here was a guy who was not a high school dropout, a grade school dropout, dropped out in the sixth grade; suffered from chronic depression for which there was no treatment at the time; and was an ex-con, served a year or two in the reformatory at granite because he was stealing cars; and, yet, he learned to fly and invented the pressure suit, discovered the jet stream, invented the tools that were used in

navigation for airplanes right up until recent years. And some planes are still using that technology.

>> You're talking about VOR navigation, very high frequency omnirange radio, radio contact.

>>Michael: Well, and the tools that they used on maps, the protractors and that sort of thing to chart where you were and figure in wind drift and that sort of thing.

>> Yeah. An important part of navigation. You bet. And, you know, we could also talk about the Braniff brothers who created Braniff Airline. Doesn't exist anymore, but --

>>Michael: No. They went out of business in the early 80s. They actually started two airlines. There was a second airline that lasted. And there's a story about that. You know, we have the Braniff Building in downtown Oklahoma City or what used to be the Braniff Building. And people assume that's where the airline was headquartered. It wasn't. Tom Braniff owned an insurance agency. His brother Paul was the flier in the family. And the Braniff building was where the insurance agency was headquartered. And, after they started that second airline, Tom Braniff figured out that nobody had insurance for airplanes, commercial aircraft. And so he went to Lloyd's of London, made a deal with them to insure aircraft, came back; and the larger part of their business for him was that he was insuring not just the aircraft that his airline was flying but all of the other airlines, as well. And so Eddie Rickenbacker would call when they had purchased a new -- they called them ships back then -- a new ship for Eastern Air Lines. Or the guy who started TWA would call and they bought a new ship and they would write the insurance policy for that particular aircraft.

>> And the first route for Braniff Airlines was Oklahoma City Tulsa.

>>Michael: Tulsa. Flying oilmen between Oklahoma City and Tulsa back in the 1920s.

>> Exactly. Exactly. Great history. I mean, anybody that doesn't get excited about this, just -- you just need to check your pulse.

>>Michael: Ira Eaker, who was one of the great generals in the Army Air Corps in World War II and post World War II born in Durant.

>> Yeah. The airfield down there is named after him

>>Michael: Yeah. Eaker Field. In fact -- and talking about more recent technology in aviation in space, Oklahoma is the only state who's had an astronaut who's flown in every phase of the manned space flight program, from Mercury to the shuttle. We're the only state.

>> Who would that be?

>>Michael: Oh. The shuttle astronaut?

>> Yeah.

>>Michael: Tom Herrington.

>> Tom Herrington. Okay. And we've had him on this show.

>>Michael: Yeah. Uh-huh. Who also is the only Native American who's flown in space.

>> Yeah. It's Chickasaw.

>>Michael: Uh-huh.

>> Okay. Guys, we're down to one minute. I want you to allow -- allow you --

>>Michael: I want more time.

>> -- Michael, to give us information about the museum.

>>Michael: We're open Monday through Saturday from 10 a.m. to 5 p.m. Our web site is [okhistory.org](http://okhistory.org). And, on that web site, you'll see a link to the History Center. And it has all of the information about the History Center: the four main galleries, the special exhibits that we have on right now, the history of rock and roll in Oklahoma, and also the history of Latinos and Hispanics who have come to the territory and the state of Oklahoma. Those two special exhibits are shown on that web site, as well. But we're open from ten to five. We have some special things with school breaks coming up, some special programs. You'll find all of the information on those special programs on the web site. Bring the kids over to the History Center. The kids will enjoy it just as much as we do.

>> By the way, there's something I want to mention about the Historical Society. It's got a wonderful research division. If you're needing to archive something, if you need to pull up something, photos, need information, materials.

>>Michael: Absolutely. We have millions, millions of photographs; and we have nearly every copy of every newspaper ever published in the two territories in the state.

>> Thank you, Michael Dean. Steve, we're out of time, buddy. It's been a fun show. We'll have him back on *Oklahoma Innovations*. Have a good week.

[ Music ]

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