Transcript for "Sean Potter, meteorologist, science writer, and weather historian in St. Joseph, MN"

Clear Skies Ahead: Conversations About Careers in Meteorology and Beyond

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Kelly Savoie:

Hello, Clear Skies Ahead listeners. This is Kelly Savoie and I'm hoping you can take a moment of your time to rate and review our show wherever you listen to podcasts. We have produced over 60 episodes and you can help us reach even more individuals that will benefit from the diverse experiences shared by our guests. Thanks so much for listening, and I hope you enjoy this new episode.

Welcome to the American Meteorological Society's podcast series, Clear Skies Ahead: Conversations about Careers in Meteorology and Beyond. I'm Kelly Savoie and I'm here with Emma Collins and we'll be your hosts. We're excited to give you the opportunity to step into the shoes of an expert, working in weather, water, and climate sciences.

Emma Collins:

We're happy to introduce today's guest, Sean Potter, meteorologist, science writer and weather historian in St. Joseph Minnesota. Welcome, Sean. Thanks so much for joining us today.

Sean Potter:

Thanks. It's a pleasure to be here.

Kelly Savoie:

Sean, when did you become interested in meteorology and how did it affect your educational path?

Sean Potter:

Well, my interest in meteorology, like many people, and I'm sure you've heard this from other guests, I can trace back to a specific weather event and I'll get into that in just a moment. But I'll say that it actually started out as just an interest in science, in general. And I attribute a lot of that to my mom who worked in the medical field and worked in a lab at a local clinic, and she was always interested in science. She grew up during the age of Sputnik and when science was something that was really being encouraged and really starting to be encouraged for girls and women at that time in the '50s and '60s as we got into, I guess, the space race. And in fact, she was just telling me the other day we were talking about something and it came up that she said that she'd never taken Home Ec in school.

And I said, "Really?" And she said, "Yeah." I said, "Well, what were you doing? Were you taking shop or something?" "No, I was probably taking extra science courses." And so she was always very interested in teaching me. She was in the biological sciences, but she was really interested in teaching me at a very young age about science in general, scientific method and also, astronomy. So I really gained my love and interest in science from her, and that really developed... I remember one of the early student teacher conferences, I can remember going to in grade school, maybe it was second grade, being there, and I think it was with my mom, and the teacher is looking at me and saying, "Sean, do you still want to be a scientist when you grow up?" And so I know that that was really instilled in me at an early age.

But to have that evolve into weather really didn't take shape until July 18th, 1986. And that was the date of what's become known as the Brooklyn Park or Fridley Tornado. Brooklyn Park and Fridley are two

suburbs of Minneapolis in the Twin Cities. And I was growing up actually where I am right now, in central Minnesota, about an hour or so north of the Twin Cities. And on that date, I was 13 years old and it was summertime. So I remember being home, happened to be watching TV, and just as all of the local Twin Cities news stations were about to go on air with the five o'clock newscast, a tornado started developing in these northern Twin Cities suburbs of Brooklyn Park and the Fridley area. And all of them started covering it, a tease going into the five o'clock newscast.

I remember one station, I think, had their camera up on the roof of their building pointed toward the direction where you could see the funnel cloud. And I was just extremely interested in this and I was flipping around the channels trying to see who had the best coverage. And it turns out that the local NBC affiliate, Channel 11, which had just recently changed its call letters to K-A-R-E, which they still are, KARE 11, their chief meteorologist at the time, Paul Douglas, who is known, I think, to many of the listeners here, and certainly anybody who grew up or currently lives in Minnesota is really... That name is one of the ones that is synonymous with weather in a state that is very weather savvy to begin with.

And he was fairly new at that station at the time. And it just so happens that Paul's station, KARE 11 a helicopter, their TV station's helicopter was coming back from assignment at the time that the tornado was developing. And they had the helicopter pilot, his name was Max Messmer, and the photographer, Tom Empey, just happened to be in the right place at the right time, and they started sending back live pictures of this tornado that was developing. And basically, that became the story for the entire five o'clock newscast. It was essentially going from live images from the helicopter of this tornado back to the anchors, Paul Magers and Kirsten Lindquist were the two anchors at the time.

And then Paul Douglas tossing to him in front of the green screen or blue screen, whichever they used in the weather area to give people updates and getting the latest warnings and advisories from the National Weather Service. But then also, seeing what he's seen not only on the radar, but then in real time and cautioning the pilot and the photographer, please, please be careful, don't get too close. They were a good distance away and they were very professional about this. So this wasn't like you think of some extreme storm chasers trying to put themselves in the path of danger for ratings or something. This was really a first of its kind experience in broadcasting and in capturing a moment like this. And I was just mesmerized.

So 1986, I mentioned, VCRs were still fairly new. My parents had just recently, maybe within the previous year or two, had bought their first VCR. And so what did I do? I remember I grabbed a blank VHS cassette tape, if you remember VHS, popped it in, hit record, and then that was it. For the next half hour, I watched in awe. And this tornado, one of the things that makes it very interesting, and one of the reasons I think I can talk about it, in some ways, in a positive light is that there were no deaths associated with it. It was limited damage. For the majority of its life, it remained in a nature preserve.

So you see these images, live images from the helicopter of the funnel cloud and going through all these different stages. Sometimes it was like a rope stage and then it just dissipated. It was condensation funnel, it looked like it was gone, but you could still see trees being ripped up and high tension power lines popping, exploding in the distance. And it was really a site to behold. So that is really, I think, I guess the milestone moment, if you will, that solidified my path toward a career in meteorology.

Kelly Savoie:

Is it common to have tornadoes in Minnesota? I think of Minnesota as just being cold, but is it an area where there's tornadoes often?

Sean Potter:

It is, believe it or not. In the winter, not when it's cold, but springtime, summertime, I'd have to look to see exactly where it ranks. And I know the whole idea or definition of tornado alley is starting to shift literally a little bit. But traditionally, the south-western corner of Minnesota, if you would see some of these just general maps or diagrams showing where tornado alley is, it would be maybe just a little bit of the northern extent of it, might touch Minnesota. And no, severe weather, including tornadoes is a reality here during those summer months. And ask any storm chaser, there have been really some devastating ones. And I have actually not seen one, but that was the thing. So you talk about this experience watching on the news with Paul Douglas and the Carol Levin team, 1986, but around that time too, every time we had severe weather here in the summer, and my parents would take us down in the basement, there'd be a severe thunderstorm war, especially a tornado warning, we'd all be huddled in the-

Kelly Savoie:

Yeah, you're all hiding from it. You can't see it. You can't see it.

Sean Potter:

We were hiding in the corner. And I think, yeah, at the time, it was like go to the, what was it? We were in the North East corner or something, and then I would sneak out and go in the garage and be looking out the window and in between flashes of lightning, if it was dark and in between flashes of lightning, trying to look to see if I could see a funnel cloud. And I never did, but it really got the adrenaline pumping.

And actually, it was Paul Douglas who sort of came up with this phrase that Minnesota has the Super Bowl of weather. So you mentioned the cold. Yes, it can get very cold -60 is the official all-time state record low. My last year in college was February 2nd, 1996. It was way up in the Iron Range in northern Minnesota, a little town called Tower, which is actually a weather service. They have a co-op, cooperative observing site there, where I was going to college in St. Cloud just a few miles from where I grew up and where I currently live, I like to say, we only got down to -40.

Kelly Savoie:

Only.

Sean Potter:

Said only -40. So yes, I remember lots of cold and blizzards and things. And then in the winter, and then in the summer, you have the threat of severe weather. If it's not tornadoes, we've had derechoes that have destroyed countless trees up near the Boundary Waters Canoe Area, up near Canada and their hailstorms, more and more lately, heat waves, excessive heat. And so, it really is everything other than no tropical weather.

Kelly Savoie:

So, after that, you realized that you wanted to be a meteorologist and you were looking for colleges and universities with degrees in meteorology, right?

Sean Potter:

I was looking for, yes. And it wasn't so much that I was looking for colleges. I was, again, happened to be in the right place, at the right time because it just so happened that the school where I went to college

for undergraduate St. Cloud State University, which is just about 10 miles at most, from where I grew up, had started the first and still, the only four-year bachelor of science degree program in meteorology in the state of Minnesota while I was in high school. So it was a brand new program.

Kelly Savoie:

Perfect.

Sean Potter:

Yeah. So it was like, there was no question. I think it was probably assumed that that was where I was going to go to college, regardless. And so, the fact that I mentioned I was really interested in whether I was really interested in all earth sciences at the time. I had an earth science teacher, it was mandatory I think, in ninth grade here, everybody takes earth science. And my earth science teacher, Mr. Johnson, Don Johnson is actually his name is a great, wonderful guy. Yeah, he didn't wear the-

Kelly Savoie:

The pink-

Sean Potter:

I don't remember him wearing the-

Kelly Savoie:

The pink pink or the-

Sean Potter:

The pink, yeah.

Kelly Savoie:

I don't know. Was it blue or pink? I don't remember.

Sean Potter:

Right. Well, I think it was both. And then the sport coat, the sleeves rolled up and all that. But he was cool in his own way. So I remember, especially when we did the weather aspects, in fact, I think it was either maybe my senior year in high school, he actually... He was so interested in meteorology that he offered an elective course and I jumped at that opportunity. I was still in high school, but I took an elective course and learned some of the basics. I think we got to plot a Skew-T chart for those weather nerds who know what that refers to. Our textbook was actually fire weather. It was a book on fire weather that was probably published for the first time in the '60s or something. But at the time, he thought this was the most accessible thing that was easiest to understand, didn't have any calculus or too much technical things that we would learn.

And then I remember, as part of a project, I did my project for that course on this tornado just at that time, just a few years earlier, 1986, and I brought in that VHS tape and showed it to the class, wrote a report, gave a little talk on it. So, that again, and then the fact that around that time St. Cloud State was forming this meteorology program, it just became a no-brainer that that's what I would do.

Emma Collins:

And were there any opportunities that you pursued inside or outside of school that helped you to secure a job in the profession?

Sean Potter:

Yeah, I think one thing that comes to mind is the opportunity of an internship. And when I was going through undergrad at St. Cloud State, I was trying to decide what did I want to do with this degree when I finished. I knew I probably wasn't going to go on and get a Ph.D. I was interested in pursuing a master's, and I can talk about that a little more in a bit. But in terms of career, one of the things I was interested in was broadcasting. I'd been on the speech team in high school, actually went to state my senior year in speech. So I felt like I had this interest and maybe knack for public speaking that seemed to go well hand in hand with meteorology. And there you have the stereotypical thing that when you tell somebody you're majoring in meteorology, they assume you're going to be doing the weather on air.

And add to that, the fact that they did offer, it was an elective course, but they offered a course as part of the meteorology program in broadcast meteorology. The first one actually was taught by Paul Douglas. Now, I wasn't far enough along in the program at that time to take the course in broadcast meteorology with him, although I did cover it. Another big interest of mine has always been a passion, has been photography. So I actually worked as a staff photographer for the university newspaper, and I got to cover that. That became a story that hey, Paul Douglas, who was a big name in Minnesota, in the world of broadcast meteorology, was coming to St. Cloud State to teach a course in broadcast meteorology. So I remember getting to cover that.

And then later, when I was eligible to take that course, it was another local broadcaster at the time named Joe DiGiovanni, who I later crossed paths with when he left broadcasting and went into the weather graphics business and was working for one of the companies that sells the weather graphics computers to stations. And I was in New York working for ABC News, Good Morning America, and it was his team that we got to interface with.

But he came and taught this course in broadcasting. So leading into the discussion of an internship, I knew that that was something, it was an itch I wanted to scratch, if you will. And I had to do an internship anyway as part of the program, I think. And so I wanted to do one at a TV station and living about 70 miles away from the Twin Cities that wasn't really feasible to do an internship and drive back and forth or find a place to stay during the summer. Well, it turns out I have an aunt who lives in Kansas City, and at the time, she lived less than, let's say about less than a mile from the local CBS affiliate there, KCTV.

And so, what did I do? I did a little research and found out the name of the person who was the chief meteorologist at the time. His name is Gary Amble. He actually just retired after 28 years, that station, just a couple years ago. Cold called him, I believe, to say, "Hey, I'm this meteorology student up in Minnesota. I want to come and do an internship with you this summer." And he already had somebody lined up to do an internship, a meteorology student from the University of Kansas. But he said, "Sure, why not? More the merrier. Let's do this." So that was how that opportunity unfolded.

And I can tell you, that that opportunity, one of the things that I like to think when I think back in my career is how everything built on everything before it. So that opportunity led to my eventually getting to get a job in broadcasting, which then, even though that's not what I ended up pursuing my entire career in, led to other things. So if I hadn't mustered up the courage or whatever, or think about just making this cold call to this broadcast meteorologist in another state who I didn't even know, or if it hadn't worked out, who knows what would've transpired. But that was certainly one opportunity that really comes to mind.

Kelly Savoie:

Yeah. And then, listen up to students. Don't be afraid to ask. Honestly, I had a student ask, just cold call me and ask if they could do an internship at AMS. And I was like, "Sure." You just don't think about it. And it's like, yes, I figured, hey, this person went out of their way to contact me. They're probably going to do a good job, so.

Sean Potter:

Yeah, it's a win-win situation. And it's one of those things, one of my words, mantras to live by, if you will, is nothing ventured, nothing gained. If you don't ask, the answer is always going to be, no, I guess. It sounds a little trite but... And it is hard. I know. I realize that that doesn't come as easily to some people. The field, people who want to go into meteorology, there tends to be, in some ways, a very broad distinction, if you will, between, and maybe it is stereotypes that you've got the extroverts who, a lot of them maybe do pursue broadcasting or maybe they go into other areas, academia or maybe the private sector or maybe government. And they're the ones who want to be the ones, the spokespeople and the face, if you will, of what's happening.

And then you have the people behind the scenes who are introverts and don't want to necessarily be speaking out. They do an excellent job. They're sometimes the best and the brightest of what they do. And I think one thing that our field, in the field of meteorology, is really evolving to, is trying to maybe find a way to bridge those two. You get the folks who maybe are a little more introverted, maybe have some social anxiety, help them find ways to communicate more, maybe break out of a shell. And then I think that's certainly... If you could do that at an early age, early in your career when you're a student, it was certainly, I think, pay off later on.

Kelly Savoie:

You had mentioned something about graduate school. And did you end up going from undergrad to grad before you did some work, or was that later?

Sean Potter:

Yeah. Actually, it was a circuitous route, if you will. I knew as I was finishing up my bachelor's degree at St. Cloud State and I think it was around the time I did the internship and I wasn't sure if I really wanted to pursue broadcasting or what, but I was interested in continuing on to graduate school. But the question is, in what area specifically, and what school specifically? I think I felt like to continue on in what I call the hardcore meteorology, going to a program that is really focused on continuing on with the dynamics and research-based, that wasn't something that I was particularly interested in. And I'll be honest, partially because it meant more differential equations and really hard... People will tell you if you want to go into meteorology, and it's very, very true that you have to be good at math and science.

And I was one of those kids growing up, and certainly, as I mentioned, science, math was something that I think was always a strong suit, but I didn't have a fondness for when we got into differential equations. And that was actually, I think, when I was going through the program at St. Cloud State is when they made, I think it was... Well, I know that AMS and the weather service work hand in hand in making sure that what qualifies you for the series 13-14 meteorologists in the federal government. They made some changes at the time when I was going through the program, and I know that they worked, at least did at the time, closely with AMS to make sure that this is something that will benefit you and will correspond regardless of what area you go into, even if it's not in the government.

So remember, they made differential equations a requirement, and it was this mad scramble. There were people in the program who wanted to do everything they could to be able to declare their major in time

before, so they didn't have to take that requirement. And it was actually sad to see people who were probably better forecasters than I would ever be, who were weeded out from the program, weren't able to graduate with a degree in meteorology because they couldn't make it past something like differential equations or they couldn't declare their major in time. I had no choice because when I started, and it's a very prescribed curriculum, that I wasn't able to actually declare meteorology as a major until I had to take differential equations. I was talking about graduate school and how I didn't want to go into what I call, pursue more hardcore meteorology. I didn't want to necessarily get a graduate degree specifically in meteorology where I'd have to take more-

Kelly Savoie:

Differential equations.

Sean Potter:

Differential equations, right.

Kelly Savoie:

I don't think that's anybody's favorite class.

Sean Potter:

No, no, it's not. Well, maybe some people, but they're the ones who end up getting the PhD's and maybe publishing all the papers. So, I wasn't really sure then what area I would pursue. And it was actually another elective course that I was able to take toward the end of my undergraduate career. It was on climate dynamics, and so, it was taught by a person, I think now is actually chair of the department. At the time, he was just an adjunct professor. They brought him up from one of the colleges in the Twin Cities to come teach this course. It was an evening course, and a night course once a week.

And it was really interesting because it was my first real insight into climatology and the earth's climate system. Obviously we talked about that in some of the meteorology courses, and you have to understand that, but looking at it from a different perspective, less focused on the synoptic or the dynamic aspects of the atmosphere and looking at it maybe more of a whole picture and looking at it in conjunction with other earth systems like water and the hydro system, the geologic system. And it really opened up my eyes to this other ancillary field of climate science and climatology.

And so, I started looking at different schools, and this was the days when the internet was still fairly new. So what did I do? I went to my school's library in the reference section, and there was something, I don't know if it's still publishing more, I think it was Peterson's Guide to Schools, and you would get all these volumes and you would look at whatever field you were interested in, you would find all the schools that offered certain degrees in it. AMS was very valuable as well, because I remember, even at that time, AMS published or made available directories or lists of schools that offered graduate degrees, and you could see what the specialties were. But I started looking through these different guides and I realized that I started to see a pattern of, there were obviously the schools that everybody thinks of in terms of, if you want to pursue any kind of degree in meteorology, the Purdue's, the Penn State's, the OUs, and Texas Tech, for example, just to name a few, Wisconsin.

But I started to see this pattern of other programs that focused more on climate and climate science. They were actually housed in departments of geography, and I'd never taken a geography course per se. And so I started looking into this and realizing that geography, that's more than just obviously just maps and learning state capitals. It's very broad. You have physical geography, you have human geography, we have GIS is a big, big component of that field. So I identified several schools around the country that have

programs in their departments of geography that at least had some faculty or some program that focused on climate and climate science. And I narrowed it down, made a list. I took the GRE, which by the way, I'd be remiss if I didn't just mention briefly the story, that when I take the GRE, which for those who don't know is the graduate record exam, which I'm not sure if it's, I think they're trying to maybe... Some schools are phasing that out.

It's basically like the SAT for getting into grad school, just in general, grad school, not med school, which would be like the MCATs or the LSAT for law school. But I had to take the GRE at the time and I was getting all excited, all pumped up, and I had this big study guide and learning all these vocabulary words and practicing the different areas that were going to be included on the exam. And it was, remember, right before the winter break, so it was in mid-December, I was supposed to go and take it. And lo and behold, what happens, we get a big snowstorm in central Minnesota.

Kelly Savoie:

Of course.

Sean Potter:

And this was the one time when I remember, at the time I was listening to the local radio station for all these closures and things, and I was like, I do not want to have to postpone this. I do not want to have to reschedule this. I was looking forward to just taking it, getting it over with, enjoying my holiday break. And sure enough, they ended up having to reschedule it. So then, I remember spending the holiday break instead of relaxing and everything, I had these little flashcards with the vocabulary words and things, and my study guide. Ended up taking it of course, and sent off my applications to, it was I think six schools around the country. I believe I got accepted to all, but one of them. But I ended up going to Indiana University in Bloomington, Indiana. Their department of Geography is, I think, still considered one of the best in the country.

And at the time, they really had a good, robust, they called it the Climate and Meteorology program. I think at times they called it that at times they called it the Atmospheric Sciences Program. But it was a sub-program, if you will, within the broader Department of Geography that had some wonderful faculty at the time that I was there who were focused on everything from air pollution to urban climatology, urban climate, urban meteorology. And I thought that was really interesting. So I applied, they must have liked what they saw because they not only accepted me to the program, they also offered me a full tuition remission and an associate instructorship, which is what Indiana IU calls their TAs, their teaching assistants. It's the TA, it's AI, Associate Instructor, but you're essentially working with the professor, helping them in their undergraduate courses. And then during the summer, you actually get to teach the course yourself.

So a couple of summers, I got to teach basically, an intro to weather and climate course, which was really cool. And I realized that all the stuff that maybe I'd forgotten from taking my intro meteorology course several years earlier, you really are forced to learn it and understand it when you have to teach it to others. But that was a great experience, and I started that, did that for a good couple of years. And then before I was finished, I guess the opportunity came about that I did really want to try my hand again at broadcasting. And so this is where I was talking about one thing building on another.

And I wanted to take a break. I essentially did take a break from my graduate studies and got a job as a broadcast meteorologist in Yuma, Arizona at the NBC affiliate there, KYMATV. And of course, as everybody knows who works in broadcasting, the way to get your foot in the door is a resume tape. Much easier I think, to do now with having cutting edge or professional quality, video editing technology and software available on your computer. At the time, you basically had to have access to a television

studio, either an actual TV station studio or a lot of people at the time would use the one at their school, at their university. I did have a tape from my days in that broadcast meteorology course I'd mentioned at St. Cloud State, but that was one that would be... I have it somewhere locked away in a vault. Maybe after I'm long gone, somebody can play it and have a good laugh.

But no, I knew I needed something a little more professional. So what did I do? This was about a year. This was a couple of years, actually, after I had done the internship in Kansas City with Gary Amble. And so, I don't remember, I kept in touch with him. I remember I'd go visit my aunt down there, I think at least once. Went to visit the station and chatted with him. But I called him up and again, just out of the blue and said, "Hey, I'm thinking of actually applying for some jobs in broadcasting and I need to make a resume tape. Could I come back and is that something that you could help me with?" And he was nice enough to say yes. And I went back, spent a weekend there at my aunt's house, went to the station. He set up the graphics, obviously had to have somebody in the control room to help and went through several takes and got one that was good enough.

Brought it back to Bloomington, found a place, I think it was up in Indianapolis that would make duplicate tapes. So basically, they would copy, I found the one, whatever, three, three and a half minute segment that was going to be my foot in the door, if you will. And had them make about a dozen or so of these tapes that were only five minute long VHS tapes that had that segment on there and then sent them off with my resume, to fairly small market stations because I knew that that's where you had to start out around the country. And I think again, early days of the internet, I was able to find some bulletin boards or websites or newsgroups or something that listed ads, classifieds for broadcasting.

And I think I remember I sent one, I think to somewhere in Ohio and maybe some other places, I don't recall all of them, but sent one to the station in Yuma, Arizona and got a call from the news director there at the time, and he said, "Saw your tape, read your resume, decided to ask me a few questions." Sight unseen, other than seeing the tape. Certainly sight unseen from my end because I didn't come in for an interview. I'd never been there before, not to that part of Arizona. And ultimately, offered me the job. And so I took this leap of faith and went down there and spent a couple of years working at the TV station.

Not knowing that during my time there I would actually learn one of the hard truths of broadcasting, is that sometimes when management changes, they can really change the look and feel of the news team. And that's something that happened, oh, probably about a year, a little over a year into my time there, which I loved. I was doing the weather. I was the first degreed meteorologist to do the weather in that market. The market, they call hyphenated markets. So it was covered, Yuma and the surrounding areas in Arizona, which is right on the border with California and then El Centro, which is about 50 miles to the west in California. So it's Yuma, El Centro market. Covered a really wide area, geographically, and even got our signal down in Mexico because we were just a few miles from the border. So it was interesting sometimes to get letters, fan mail in Spanish from viewers in Mexico.

Emma Collins:

That's fun.

Sean Potter:

And it was fun. Yeah, they would talk about something like... And unfortunately, I don't speak Spanish, but it was something like how they liked all of the, mentioned the different on-air talents, Señor Porter the el tempio, and it was a real eye-opening experience, just being in a different place, different culture, different climate. I mentioned growing up in central Minnesota, that the coldest I'd ever experienced it was -40. Well, the hottest officially in Yuma was 120, +120 in the shade.

Emma Collins:

Oh my gosh.

Sean Potter:

So that's my personal climate range, if you will, of extremes. And it was a great experience because especially knowing that I was hired because I had the degree in meteorology in a market that traditionally, I think up until that point, treated weather in the local newscast as, maybe it's a little extreme to say as an afterthought, but again, they typically would just have people who were looking to go on to become a reporter, an anchor, who knows maybe even sports or something. And we did have some of those doing some of the other shows. I worked primarily as one of the main on air talent team. So I did the Monday through Friday, it was five, six and 10 o'clock newscasts with our two main anchors and our sports anchor, and it was great. And I would go and do live shots and the community people knew me and I would actually try to educate them about the weather. I would do during sweeps week, I would do these, I want say a three-part series called Tools of the Weather Trade.

And we had a Doppler radar in Yuma. Yuma has a Doppler radar, it used to have a weather service. I think it was what they called a WSO, weather service office, one of the smaller weather service offices that many of which closed during the modernization during the 1990s. And so everything that that office did got subsumed into the larger forecast office in Phoenix. But of course, I got to know the people in Phoenix at the weather service, and I think they respected the fact that I was a meteorologist working on air down in a place like Yuma. And I had, I think it was the WCM, the Warning Coordination Meteorologist come down there and went out to the desert where the Doppler was and interviewed him about that for the segment.

Yuma has a big military presence, so they have a Marine Corps Air Station, MCAS Yuma, right in town. They of course, have a weather team. So I would get to know them and sometimes, when there was the rare severe weather, I would be coordinating with them. There was actually once while I was there, a funnel cloud spotted and it didn't touch on. It ended up being a cold air funnel. But I remember being on the phone with the weather folks at MCAS Yuma, the Marine Corps Air Station ended up sharing information and making sure I could pass that on to the viewers. The U.S. Army has a proving ground, Yuma proving ground about 30 miles north of town where they do all kinds of ordinance testing. You drive out there and you might be just driving to some other area up in that region, and you'll see these signs saying, "Don't."

Emma Collins:

Oh, yeah.

Sean Potter:

Federal property unexploded ordinances. Be careful, no trespassing everything. Well, again, they had a civilian meteorologist who, because you think about, if they're going to be testing ordinances, they need to know very, very specifically what the weather is going to be and especially winds. So they actually would launch weather balloons.

One of the things that I was proud of in terms of doing the weather there was the fact that we were, see, I think otherwise the closest weather balloon, radio sound upper air stations if you will, from the weather service where Phoenix or Tucson, which was several hours away, or San Diego, which is on the other side of a mountain range and on the coast. So whatever their upper air is showing, is not necessarily going to be useful to predicting local weather in the low desert in Yuma. But what they call the YPG, the Yuma Proving Ground, they would launch weather balloons actually several times a day,

specifically if they were going to be... They did it anyway at the standard 0Z, 12Z times, but then they would supplement that if they were going to be doing some special testing.

So I got to know, I actually went up there and as part of this series I did, we talked about weather balloons. I think the third part, by the way, was just on computer models, but I got to know the civilian meteorologist up there quite well, and he actually agreed to fax, yes, this is back in the days of faxing, would fax the upper air data to me at the station every day. And I wasn't necessarily, again, plotting Skew-T charts or anything, but I would have all the indices. And again, people who know you know, who I'm what talking about, know the lifted index or the K-index or the SWEAT index are these indices that use the information from these upper air measurements taken by the radio sounds that are attached to weather balloons. And they're used as guidance, if you will, rules of thumb to help predict severe weather.

And even though, people thought when I went down to work as an on-air weather caster in Yuma, they said, "Well, how soon are you going to get tired of saying it's hot and 100+ degrees?" Well, they don't realize that there actually is some variation in the climate there. And during the monsoon season, which I don't think I ever really had much knowledge of before that, that there is such a thing as a North American monsoon and that part of Arizona and northern Mexico, just to the south, are very susceptible to these changes in humidity that happened with golf surges. And by golf, I mean the Gulf of California that can, especially the summer months, really from, well June and July and August, that can really influence local weather in terms of producing monsoon type thunderstorms.

Locals just call them monsoons. Oh, we had a big monsoon yesterday. What they really mean is a monsoon type thunderstorm that can drop essentially sometimes, a year's worth of rain on average in a single shot. And I saw that happen in Yuma, Yuma average is around three inches of rain a year, making it a desert climate. But there was one big monsoon thunderstorm that happened actually while I was doing a live shot. And it was I think, at a local homecoming. And we got, I think about that much rain from this one thunderstorm, and it just was devastating because you'll get arroyos, which are sort of low-lying, dry stream beds, river beds that would start overflowing. Urban flooding can be a hazard, some landslides even, if you're maybe in the right areas for that. And so, weather really was impactful to that area. And I really took my job seriously, and it was actually while I was there that I pursued my AMS Seal of Approval.

But while I was pursuing that, and I did ultimately get it, there was a change in station management. So I was talking earlier about being at the whim of station management, and you hear sometimes, these horror stories of, well, you get a new manager, new general manager, new news director, and they want to clear house and hire all their people because this happened. And our new general manager, had been there previously, I think as the sales manager and locked horns with the news director who had hired me and many of the other newsroom team and probably wanted to get rid of everybody and hire their own people. But if they had done that, they would've had to pay all our contracts, remainder our contracts.

So what they did, I didn't realize it at the time, but what they did was very ingenious, if you will. They started moving people around into other positions that really is not what their strong suits were, at the time at least, or didn't seem like it. Certainly not they were hired for. So people who had been an anchor, maybe even in the morning we're now yanked off of that and doing something else, maybe even weather. I thought doing sports-

Kelly Savoie:

Oh my gosh, can you imagine?

Sean Potter:

Yeah, so you're maybe doing sports and now you're-

Kelly Savoie:

Now you're the weather person.

Sean Potter:

I thought, I'm the weather person.

Kelly Savoie:

And you know nothing.

Sean Potter:

Right. I'm the weather person. I have a degree in meteorology, I'm well-liked in the community. I was hired because I have a degree in meteorology. I'm the one person who is going to be safe from all of this. And then one day, lo and behold, the new general manager called me and the new news director who he hired, one of the first things he did was fire the news director who had hired me. Brought the new news director in to his office, sat me down, and started giving the speech about, "Well, I try to think of myself like a coach on a football team, and I put everybody where their talents are in the different positions, and I really think that your talent lies in reporting."

I almost fell off my chair because I thought, I don't do reporting. The only reporting I'd ever done were these little specialized packages that I had done for these sweeps weeks and that was certainly a far cry from what a general assignment reporter at the station would do. Sometimes covering hard news or breaking news or something like something else. But they basically said, "Starting next week, you're going to be..."

Kelly Savoie:

Oh my gosh. Did you stay or was that your...

Sean Potter:

Well, no, I actually stayed. And I remember though at the time, it seemed like the worst thing that could happen to me. And I think I thought that that was it. The whole world was collapsing. This is the end, I'm going to have to leave. But I ended up staying and I ended up rolling with the punches. And looking back, it turned out to actually I think, have benefited me because even though I can't say that every single thing I got to do, covering local city council meetings was really something I was excited about. But I got to do some really cool things and I got to build on my science background.

And I told them, I said, "Okay, if I'm going to do this, I'm going to try to incorporate as much science as possible." And they let me do, for example, something once a week, a little weekly series we called the Science Minute, and we got these packages and stories from the network feeds from NBC Network in New York. And also, even though we weren't technically a CNN affiliate, we would get things from CNN and we could use any of that in our own packages reporting. So I would find whatever the big science stories of the week and edit, and we had to do our own editing, and edit them in the edit bay, make this little one minute package, voice it over. And a lot of times it was space related and it was, I remember Chandra Telescope being launched, NASA, which fast-forward years later, when I ended up working as a public affairs specialist in NASA headquarters, actually got to work on some things related to that mission. I had no idea at the time.

Let's see, the 30th anniversary of the moon land, the Apollo 11 moon landing, I actually got to do a package, so a package like a full story, on that, using some of this network material that included interviews with, I think even Neil Armstrong was still around at the time. And then fast-forward to my time at NASA, just a few years ago, I was there for the 50th anniversary of Apollo 11 and was an integral part of that, planning and the celebration, the festivities, and-

Kelly Savoie:

Wow, did you even know that this one job was going to give you so much experience, this one broadcasting position?

Sean Potter:

So much experience. And I don't want to, again, sound trite and say I was making lemonade out of lemons, but I got to do some really cool things that I wouldn't have got to do otherwise. But I knew this wasn't really where my future was. And one of the things I always lamented was that I went down to Yuma leaving my graduate work in Indiana unfinished. I thought naively at the time that, oh, I can finish this up in absentia, essentially, remotely. And that doesn't work, especially when part of my master's research involved some field work. And I think my advisors back in Bloomington were starting to get a little concerned about my ability to come back.

And so long story short, after a few months of doing the reporting, and I knew other people at the station were doing this, I did approach management and asked if I could get out of my contract early. And I said it was because I wanted to go back and finish up my graduate degree. And they agreed, and I think it was at the end of 1999. I started there in early 1998. So I was there for just under two years. And I wrote to my graduate advisor in Indiana and told her that I was thinking of coming back to Bloomington to finish up my master's. And the first word in her response was, "Excellent."

And she was able, I think, to help get me some funding as assistantship, as an associate instructor for the upcoming spring semester. Went back there for the first part of 2000, taught, finished up my work, did my thesis, defended, passed. And then my next real job from there, actually, I got, because somebody I had gone to school with who was getting his PhD at the time that I was getting my master's, happened to get a job himself down in South Carolina at one of the regional climate centers.

This was the Southeast Regional Climate Center, which is actually now located up in North Carolina, I think at UNC. But at the time, it was actually housed in the Department of National Resources in Columbia, South Carolina. So I was looking for jobs as I was finishing up my master's from Indiana and thinking that maybe I wanted to go back into broadcasting. I did send a few tapes out and resumes, didn't get any bites, so to speak. Was looking into some other things in the private sector and even in academia. I actually had an offer to go work as a research assistant, kind of assistant to a professor at Scripps Institute of Oceanography in La Jolla.

Which is a place that I actually got to know some from when I lived in Yuma, because La Jolla is in the northern part of San Diego. And San Diego was only about three hours drive from Yuma. So when it was like 110 degrees in the summer and it was a weekend and I wanted to get out of town, it was like, hmm, do I... And Yuma was about equidistant from Phoenix and San Diego, so it was like, do I want to go to Phoenix? Drive three hours and go there and just more of the same with the heat and humidity, or do I go to San Diego? So that was a no-brainer. So I got to know-

Kelly Savoie:

Where the weather is absolutely perfect.

Sean Potter:

Exactly. So I got to know San Diego quite well, and it was hard to not take the job in La Jolla, but in the end, this job in South Carolina I knew would probably be better in terms of my career development. And it was, because again, everything building on everything else before it, I had no idea that when I was there and I was hired essentially as a, they called it a surface climatologist. So the regional climate centers, one of the things they do in cooperation with the... At the time was called the National Climatic Data Center in Asheville. Now it's the National Centers for Environmental Information. And CEI is still in Asheville, is, they were part of this sort of three tiered level of climate data services. There's also, I think many, if not, most states have a state climatologist as well.

So if you need past weather data or data that's climate specific, related to your local area or your state or your region, you would go either to State Climatology Office. They're the experts for the state. You've got the national center, part of NOAA on the national level, and then you have in between, these six regional climate centers. And the one where I worked, the Southeast Regional Climate Center, I was in charge of fielding these requests, and a lot of them came from attorneys who wanted past weather data for litigation. And it was really interesting to see that part of the field that I really hadn't had much exposure to.

I also did educational outreach for them. So I ran their educational outreach program. And because of that, I had the opportunity, I built them a new website. I couldn't do that now because at the time, it was using HTML technology and maybe CSS and some things that I wouldn't, unless it was being done to Squarespace or something, I'd be able to do it now. But I did basically rebuild their website, including an educational component of it and built these little games and things that would be both entertaining and educating. So that led to the discovery of a word edutainment. And I thought, this is really interesting.

And my director at the time, the person I'd knew from grad school said, "Maybe you should present a paper at the AMS annual meeting." And I'd never been to an AMS annual meeting before. So I decided to submit an abstract to the education symposium, and I ended up doing a poster presentation, I think it was called, maybe it was Weather Edutainment on the Web, I think it was what it was called. And it was talking about all the things we were doing at the SERCC, the South East Regional Climate Center at the time, on weather education via our new website.

And it was the, I don't remember exactly which number meeting it was, but it was in 2002, I believe. And that was... Kelly, I don't know if you know, it was in Orlando, so I think it was 2002 in Orlando, my first AMS annual meeting. Can't say I've been to every single one since, but virtually or in person, I've tried to make a lot of them. And that was, again, a real eye-opening experience that informed my future career path in many ways. Both my freelance career, and that's where it really sort of took off because of some of the people I met there, but also, my day job career because I ended up meeting my future boss, Dave Jones, who I know many in the field know. He is the founder and CEO of Storm Center Communications. And he was just getting that company off the ground at the time.

And because I was doing this poster presentation, somebody who worked with him at the time had seen it, was interested, thought this is the kind of thing that I know Dave is really interested in and set up a meeting. And it took a while. It took several months, but eventually, was able to get a job that moved me up to the D.C. Maryland area. But one other thing I want to mention before leaving the time in South Carolina, and this is also relevant to career development, I think it was the local chapter, and I wasn't really involved, but some of my colleagues were, and I think they had a local chapter meeting in Columbia, and they had a guest speaker.

Kelly Savoie:

Was it the Palmetto Chapter?

Sean Potter:

It was probably the Palmetto Chapter, yeah. And they probably had people from... It was probably a large geographic area, so it wasn't just... Columbia's right in pretty much the center of South Carolina, but probably, you would get maybe people in say, Georgia, along the Augusta, is that right? Near the border of South Carolina-Georgia border. And he had an individual who at the time, he worked at the Santa River National Laboratory in Aiken, South Carolina, which is right on the border. And Kelly probably at least, maybe know who I'm talking about. This was Matt Parker.

Kelly Savoie:

Oh, yes. Great guy.

Sean Potter:

Great guy who really took me under his wing, if you will. And he started talking to me about this program, the CCM program, Certified Consulting Meteorologist program, and that I should really think about applying for it. And I thought to myself, I knew about that because I knew back in my days in Yuma of applying for the then Seal of Approval, which is now the CBM, which I was later able to basically, I don't want to say upgrade to, but I still had to take the exam and everything. But I knew about that CCM program as one of the certifications that the society offered at the time and looking at it and thinking, well, that's not for me. This is for people with PhDs and real serious meteorologists really into research and whatnot.

And Matt was telling me, "No, no, no, no. That's the wrong way to think about it. This is anybody, and especially if you're interested in doing service." I was getting interested in this idea of forensic meteorology, which essentially is, I was on the other side in giving and providing past weather data to attorneys and actually did end up have done some of that in a freelance basis later on. But Matt, he was relentless, really, tenacious at the least. And every time I saw him, he would come to visit and I would see him in a meeting or something and he would just keep saying, "You thought about applying for your CCM? You should do it." I said, "Also, I'm really young." I was I think 28, 29 at the time. And I thought, you have to have five years of experience and you have to do all these things, research paper.

And he say, "Oh no, you did research. You did a..." And I did actually have a paper that I co-authored with my graduate advisor that got published in the, I think it was the International Journal of Climatology that he said that would work, as long as 50% of it is your own work or talk to the current chair of the CCM board, who at the time was Joe Schaefer, who was at the time, the director of the Storm Prediction Center. Wonderful guy. And so, I started thinking about this and I started reaching out to Joe and saying, "I'm thinking about applying, but I'm not sure about this aspect. I'm not sure about that." And basically, he showed me that there was a path for me to do this, and I did apply, and lo and behold, I got the certification.

Kelly Savoie:

You did. Congrats.

Sean Potter:

Yeah, I got that. I think I got the letter from you, Kelly.

Kelly Savoie:

You did.

Sean Potter:

Right after my... Surely it was right after my birthday, and I remember it was the 29th birthday. So I remember talking to somebody else at one point who also was fairly young when he got in and thinking, we must be two of the youngest people to ever get the CCM certification. But if it hadn't been for Matt, I would probably not have pursued that. Certainly not at that time. And that's something that really, I think, helped open a lot of doors for me professionally moving forward. And Matt became a great colleague and mentor, and a good friend. He also then got me into join, what at the time was called NCIM, the National Council of Industrial Meteorologists. It's now ACM, the Association of Consulting Meteorologists.

And actually, I joined that shortly after getting my CCM and then they wanted me to run to be president, which I thought, no way. These are people who are old enough, some of them old enough to be like my father or maybe even older than that, and no, others were serious. And I became president, spent a year as president and then past president on the board of NCIM. And that really led to other things.

I need to go back to say that yes, unfortunately for those, many of the listeners know, and some may not, that we lost Matt suddenly back in 2017, just, I believe it was right after he became President-Elect, if I'm not mistaken, of AMS. And so it was very sad. It makes it all the more, I think, poignant, the advice and the guidance that he provided to me in my career path and getting the CCM, even that process exposed me to other prominent people in the field who are still friends and colleagues, and then getting to work and be part of this organization NCIM now, ACM is what, in a way, it led to me being able to spend 15 years in my day job working in the federal government first for the National Weather Service. Because at the time, public-private partnership was very important both to, let's just say NCIM because that's what the organization was called at the time, that I was serving as president of and the Weather Service. They were trying to find ways to not compete with the private sector, but to coexist.

And so we would have meetings with the director of the Weather Service, with other high-level officials at the Weather Service and trying to find ways to really work together. And back in, I think it was again, at the AMS annual meeting in 2007, I think this was in San Antonio.

Kelly Savoie:

During the ice storm.

Sean Potter:

During the ice storm, yes. Yes, that's right. If you're going to have an AMS meeting in January, of course, you're going to have it somewhere where there's going to be some exciting weather. I think it was La Nina Flooding, last time it was in San Diego or no, in Long Beach. Long Beach. Ice Storm in San Antonio and—

Kelly Savoie:

Yeah, San Antonio. They don't want us ever to come back again.

Sean Potter:

No.

Kelly Savoie:

Because I think that was the second or third time that they had bad weather when AMS was there.

Sean Potter:

Let's just keep having them in Boston like we did for the centennial in 2020. If you're going to do that, then you might as well have them in Minneapolis or St. Paul.

Kelly Savoie:

Well, that one, the temperature was like 70. It was insane. The Boston one, so.

Sean Potter:

Yeah, I remember always joke, oh, the meteorologists are in town, we're having crazy weather and... No, but no, I was there. It was the year I was serving as president of this organization and the Weather Service had just hired a new... He wasn't new to the organization, but he was new as their communications director and he was very interested in getting to know more about our organization. So he reached out through to me and maybe through some mutual contacts I was able to connect with him. And we just had a quick side meeting as he was leaving, I remember him walking out of a meeting room at AMS with the then director of the Weather Service and other bigwigs. And it was actually, I didn't know who he was. I was with Jason Samenow, who I know you've had on as a guest as well. Good friend of mine, I knew when he was starting Capital Weather Gang along before it was part of the post.

And he looked over, he says, "That's..." Curtis Carey is the name of the guy who ended up hiring me into the federal government. Then the communications director of the Weather Service. "That's Curtis Carey there." So I went over and introduced him. We had this little side discussion telling him a little bit about my background and he said, "Well, I've got these jobs that I'm looking to fill in my office and there's one I think you'd be really ideal for and would you consider applying?" And I think I thought about applying in the federal government before, but again, like with the CCM, it was a daunting task, all these seeming hoops to jump through. And I thought, I don't know if I'm going to be able to do this.

But I did. And ended up getting hired. Ultimately, it took about 10 months as typical with... At least at that time, the federal hiring process, but ended up getting hired as a communication specialist. So, initially working as a speechwriter for the then director and deputy director of the Weather Service. But it started this 15 year long journey of working in communications for the federal government about evenly divided and maybe a little more eight years or so with the weather service and communications then the last seven years at NASA headquarters in public affairs.

Kelly Savoie:

And so how did you switch from the National Weather Service to NASA? How did that come about?

Sean Potter:

Well, it came about at a time where I think I was ready for a little bit of a change and I was looking at other jobs and USA jobs, the federal jobs hiring website and just saw one that came up, NASA headquarters. It was like a media fair specialist and who doesn't have the dream, especially people working anywhere in the science field, science communications to maybe work at NASA at some point?

Kelly Savoie:

Yeah. That must be cool to work at NASA. Just say you work at NASA.

Sean Potter:

And I have to say, at the time, this was the easiest position in terms of applying. I uploaded my resume, I answered a few questions about eligibility, hit send. Maybe it was a little more than that, but as I recall, hit send and boom, it goes into black box and then you just wait, wait, wait and see if you made... They call it making the cert, the certificate of eligible applicants that are forwarded on from HR to the hiring manager. And I did. And then I got a call from somebody, the hiring manager at NASA headquarters.

And initially, it was just a phone conversation, "Hey, you want to talk about this position you applied for?" Feeling things out. And eventually, they brought me in for an in-person interview. And long story short, then shortly after that, I was offered the position. And so again, it just, how could you say no to that? And I think even, maybe it was in the phone interview, it was maybe a question about what interests you in this? Why do you want to work for it? And I decided to take the risk of sounding a little cocky or flippant, I basically said, "Are you kidding? It's NASA who wouldn't want to work there?"

Emma Collins:

I want to work there.

Sean Potter:

Yeah, I'd like to think that maybe that... I don't know what-

Kelly Savoie:

But your professional journey and your work experience, you had such great range of experiences and communication skills and meteorology and broadcasting and you were a great candidate.

Sean Potter:

Thank you. Yeah, I think so. And I remember in the interview somebody looking at my background in meteorology and thinking, you worked for the weather service in communications. That seems like, for somebody who's a meteorologist, that that would be a dream job. And I said, "It was, but in many ways..." I said, "You can have other dreams more than one dream, and working at NASA was a fulfillment of a dream, and I got to do some amazing things, work with some amazing people, and both of those two agencies have really left indelible marks on me professionally and personally."

Emma Collins:

So how was your transition affected? How did it affect your ability to focus on those things that matter to you in your work?

Sean Potter:

Well, so transitioning as I did about two years ago, from leaving the federal government into essentially retiring from the federal government and devoting myself full-time professionally at least to things like weather history and writing was, it actually opened up a lot of flexibility, is probably the most important thing. I mentioned going back to that AMS meeting in Orlando in 2002, I believe, really was the starting point for my freelance science writing career. And a lot of that was because of some people I met. First and foremost, Bob Henson, who's become a near and dear friend of mine over the years, and I know is again, well known to folks in AMS. Both the people who work for AMS and other members, and he's written several books and including at least, a couple that have been published by AMS.

He really guided me, had questions about wanting to, how can I start doing some writing? I did a few things that were just really local to the job I had in South Carolina, but I wanted a broader audience.

Another person I met was a guy named Bryan Yeaton, who at the time was host of a, unfortunately, no longer, now, defunct radio program that was produced by the Mount Washington Observatory in New Hampshire called The Weather Notebook. And they were broadcast on public radio stations across the country and online, and they relied heavily on freelancers. So, I pitched some ideas to them, wrote some scripts, and then that gave me a little bit of a portfolio then to... One thing I wanted to do, I knew that Bob had done was write for Weatherwise Magazine, which I'd been a fan of for years. It's been around since 1948, still being published today. So I pitched.

The first thing I pitched to them was back in 2003, and I knew that the 100th anniversary of the Wright Brothers first flight was coming up that December. And I pitched an idea for a feature story about how weather and climate affected the Wright Brothers in everything from the choice of Kitty Hawk as a location for their testing, to what the actual weather was like during their tests and on the day of that famous first flight.

And so I wrote that. They were interested, wrote it, published it, and then I had a meeting with the editor at the time and was telling her that... Doing this, I remember one of the things I used to illustrate that article was the Daily Weather map. And so from that date of the first flight, I said, "It occurs to me that there are a lot of events throughout history where you could talk about it from either a historical event where weather played a role, or maybe it was a historical weather event that maybe you could look at from maybe a more human interest standpoint, not necessarily focusing strictly on the meteorology."

And I had this idea of writing a regular column on different events that the common thread would be that on most of these, at least, if it was available, showing the daily weather map from that date. So pick a famous event in history and some things that rise to the top of the list. You think of like Hindenburg Disaster, the sinking of Titanic. But it might also be something like the Times Square New Year's Eve Ball Drop and what the weather's been like and how that's affected that over the years. The Macy's Thanksgiving Day parade in New York, very, very weather dependent. And there's been some cases where some things have happened because of high winds that have resulted in injuries and so forth.

So I pitched this idea for this regular column and she said, "I love it. Would you do a sample for me?" And I did one, it was actually on the Spatial Challenger disaster of 1986 because it was the frigid cold that caused the O-ring and the rocket boosters to seal and to leak, to freeze and leak. And that ended up being the first one that was published in, it's a column that's called Retrospect. And so, I've been doing it ever since. And that first one, that was in 2004, so it's now been just over 20 years. It's in every issue. And that's really helped, I think, solidify my work, if you will, as a weather historian and getting back-

Kelly Savoie:

Speaking of that.

Sean Potter:

Speaking of, and I was going to say that it's the thing I did when I had these day jobs, but I have much more freedom and flexibility now to do a lot more planning, to spend more time writing these things rather than, oh my gosh, I've got to stay up all night finishing a retrospect because it's due tomorrow. But yes, speaking of which...

Kelly Savoie:

You are the author of a book, it's called Two Near for Dreams: The Story of Cleveland Abbe, America's First Weather Forecaster. How did that come about? And for our listeners who do not know who Cleveland Abbe is, please give us a little look into his life.

Yes. Cleveland Abbe was initially an astronomer who lived in the mid to late 19th century and died in 1916, born in 1838. And he was initially trained as an astronomer and served briefly as director of the Cincinnati Observatory in 1868 to 1869. And while he was there, he started, really was the first public system for creating and issuing weather forecasts. He called them probabilities at the time, but weather forecasts using a network of observers using scientific techniques and scientific observations that were uniform both in how they were taken, but also, more importantly, when they were taken. The simultaneous observations taken at the same time in this network that was regional at the time. It wasn't national, but it was regional, and it really relied on, at that time, was a fairly recent invention, the Telegraph. Was invented shortly after he was born, but it was still in relative infancy at the time.

And he, among others, saw the possibility to use the telegraph to quickly transmit weather observations taken at various locations at the same time. So they would show the state of the atmosphere, these different locations, to a central location, in this case Cincinnati, where he could analyze them, plot them on maps, and then with the help of Western Union Telegraph Company, send these forecasts out and also, publish them in the local newspaper and post them in the local telegraph office for people to see.

It just so happened that this was the time when, let's say, different ideas and forces were coalescing to form the first National Weather Service, the first Federal National Weather Service, which was part of the U.S. Army Signal Service at the time, and came into being with a signing of a joint resolution of Congress in February 1870. And the first chief signal officer, which is, essentially was the head of the Weather Service at the time, General Albert Myer, was aware of Abbe's work in Cincinnati and corresponded with him.

And Abbe offered the use of his techniques and his publications and his maps and his ciphers for coding, weather observations to Meyer and his burgeoning weather service. And a few months later, Myer actually offered him a job, and Abbe was hired as one of the first civilian employees of what is now the National Weather Service in early 1871. And spent almost the next about 45 years working there right up until his death, shortly before his death in 1916, he had to take some medical leave. But he was there for essentially almost half a century.

And I realized that this was a story of this individual, that was a very complex and multifaceted individual that hadn't really fully been told up until that point. There was only one book-length biography, if you will, about Abbe, that was published in 1955 that was written by one of his sons, Truman Abbe. And it was published by a Vanity press, which means that... And I've actually seen some of the correspondence of Truman when he was trying to publish this book. He was approaching different places like the Smithsonian Institution. I can't remember if he might've even reached out to the AMS, which of course, I don't think was publishing books at the time, but he was having a hard time finding a publisher.

So he went to this route of Vanity publishing, which is like self-publishing other than you actually pay a publisher to get your book published, though it's a limited quantity. Put it out there, it's still very valuable. It was a very valuable tool to me in writing a biography on Abbe. But it was far from being objective, I thought. So I thought the time was right for an objective complete biography of Cleveland Abbe.

And I decided to pitch the idea to AMS, which at the time, had a robust book publishing program. And it was actually, again, thanks to my dear friend Bob Henson. He helped guide me in that direction. And so, I ended up putting together a proposal, sent it off, and a few months later, heard back that AMS was interested in publishing this book. And it was at the annual meeting in 2018, sorry, in Austin, where I signed the contract. And my goal was to have it ready for the centennial meeting in 2020, in Boston, because I knew that was going to be a big meeting, a lot of history going to be discussed there, and it seemed like the perfect opportunity.

So I really had to work very diligently at a time when I had a full-time job, at the time when I got married, at the time when our son was born, at the time when my dad had passed away. All these things happening at the time when I'm writing this manuscript and trying to meet this self-imposed deadline, which ultimately I did. And we got the manuscript submitted, got it edited, laid out and published. And it was actually, somebody had to go and basically hand-deliver boxes of the book from the printer to the exhibit hall in Boston. Just—

Kelly Savoie:

You just made it.

Sean Potter:

Just made it, yes. Just before the opening of the exhibit hall for that centennial meeting. And I couldn't have been happier because then it was like the debut. And so that's how that came along.

Kelly Savoie:

That's great. Thank you so much for that contribution to weather history. It's awesome.

Sean Potter:

You personally got it, but thank AMS for agreeing to publish it.

Emma Collins:

We're very happy to. We're also so grateful for everything you've told us today about your career. However, before you go, we always like to ask our guests one last fun question at the end of the show. So what is your all time favorite movie?

Sean Potter:

My all time favorite movie, and this is the standard response that I've been giving for years and years now, is a movie that came out in 1991 that many people actually have never heard of, but it's by a famous German director named Wim Wenders, and it's called Until the End of the World. And he is probably better known for some of his other films, Wings of Desire and Paris, Texas. But until the End of the World is an epic road movie that William Hurt and the great Max von Sydow, Jeanne Moreau, famous French actress, among others, Solveig Dommartin, was a French actress who unfortunately has passed away. She was the lead in it.

It's hard to describe, it's hard to classify, and I think that's why it didn't really get a lot of attention, especially in this country. It was also very long. It's original US release was 159 minutes, but vendors had always envisioned it as this much longer version. And it recently, for those listeners who are really into film and know about the Criterion Collection, the Criterion Collection recently came out with it in its director's cut version is a 287-minute-long version. And so, if you're really interested, it's shot and taking place in several continents, Australian Outback, America, Europe, Asia, Japan, and it's just an incredible journey cinematically, and it's really hard to put into words.

The other thing that I love about it is the soundtrack. It is an epic soundtrack with musicians like U2, Talking Heads, Lou Reed, R.E.M., Depeche Mode-

Kelly Savoie:

Oh, wow.

Sean Potter:

Elvis Costello.

Kelly Savoie:

That alone is going to make me want to see it.

Sean Potter:

Exactly. And I actually got to know the soundtrack. I think, before I saw the film. I was a freshman in college and they were showing it as part of a film series. I'd already had, I think, a CD of the soundtrack and then got to see the film, and it was really a transformative experience. I still consider it my favorite film.

Kelly Savoie:

Is it in English or is it subtitled?

Sean Potter:

It is in... Yes. No, it's actually, even though some of his films are in German, this one is primarily in English. So if you can get the version that is released in this country, it's mostly in English. There are some parts of it that are in German, French, even other languages.

Those would be subtitled. Until this version came out in the Criterion Collection, the only way... I did have a German DVD version that was the full director's cut, but it was on three discs it wasn't Blu-ray or 4K, which the newer version is, and even though the audio was mostly in English, there were some parts where they would be speaking in a foreign language and there were no English subtitles, and I needed a special DVD player to play it. That's how much I love this movie. That I had was going to all these lengths just to be able to see it, and now, I can see it at its full glory as the director intended.

Kelly Savoie:

Yeah. And these days, 159 minutes isn't that long.

Sean Potter:

Isn't that long, but 287 minute director's cut, still.

Kelly Savoie:

No, I'm not going to tackle that one.

Sean Potter:

Even some of my film friends will roll their eyes when I mention it because they're like, "No, no, that's too much."

Kelly Savoie:

Thanks so much for joining us, Sean, and sharing your work experiences with us.

Sean Potter:

Well, thank you so much. It's been a real pleasure. I really appreciate you having me on.

Emma Collins:

Well, that's our show for today. Please join us next time. Rain or shine.

Kelly Savoie:

Clear Skies Ahead: Conversations about Careers in Meteorology and Beyond is a podcast by the American Meteorological Society. Our show is edited by Johnny Le. Technical direction is provided by Peter Killelea. Our theme music is composed and performed by Steve Savoie, and the show is hosted by Emma Collins and Kelly Savoie. You can learn more about the show online at www.ametsoc.org/clearskies. And you can contact us at skypodcast@ametsoc.org if you have any feedback or would like to become a future guest.