Sidedoor Season 3, Episode 11: Amelia Earhart’s Revolutionary Flight Club

[INTRO MUSIC]

Haleema Shah: This is Sidedoor. A podcast from the Smithsonian with support from PRX. I’m Haleema Shah.

HS: Amelia Earhart is a name that’s familiar to many people. Sadly, she’s probably best remembered today for her disappearance over the Pacific Ocean during her daring attempt to be the first woman to fly around the world. But what’s lost in the enigma of her death is what a marvelous life she lead.

HS: Earhart was a true pioneer. She set many records for women in flight — including being the first woman to fly across the Atlantic. At a time when women had just won the right to vote, Earhart had a bold, visible career out in the world — and above it. But she wasn’t alone. Earhart was part of a group called The Ninety-Nines. An organization dedicated to the advancement of women pilots.

[MUSIC]

HS: If you’ve heard the podcast, ‘Airspace,’ from our friends over at the Smithsonian’s National Air and Space Museum, you’ll know it’s out of this world. You may even recognize Emily Martin’s voice. She’s one of their three hosts, and she joins us here to tell us about Earhart’s fellow pilots, The Ninety-Nines.

HS (on tape): Hey Emily.

Emily Martin: Hi. How’s it going?

HS (on tape): It’s going well! Well, first of all, who were The Ninety-Nines?

EM: The Ninety-Nines was a group of 99 women, which is how the name came about, who came together in the late 20s the early 30s, to form this organization to help support one another as female pilots. This was a time when women had just gotten the right to vote, many women weren’t driving vehicles let alone airplanes.

EM: And so, there wasn’t a lot of camaraderie that came along with it because everybody was spread out across the country, across the world. So, having this, sort of, formalized organization to be in a group of people who took each other seriously as pilots [and] as mechanics. Because in this time in history, planes were relatively unreliable, the wings were not made out of metal they were made out of canvas, [they] didn’t have GPS, certainly no air traffic control.
EM: So, they really needed this group of people to, kind of, come together and be really serious about being aviators. I mean, this is a life and death hobby and they really needed a place to, kind of, kind of your safe space.

HS: So today, we’re featuring an episode of Airspace that you reported about The Ninety Nines. And that story revolves around the First National Women’s Air Derby.

EM: Right.

HS: So, tell us about that race.

EM: An Air Derby is essentially a race. And people, typically up until this point, men, they would plan out this route where you would fly from city to city, fuel up, sleep, fly from that city to the next city, and so there was kind of a Point A to Point B every single day. For this particular air derby, being the first women’s national air derby, the organizers really wanted the women to fly lighter planes because it was considered more appropriate. And the women were really not OK with that. Partly because they just didn't want to be taken down in that way, because most of them were such accomplished pilots, most of them were flying the bigger, heavier planes to begin with. But also the organizers wanted them to fly with their own mechanics.

EM: These planes were so unreliable at the time that most pilots had to be mechanics as well as accomplished pilots. And the women’s concern was that if they flew with a mechanic, which in this case was mostly men, they weren't going to get the credit for being the accomplished pilots. Because the idea was, “OK, well anybody can maybe fly a plane but nobody can do all this additional work.” They wanted to make sure they were getting 100 percent of the credit.

HS: So, how long was this race? First of all, I love that it’s called a derby it feels very 1920s, 1930s.

EM: It was a nine-day race. They started in California and they ended in Ohio. What was particularly interesting, though, is that because it was so — dare I say novel that women were doing this race — every time the women landed in there their next destination, they wanted to take care of their planes, fuel them, repair them, and get ready for the next day. But what they really needed to do was spend the rest of the evening being hosted by whatever city they’ve just landed in. So, they needed to shower, dress appropriately, and pretty much do everything backwards and in high heels. So, most of them were doing these nine days on very little sleep because they had to spend the whole night pretending to be these female pilots instead of being treated as regular pilots who needed to go take care of their airplane and make sure that they were ready for the next day.

HS: All right. So let’s go to the first national women’s Air Derby in this excerpt from the air space podcast.

[BREAK]
Heather Taylor: We were in, sort of, “yellow journalism” at the time. So, often the women were referred to as “petticoat pilots,” as “flying flappers,” as “Lady Bird” pilots.

Emily Martin: That's Heather Taylor. She's the producer of the documentary “Breaking Through The Clouds: The First Women's National Air Derby.”

HT: The first Women's National Air Derby was a nine-day air race that began in Santa Monica, California on August 18, 1929 and ended in Cleveland, Ohio on August 26. There were 20 women initially entered into the Derby on race day and 14 ended up in Cleveland by the end of the race nine days later.

HT: Aviation was at the precipice. This was sort of the apex of all that was happening between technology, between some of women’s rights, between the manufacturing of airplanes, women earned the right to vote in 1920 and that was building. There was a bit of the Jazz Age and the freedom and a bit of excitement really building at this time. And I think the women sort of got caught up and captured that for the country.

[NEWS CLIP: What a wonderful woman. And isn’t she like Lindbergh? And there's her little plane with which she's broken all records, and crossed the Atlantic in thirteen and a half hours.]

EM (on tape): And initially didn't the organizers want the women exclusively to fly in, sort of, smaller, lighter planes because it was more “appropriate?”

HT: Right. Initially some of the rules that the men suggested that the women fly only in light class planes, which meant smaller engines and smaller planes. They felt that was more of a safety issue for the women. And, of course, the women said, “no we can fly whatever you throw at us.”

EM (on tape): Can you describe how this takeoff works and what it was like on that first day of the Derby?

HT: the first day of the derby, opening day, was a madhouse.

[MUSIC]

HT: It was over 30,000 people to Santa Monica Airport. People were sitting on the roofs of their barns going up to the airport. There was a long line to get into the race. It was just crazy and people would bring a picnic basket and little boys were flying paper airplanes and all kinds of festivities. You can almost smell the popcorn, and the peanuts as you… and hear the whirring of the propellers as you’re there.

[CLIP: All right folks. All right.]
They were all officially introduced…

[CLIP: ...want to introduce some of the greatest flyers in the history of aviation. The women flyers who are going to be contestants and the Great National Women's Air Derby…]

So, the first woman to take off would be Phoebe Omlie.

EM (on tape): Can you kind of give us a picture of Phoebe as a person and her accomplishments?

HT: Yeah. Phoebe Omlie was… is so under recognized and one of the most astonishing pilots. But in order to make money to buy an airplane and do all that you had to do, she did a lot of wing walking. So, she walked on the wings of the airplane. She hung underneath with just her biting a leather strap underneath the airplane…

EM (on tape): Oh geez.

HT: ...and just hanging underneath. I mean she was insane. She did parachute jumping. There in the Derby she was walking with a cane from previous accident.


HT: So, Phoebe Omlie earned… was the first female pilot to earn a A&P, which is basically a mechanics license. In 1927 is when she earned that.

[CLIP: Woman pilot: Well, Marvel I'm certainly gonna try to win this race, but if I don't I hope you do. Marvel Crosson: Well thanks, and may your landings all be slow and low!]

EM (on tape): If you're gonna talk about big personalities I think…

HT: Poncho.

EM (on tape): Poncho Barnes, right? Biggest personality of the group.

HT: Yeah. Poncho is a walking contradiction. She was raised in a very wealthy Pasadena, California in a very wealthy Victorian home. Her mother wanted her to go to finishing school and be a proper young lady and Poncho from the moment she was out of the womb was riding…

EM (on tape): (laughs)

HT: ...riding horses… standing up on the horse's back and riding them, you know? She was not one to be contained. And there was actually a prearranged marriage her parents made for to a Episcopal preacher and that didn't go over well. In fact, later, when Pancho had sort of come
into herself and established who she was: she was known for her swearing, and her short hair, and her smoking cigars, and being as outlandish... she was as outlandish as she could be. But she had a heart of gold and was always helping people. But at one point when her husband, the Episcopal preacher, who was administering to some of his parishioners in ways that were not maybe Christian.

EM (on tape): Yes, that is a euphemism. It is the euphemism you think it is.

HT: Yeah. She would wait until the Sunday services and buzz the church.

EM (on tape): I love that part. It’s probably one of my favorite stories about her. What are some the expectations of these female pilots?

HT: Right. So, in some ways the women in the derby were looked at as a novelty. One of the big things in the air race that was always commented on in the papers or in the radio was that these women were wearing pants. What they wore and how they looked was reported on way more than how they flew.

EM (on tape): Yeah, I mean, that's nothing... nothing's changed right? I mean, #askhermore.

HT: Right.

EM (on tape): I mean, that’s a big issue still these days...

HT: True.

EM (on tape): ...and the women weren't really just facing the dangers of the elements, the dangers of early aviation, and the challenges that came along with simply having early airplanes. Right? But, there was this issue of sabotage. It was a really big player in this race.

[MUSIC]

HT: Sabotage was a big issue in this race. And there's a lot of speculation. The second day of the air race there were four accidents and one of them resulted in the death of the... of the pilot. On that same day Bobbi Trout crashed an in about the same area near Calexico. They said she ran out of gas, but she was an expert in gas maintenance, and she fueled up in San Bernardino. Thea Rasche had also landed and had dirt in her gas tank you know engines weren't super reliable in 1929. So, you can give a reason for every one of these accidents, but when you put them all together — and again we didn't have NTSB at that time.

[MUSIC]

EM (on tape): So Louise Thaden won the race and a few months later The Ninety-Nines held their first meeting. How did this race precipitate the formation of The Ninety-Nines?
There’s a legend that the women gathered on the second day after they arrived under the bleachers and said that, “we need to form an organization. We've had such a good time and this has been such a success that we need to keep supporting each other as women pilots.” They had their personality, their guts, and each other.

[CLIP:
Woman Pilot: There’s one thing that stands out in this race and that is that all the girls are good sports. It's been a pleasure to be in it to meet the other girls.
Male Reporter: Now look over this way and say “hi.” A little smile.

There are definitely… each of the women has, sort of, a different variation of what happened and how it started. But the genesis was most certainly the first Women's National Air Derby and almost all of these women were charter members of the organization.

[MUSIC]

Haleema Shah (on tape): These women were inspiring. I mean, they were doing mechanical work on airplanes, flying, and wearing pants all things that were, at the time, really radical. What do you think motivated them to do something like this?

Emily Martin: When you look at a lot of the different activities that these women were doing to, sort of, support their flying habit — they were unbelievable daredevils. But what motivated them, I think, is the same sort of stories that you hear when you talk to a modern-day pilot or even an astronaut. When you talk to people about, “what, sort of, drove you to do this thing?” And for most everybody it was either their first airplane ride, or their first experience watching an airplane go overhead, and it’s a big reason why The Ninety-Nines today still do these discovery flights.

HS: Coming up, Emily meets a modern day Ninety-Nine and they take off in a very tiny airplane.

[BREAK]

Haleema Shah: We're back. I'm here with Emily Martin, one of the hosts of Airspace. The gravity-defying podcast from our friends at the National Air and Space Museum. And we're talking women who fly.

HS (on tape): Even though flying is common today, just six percent of commercial airline pilots are women. Six percent. Emily, how is it possible that number is still so low a full century after Amelia Earhart and The Ninety-Nines started their work?

Emily Martin: This six percent number — I remember hearing that number when we were going through the research for this episode, and I was… I was… I was shocked. But I'd never thought about getting a pilot's license before.
HS (on tape): Mmhm.

EM: Not because I thought of it as something that men did and women didn't. It just had never occurred to me before.

HS (on tape): So, The Ninety-Nines are still out there right now and they're trying to get young girls excited about flying. What does their work focus on now?

EM: The Ninety-Nines or maybe most well-known for doing what they call discovery flights. So, they'll take up a young woman and a parent in these planes and then go on a little 35, 45-minute flight. You get this very cool opportunity to really be strongly connected with that flight. The advantage of being in a really tiny plane is it's a much stronger feeling of flying than what you get in a commercial airplane, right? In a commercial airplane — what, one in three people get a window seat? But that's about it. Right? So, you get to see the cockpit. You literally watch somebody fly this airplane and The Ninety-Nines are really driven to do this because even if they're not motivating young women to get their pilot's licenses and fly, what they're really hoping is that women would become more excited about sort of these STEM-adjacent fields whether it's designing airplanes, or flying airplanes, or doing technology-related things that will help improve air travel, or maybe even traveling into Space.

HS (on tape): So, as I understand it, you got a chance to go on a discovery flight.

EM: I did.

HS (on tape): Ooo, tell me all about it.

EM: Yeah it was... it was a very neat experience to be so close to a person controlling an airplane because I fly on regular airplanes all the time — you are completely disconnected from what's going on in the control space.

HS: All right. So, let's jump back into the episode to hear from someone who knows the wonder of flight and the view from the cockpit really well. Someone who cares more about the journey than the destination.

[MUSIC]

Judy Shaw: I'm Judy Shaw and I'm a Ninety-Nine. I've been a Ninety-Nine since about 2011 and thoroughly enjoy the company of other women pilots.

JS: There are so few female pilots today particularly because it's never been encouraged. I can remember back when I started I wanted to be a bush pilot in Alaska. My mother said, "no way dear, try nursing or some other profession like that." And my first small plane, gee, would have been probably a glider. I just loved being in the air. It was just fantastic.
Emily Martin: I met Judy at Leesburg Airport which is about 40 miles west of Washington, D.C. She drove us to a hangar and opened the door to a little four-seater airplane. They called it “the Ferrari of planes” because it has a very special feature.

JS: We are going to be flying in a Cirrus SR20. Cirrus is a plane that has its own parachute. And if you ever get into trouble there is a red handle in the ceiling that you just reach up and pull and it will land the whole place.

JS: Okay. You ready to get onboard?

EM (on tape): I love have a whole while of this airplane hangar just opened up. Judy just pulled the airplane out by herself. The whole airplane. Then she drove her Prius inside and then they closed the wall of the airplane hangar and now they're coming out of the little Hobbit door in the side.

EM: There was one more person with us, Justin Longosky. He's an instructor and he came along to help Judy keep her instrument rating current. If your instrument rated you can fly in conditions where there’s no visibility. For example, when you fly inside clouds.

EM (on tape): Everything I want to step on to get onto this airplane says no step. There’s a handle there. Jackpot!

JS: You found your seat belts back there?

EM (on tape): Yes I’m buckled in.

JS: The handle for the parachute is here.

EM (on tape): Okay.

JS: If you ever need it you just reach up and pull… pull down with about 40 pounds of force…

EM (on tape): Okay.

JS: …and you will release the parachute.

EM: We taxi to the runway.

Justin Longosky: You excited?

EM (on tape): Super pumped.

JS: Frequency 1-2-5-point-0-5 [...] 4-6-5-0 and holding for release.
(Indiscernible)


[AIR TRAFFIC FX]

EM: And we took off. Before you knew it we were cruising over farmland and some new housing developments in the suburbs of D.C. It was a neat experience being able to actually see sort of 180 degrees around you. The small plane actually had a lot of windows.

JS: Altimeter is set for 2-9-9-8.

EM: We headed for Culpeper. That's about a 40-minute flight. Judy wanted to go there because they have a compass rose that The Ninety-Nines painted 15 years ago and it needs repainting.

JS: Compass rose is essentially a compass painted on the taxiway usually. And, for The Ninety-Nines it has our logo in the center. It's also got the cardinal points marked out on it and it legally has to be surveyed so that it actually points north because planes are allowed to legally swing their compasses and align their compass in their plane by lining up with the compass on the… on the runway. And plus, it's kind of neat to fly over an airport that has a compass rose because you could see it very clearly from the air.

[AIR TRAFFIC FX]

As we were flying towards Culpeper, Justin pointed to the screen on the dashboard that shows all the weather patterns. And he put his finger on this big red spot and he said…

JL: That's actually not good for us.

EM: “That's actually not good for us.” It was a thunderstorm right in our path potentially with a lot of lightning and we had to stay away from it.

JL: We're seeing a cell off just south of Culpeper. We're thinking about canceling IFR and returning back to Leesburg.

JS: Aw, that's too bad. Oh well. Best laid plans...Mike-sierra is eight miles to the southwest, inbound for landing 1-7. We'll be overflying midfield.

EM: A little while later we landed in Leesburg.

JL: …your speed. Pitch down, increase power.

EM: It was a really smooth landing.
JL: And that's how you do it!

JS: 8-2-6-mike-sierra's clear of the runway.

EM: And we taxied back to the hangar.

JS: So, you ladies want to deplane?

EM: We wiped bugs smudges off the plane and had it refueled.

JS: How was... was the ride comfortable back there?

EM (on tape): Yeah! I got a little green behind the gills towards the end, but, yeah, I know. I know, I don't... I can't... I don't think it had anything to do with the driver.

EM: So, we didn't see the compass rose, but with Judy it's pretty clear that any day you get to fly is a good day. This is a woman who will meet up with some friends at the airport jump into a plane and fly to Pennsylvania for dinner and then fly back. Basically, she just loves to fly.

EM (on tape): What's your favorite part about it?

JS: It's actually being just above the clouds where you're, you know, free of the updrafts. But there's this puffy, like, cotton-batteny stuff all underneath you and you don't see anything else but blue sky and white. And I... I think... to me that's incredibly beautiful.

[MUSIC]

EM: And Judy says flying is a lot more accessible to women and girls these days. In fact, the same morning we were at Leesburg Airport a group of girls from the museum's aviation summer camp were taking their first flight in a small plane.

Girl Pilot 1: When I was up in the air, it felt unreal.

Girl Pilot 2: In a car like you can go anywhere but there are certain roads and path that you have to follow and rules. In a plane you can just go anywhere in a circle you can do a flip you do anything that you really want to do in a plane.

Girl Pilot 1: And it felt like you were just a giant in the middle of the air. Just walking around.

Girl Pilot 2: Buildings were like little toy buildings that you could build with Legos. And a car looked like little toy cars you can buy for Toys R Us. So, it was definitely like... it's different from up there.
Haleema Shah (on tape): Wow. So, the next time I get on a plane I'm definitely thinking about this organization that women like Amelia Earhart were part of ninety years ago and it's still supporting women pilots. And it's encouraging girls to fly, too. If Sidedoor listeners were into this, which I really was, what other episodes of Airspace do you recommend?

Emily Martin: So, if you're really interested in the air of Airspace, some of my favorite air stories that we've done have been an episode called “Bailing Out.” The deputy director of the Air and Space Museum used to fly fighter jets. And, at one point during a training exercise he had to bail out of his plane. It's an incredible story. So, our “Bailing Out” episode is really great. If you want a little space to balance off the air, some of my favorite episodes have been the “Space Junk” episode where we talk about all the different kinds of junk that we have floating around up in space and how that kind of affects our day-to-day — including your cell phones! So, you should definitely listen to that episode.

HS (on tape): Oh, I will. (Laughs)

EM: Nobody wants to endanger their smartphone.

HS (on tape): No absolutely not! How am I going to check my tweets?! (Laughs) Emily thank you so much for telling us about The Ninety-Nines.

EM: Thanks so much for having me. I had a really great time talking about this.

HS: By the way, if you liked the segments of the story that we shared with you today, you can hear the full episode over on the Airspace podcast feed. And, subscribe if you like it. That's all one word — Airspace — and it's available wherever you find your podcasts.

Haleema Shah: You’ve been listening to Sidedoor, a podcast from the Smithsonian with support from PRX.

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HS: I’m your host Haleema Shah. Thanks for listening.