



Episode 904 Story 2 – Lindbergh-Sikorsky Fabric

Tukufu Zuberi: This case investigates a fragment of fabric. What will it reveal about two aviation pioneers? In the early light of May 20, 1927, Charles Lindbergh's "Spirit of St. Louis" clears the telegraph wires at Roosevelt Field on Long Island. Thirty-three and a half hours later when he lands in Paris, the young aviator has flown into the history books: first to fly solo non-stop across the Atlantic Ocean. At the same time, another flier is also laboring in obscurity on Long Island. This Russian émigré is destined to have an equally large impact on aviation history. But what was it that brought these two men together? Now, a man from Staunton, Virginia, thinks he may have an artifact that marks a little known collaboration from early aviation.

Jimmy Patterson: My dad showed me this as a young teenager and I've wanted to know ever since exactly what the story was.

Tukufu: I'm meeting Jimmy Patterson to learn more about this object passed from father to son. Hey, how you doing?

Jimmy: Hello! I've got a piece of fabric, hand signed by Charles Lindbergh and Igor Sikorsky. Dated August 1943, that my dad showed me when I was an early teenager. I have a suspicion that this fabric could have come out of the "Spirit of St. Louis."

Tukufu: So who is this Sikorsky guy?

Jimmy: He was instrumental in the development of the helicopter.



Tukufu: So how did your father come into possession of this piece of fabric?

Jimmy: This was given to my father by Charles Lindbergh.

Tukufu: You're father knew Charles Lindbergh?

Jimmy: Yes, he did.

Tukufu: And where was your father when he gave him this piece?

Jimmy: I feel like that he was working for an aircraft plant in Connecticut.

Tukufu: Jimmy was a teenager when his father, a former state police officer, died, and he doesn't know exactly what he was doing during the war. So, now do you have any idea why Charles Lindbergh, if that's his signature, and Igor Sikorsky, if that's his signature, would be signing this theoretically on August 1943?

Jimmy: I want you to tell me why. I want you to find out if the signatures are authentic. And then, did it actually, in fact, come out of the "Spirit of St. Louis?"

Tukufu: First, let's get into this piece of fabric. This glue was holding it in place, and that's probably why the fabric is stiff. At the top we have C. A. Lindbergh. August 1943. Now, I've done some investigations that involved Lindbergh. First of all, that flight happened in 1927, not 1943 so I really have my doubts that this is a piece of the "Spirit of St. Louis." Also, my colleague, Elyse Luray, has done a couple of stories which involved fabric that was used on airplanes. So, it's not



uncommon for this type of fabric to have been used on airplanes. And down here, written very lightly, so faint we can barely discern what it is, we have Igor Sikorsky. I want to learn more about Sikorsky, but first, I'm going to meet an old friend of *History Detectives*. John Reznikoff is President of University Archives in Westport, Connecticut. He's an expert on signatures and has helped on previous investigations. He says he has some items that might help on this one.

John Reznikoff: I've got a couple of Lindbergh items.

Tukufu: Nice.

John: Including a piece of the "Spirit of St. Louis" authenticated by Charles Lindbergh himself. And this is a letter that he wrote some years later in 1935. Let's see what we've got.

Tukufu: Here are my signatures. Can you tell me if these are authentic?

John: Well, I've studied Lindbergh's signature and I've had a lot of autographs from him.

Tukufu: John shows me the 1928 letter, but something seems a little off.

John: In the late 20s, his signature was tall and elongated and very stringy.

Tukufu: John says Lindbergh's writing style evolved.

John: His signature changed throughout the years.



Tukufu: He shows me a signature from 1935.

John: And you could see how the signature gets a little more cramped and he doesn't start to get his D and B short until the mid-thirties. And so he's getting very close to this. Look at that little unusual loop at the top of the C that matches exactly with this one. The way the L crosses the next letter, right here. I'd say this is one hundred percent an authentic signature of Charles Lindbergh.

Tukufu: Can you authenticate that this is Igor Sikorsky's signature as well?

John's seen Sikorsky's signature before, and he thinks we may have the real thing.

John: But I don't have an original example here, and I'd have to have that in order to determine that it definitely is Sikorsky.

Tukufu: Was Charles Lindbergh still signing pieces of the "Spirit of St. Louis" in August of 1943?

John: Most likely not. When they renovated the plane for inclusion in the Smithsonian in 1928, they took certain parts of it off and put new parts on, and somebody had the forethought to save some of the material. And that material became a souvenir that was highly coveted. And I haven't seen anything that comes after 1930, that is indeed from the "Spirit of St. Louis."

Tukufu: John volunteers to compare our fabric with the known swatch from the "Spirit of St. Louis."



John: This is called a proscope.

Tukufu: This high-resolution digital camera takes a picture of Jimmy's fabric magnified by a power of thirty. Next, he takes a picture of the fabric from the "Spirit of St. Louis."

John: Here is the "Spirit of St. Louis" fabric, and here is your fabric. And look at the difference. The "Spirit of St. Louis" appears to be a much higher quality. There's virtually no daylight between the stitches. I would say, definitively, it did not come from the "Spirit of St. Louis."

Tukufu: John thinks our fabric did come from an aircraft, but he has no way of knowing which one. So was Charles Lindbergh still working on aircraft around this time?

John: I know that Lindbergh worked on a lot of planes.

Tukufu: At first, Lindbergh was controversially outspoken against the war. But after Pearl Harbor, he found a way to serve his country. By 1943, Lindbergh was in demand consulting on various World War II aviation projects.

John: He was a test pilot, and he was very involved in the war effort.

Tukufu: I need to run down some more information on Sikorsky, and how the two men may have met, or worked together.



In the early 1900s, the Russian-born Sikorsky was an aircraft designer for Czar Nicholas, but had to flee the Russian Revolution. So he arrives in 1919 at Ellis Island. And this is the reason he gives for migrating to the United States. "To seek employment as a designer and constructor of large aircraft." As World War II ignited, Sikorsky was attempting to build a "direct lift craft," or helicopter. He calls his the VS-300. But Sikorsky has competition. The French and Germans are making progress on their own craft. The helicopter's war-time value would be in its ability to lift directly from ships and battlefields. "Igor Sikorsky greatly admired his closed friend, Henry Ford." This is interesting: here's something from a biography on Sikorsky. "In a conversation with Charles Lindbergh, Sikorsky mentioned that he would be honored if Henry Ford would allow him to donate the VS-300a to the museum at the Edison Institute in Dearborn, Michigan." It's a connection between Lindbergh, Sikorsky, and Henry Ford. Bob Casey is the curator of transportation at the Henry Ford Museum, and an authority on an early aviation. Now, this is the piece of cloth that I'm investigating. As you can see, it has the signature, Charles Lindbergh and Igor Sikorsky. August 1943. Now apparently these guys had a relationship with Henry Ford.

Bob Casey: Well, I've got a photograph that shows some of that relationship. This is Igor Sikorsky's helicopter. He's donating it to Henry Ford's museum, to our museum.

Tukufu: Okay.

Bob: There's Igor Sikorsky. There's Henry Ford. And there's Charles Lindbergh. All three of them were friends. They knew one another. And you might say they flew in the same circles.



Tukufu: When was this photograph taken?

Bob: This photograph was taken October the 6th, 1943.

Tukufu: That's just two months after the date on our fabric... when the helicopter was donated to the museum. So this is it.

Bob: This is it. This is Sikorsky's first successful helicopter.

Tukufu: So this is my piece of fabric. Could it have come from this aircraft?

Bob: Conceivably. This aircraft has been recovered twice since it's been in our possession. It might have come from this aircraft. But there's no way for me to verify that. I do have something though that might lend a sense of direction to this.

Tukufu: Bob says in the early '40s Sikorsky was working on a military helicopter, the R4, for a company called United Aircraft Corporation. Sikorsky Aircraft. Division of United Aircraft Corporation. Bridgeport, Connecticut. August 16, 1943. Jimmy said his father was also working in a Connecticut aircraft plant, and that's how he got the fabric.

Bob: And it is signed by Igor Sikorsky.



Tukufu: This letter places Sikorsky in Connecticut in the month and year on Jimmy's fabric, and the signature seems to match ours. Now, do you think Lindbergh was also in Bridgeport, Connecticut in August 1943?

Bob: I don't know for sure. I do know that he was working for United Aircraft. So he could have been in Connecticut in August of 1943. Just don't know for sure.

Tukufu: Sikorsky Aircraft is now headquartered in Stratford, Connecticut. Sergei Sikorsky is former vice-president of special projects and Igor Sikorsky's son. We meet in Igor's office, which has been kept just as it was when he died in 1972. It even includes the fedora Igor wore when he flew his helicopter. Can you recognize that?

Sergei Sikorsky: yes. That definitely is the signature of Igor Sikorsky.

Tukufu: What was the relationship between Charles Lindbergh and Igor Sikorsky?

Sergei: Deep friendship. A mutual respect and admiration.

Tukufu: They were close friends, and Lindbergh was very interested in his father's helicopter.

Sergei: And my father would stand there. Lindbergh sitting in the machine, my father standing, and sort of above the engine noise, shouting instructions into Lindbergh's ear. Lindbergh nodded. Would take off and hover for a few minutes,



and then land. And then my father would come over and shout a few more instructions.

Tukufu: I'm thinking that this could have possibly been a piece of the VS-300.

Sergei: It is typical of the fabric that was used at that time for the VS-300. But I could not identify it positively.

Tukufu: Sergei says wartime aviation plants were alive with activity. Lindbergh followed the progress of the VS-300, and consulted on two projects funded by the US Navy. One was a fighter called the F4U Corsair. The other was a plane meant to perform much like a helicopter, capable of quick lift-offs and slow flying speeds. Officially called the V-173, it was nicknamed the "Flying Flapjack" or "Pancake." Sergei says both aircraft included sections of fabric. So this fabric could have come from the VS-300. It could have come from the Corsair. And it could have come from the Flying Pancake.

Sergei: Yes, it could have come from either one of these things.

Tukufu: Tracking down comparison samples will be a challenge.

Receptionist: History Detectives.

Tukufu: How ya doin?

Receptionist: Hi Tukufu.



Tukufu: I need you to help me out.

Receptionist: Three samples.

Tukufu: The VS-300, the Corsair, and the Flying Pancake. Back at the *History Detectives* office, the research staff work the phones.

Receptionist: Right, it's a Sikorsky.

Tukufu: It takes some doing, but I eventually have what I need for another visit to John Reznikoff.

John: Can't wait to see what you have.

Tukufu: Well, you know, I knew where to come. Okay, let's start with this. This is the original fabric from the VS-300A helicopter.

John: This brown coloring on the back is very different than this, obviously. And not only is the weave even by my naked eye different, but it's not a match. I don't think it's even close.

Tukufu: It's not the helicopter. What about the Corsair fighter?

John: I'm seeing a pretty tight weave here too.

Tukufu: It looks close.



John: Let's shoot a shot of it.

Tukufu: John decides to test further. Okay, here's the question piece. Signed by Lindbergh.

John: It's almost octagonal. The areas that have holes in them. Whereas, this is very square.

Tukufu: Right.

John: So I would rule this out, absolutely.

Tukufu: So it's not the Corsair.

John: Nope.

Tukufu: Okay! That's two strikes. And so this is a piece of the Flying Pancake. What do you think about that? One more chance at a match.

John: This is a possibility. We need to look at it a little more closely.

Tukufu: What John discovers next will certainly be a surprise to Jimmy. Now your first question is do you have authentic signatures for Charles Lindbergh and Igor Sikorsky? And my answer to you is, without a doubt.

Jimmy: Amazing.



Tukufu: Now your next question was, was this piece of fabric from the “Spirit of St. Louis?” And we were able to prove that it was not.

Jimmy: Alright, where did it come from?

John: Same size hole. You have the small hole and the big hole. That’s the same material.

Tukufu: So, our piece comes from the Flying Pancake?

John: I think there’s no question about it at this point.

Jimmy: Wow. Amazing. Just to know that it came from an early experimental aircraft. Just knowing Lindbergh had something to do with it. I think it’s wonderful that I know exactly where it came from.

Tukufu: Mired by development and funding issues, the Navy cancelled the Flying Pancake project in 1947. However, Sikorsky’s helicopter design achieved great military success. He developed his VS-300 into the R-4, the world’s first production helicopter. In 1942, the United States Army Air Force successfully tested the R-4 in Burma and Alaska. They soon ordered 100. The R-4 became the first helicopter to ever enter combat.