

# TRADITIONS & Transitions

By Kathleen Cardwell

It is common practice in professional and social circles to ask: "So, what do you do for a living?" Yet, Ralph Waldo Emerson's words, "Life is a journey, not a destination," invite us to look deeper. The destinations—the places we call "work" and the job titles we hold—are worthy of sharing. But the journeys are far more intriguing and reveal the best stories.

This series, Traditions & Transitions, explores the stories of watchmakers, clockmakers, technicians, designers, educators, industry leaders, and shop owners—but with a twist. Some will share traditions—tales of strong family heritages, of businesses that have been passed down through generations, or learning the trade from a beloved parent. Others will recount transitions—linear or circuitous paths that led them from a career as a teacher or engineer to a career as a clockmaker or watchmaker, or how they turned a treasured hobby into a livelihood.

## The Micro-Mechanical Artist

Dan Spitz's story as a co-founding member of the legendary heavy metal bands Anthrax and Overkill is both well-documented and fascinating. Besides playing lead guitar and writing songs, Dan also helped to create thrash metal music. He's had three Grammy nominations and 30+ million albums sold. He quips about cracking the top 10 on two planets, which in fact, is true. That's because he was one of the first 10 artists chosen to have his music

playing with NASA on Mars, to awaken the Lunar Rover *Curiosity*. Dan left Anthrax in 1995 and returned in 2005 for a reunion tour. He left the band in 2008, ready for a change from the lifestyle—living on a tour bus, traveling to various countries, being surrounded by bodyguards and millions of people. He's both nostalgic and proud of his rock star days in heavy metal music, his pivotal role in defining a genre of music.



Even with his numerous credentials, Dan thinks of himself as an inventor.

Photo: © Dan Spitz

Dan's story of being a change agent in another heavy metal industry—watchmaking—continues to gain momentum. He believes independent watchmaking imbues the same humanness, magic, and art as the musical counterpart. His "official" title is Certified Master Watchmaker, Complication Specialist. Ask Dan what he prefers, and he'll respond with "I'm a micro-mechanical artist, but I'd rather be called an inventor." It's a title that doesn't begin to cover his talents, his vision, his quest.



Dan's ultimate goal has always been to be a part of bringing high-quality watchmaking back to America.

Photo courtesy of Dan Spitz.

## His Creds And a Calling

At the Bulova School of Watchmaking in Queens, New York, Dan finished a four-year curriculum in one-and-a-half years, becoming the fastest to graduate in the school's 53-year history. Dan later attended the prestigious WOSTEP watchmaking school in Neuchatel, Switzerland, on a full scholarship. He was taught by Antoine Simonin, the inventor of WOSTEP's courses. Dan earned degrees in complicated micro-mechanical engineering and, thereafter, was the first American watchmaker to gain access to the complicated watchmaking rooms of some of Swiss watchmaking's most prestigious brands, working on masterpieces at the top tier of micro-mechanics. Dan adds, "That's how hard it was, but I was trying to show people, that 'we (Americans) can be bad-asses too,'" which aptly sums up who Dan Spitz is.

His credentials include being the former head master watchmaker of complications specialist and instructor for Chopard—North and South America, as well as being the creator of all teaching courses for other watchmakers. He held these same positions for Leviev watchmaking for five years. He has owned and operated three restoration and after-sales service centers, specializing in pre-1960s mechanical, complicated timepieces. His decades as a watchmaker have included being a ghost-builder for many brands as well as consulting on part longevity of new calibers for Chopard and other major brands. Dan also holds

the prestigious Swiss title of being nominated for the GPHG (Grand Prix d'Horlogerie de Geneve), the equivalent of the Oscars for watchmaking.

During his many years of running his restoration and after-sales service centers, Dan always viewed himself as an old soul, trapped in a younger person's body. That's largely because he considers watchmaking to be in his blood. He's a third-generation watchmaker, having grown up on his grandfather's lap, in his grandfather's jewelry store, Eddie's Antiques, in the Catskill Mountains of New York. The store was frequented by famous entertainers and vacationers who visited the Catskill Mountains as an escape from the hustle and bustle of New York City.

It's easy for Dan to recall the memories of his grandfather's shop. He also remembers opening his first watch, a Patek Philippe, when he was eight years old. He shared, "In my grandfather's shop, I was surrounded by some of the most incredible vintage timepieces ever—real watches, mostly handmade or hand-finished. I'll always be grateful for my achievements in music, but I've always had a calling to get off the road and get back to my roots in watchmaking," Dan said. Besides the memories, Dan also wishes he could have collaborated with his grandfather after graduating from WOSTEP. "It would have been great to return to his shop and carry on the business, and to collaborate with him."

## The Movement

The seismic shifts in the watchmaking industry would prove to be the impetus for change in Dan's vision and plans. It was thought that if you graduated from the only WOSTEP watchmaking school on the planet at that time—and the only English-speaking complication school—that you would stay in Switzerland and utilize your credentials as a master watchmaker to help the Swiss with the shortage of complications specialists. According to Dan, there was a severe shortage then, and there still is today. Dan explained, "My plan was to get certificated so that I could get parts accounts with the large haute horlogerie brands and somehow convince the Swiss I was American, but holding the WOSTEP skills to do complication work outside of Switzerland, and have my own service centers. A first here in the USA. But I also wanted to be a part of bringing high-quality watchmaking back to America...that was the ultimate goal set forth in my mind's eye."

After the three-year-long Anthrax Reunion Tour, Dan took an extended break to concentrate on raising his twins with autism. He then decided it was time to start fresh and concentrate solely on the avenues he needed to ramp up, so he could manufacture his own independent timepiece and create "the one-man workshop" to invent for himself and others. He started acquiring machines over the course of several years, and spent another three years restoring or rebuilding most of the equipment and expanding his facility.



Anthrax, 1988.

Photo courtesy of [billboard.com](http://billboard.com) / [www.fox.com](http://www.fox.com).



Dan in his atelier in Gun Barrel City, Texas.

Photo courtesy of [bestpick.com](http://bestpick.com).

Dan explained, "It was a lot of grease, sweat, and bloody paper towels. It wasn't just an idea but a movement, the rebirth of independent watchmaking right here in the USA. I started scouring the planet's dirty watchmaking machine underground network, trying to find, purchase, and then restore the machines that had mostly been unused for 40 to over 120 years—for example, my Leinhard broccading machine."

Equally challenging for Dan was sourcing the materials for his work. Determined to buy American, he recalls going in circles with so many companies, trying to convince them that he wanted to purchase their materials but needed to do so in smaller quantities.



Cover of *I'm the Man*, the second EP by Anthrax, released in 1987.

Photo courtesy of [metal-archives.com](http://metal-archives.com).



Dan spent years acquiring, rebuilding, and restoring the equipment in his atelier.

*Photo courtesy of Dan Spitz.*

He referenced a ruby factory in the United States, and how he thought the company might be a supplier for the jewels he needed. He thought they would welcome an American indie watchmaker and help him with small quantities needed. Not so.

“Ordering the smallest quantity available in one size required minimum quantities that did not fit with how indie watchmaking works (small quantities of masterpieces). It ended up being an order of \$35,000, but I only needed \$3,000 worth of assorted sizes that alone would last me until I was dead. Eventually, I had no choice but to return to my network of colleagues and vendors in Switzerland, France, and elsewhere for my materials. I’ve almost quit this ride 37.2 times. I could have accomplished my mission to build my masterpiece in Switzerland with zero pain and very fast results. There, it’s like going to a 7-Eleven around the corner for anything you need after breakfast. Here, in the USA, it’s an hourly nightmare of doom,” Dan said.

For several years, Dan worked as one of 12-18 ghost-builders around the world. Much like a ghostwriter of music, these master watchmaker ghost-builders are each experts in certain aspects of the whole watch—the design, making the main plate, cutting the gears and pinions. The

ghost-builders work with the large companies in Switzerland so that the companies can release three to four handmade/specialty watches each year, and to help them develop these calibers. Dan’s specialty was testing new calibers for longevity and making handmade parts that would increase a timepiece’s accuracy over longer periods of time. While these independent masters often met to discuss ideas, they eventually would return to their benches and work independently on their own creations.

His decades of success in his restoration and after-sales service centers, and in micro-mechanical art, were filled with refining and expanding his network, his knowledge, and his craft, with a variety of challenges mixed in. He recalls how his upbringing and his WOSTEP education were as much about exposure, experiences, and learning the process, as they were about honing his problem-solving skills and building a trajectory to be one of the best.

Dan explained, “I finished early at Bulova, and asked to learn more, to do more. I wanted to work on complications. They didn’t know what to do with me. So, I knew WOSTEP was the next part of the journey”. A particular memory from WOSTEP, involving taking apart and reassembling a complication,

is an appropriate anecdote for Dan's movement into independent watchmaking. "I had taken the complication apart very carefully, and lined up all the pieces in chronological order, so I would know exactly how to put it back together. When I presented my work to the instructor, he shook the tray so that all the pieces mixed together. The instructors would also bend certain parts or throw in multiple calibers when you were working on a project. It was their way of weeding out the ones who weren't cut out for this type of work," Dan explained.

In his current atelier in Gun Barrel City, Texas, Dan is surrounded by the many machines he has acquired and/or restored, some of which are one of only two or three in the world. His space includes a machine room, clean room, finishing and polishing room, and a dirty room. The description of his atelier on his website speaks both to the heart of his work, and the work of his heart. "The atelier of Mr. Spitz is filled with old, meticulously restored, very rare watchmaking machines from watch factories and methods long gone. These beautiful machines (themselves a work of human art) allow him the capabilities to manufacture all parts of a high-end timepiece on site, he has no need to rely on outside sources. This independence allows him to build as he would for himself; to overbuild the thickness and quality of each mechanical piece by hand, as watchmakers did centuries ago, building for centuries ahead."

## Momentum

Dan released the Caliber J11.13 in 2019, the first haute horology wristwatch hand-manufactured in the United States. It quickly grabbed the attention of the industry, other independent watchmakers, and collectors, and was hailed by Johnny McElherron of *Thewatchpress.com* for its "...robust longevity, high horology, and beauty."

In his 2020 article, McElherro described the unprecedented, mechanical marvels of the watch, as well as Spitz's unique talents. "Beneath the balance, a very unusual escape wheel with pronounced teeth is the Daniel Spitz

Libre Excentrique escapement, which is yet another unique in-house development, and an evolution of the 18th-century Louis Richard escapement. Requiring no oil, it performs with minimal friction and is a beautiful refinement of what is quite literally a centuries-old innovation which the watchmaker has scaled down for the confines of his wristwatch."

According to Dan, it was a pivotal point in his work, the result of three long years of full-time research and development. But it was also monumental in his quest to strengthen the momentum of independent watchmaking in America by hand manufacturing and finishing a caliber, especially after helping many top Swiss companies with their own calibers. He said, "It was a huge undertaking to do this outside of Switzerland, but it was time to do this for myself, for this industry, and for this art form, in the United States."

The thrill of the accomplishment is enthusiastically detailed on Dan's website. "The J11.13 movement isn't based on any pre-existing caliber and all parts must be made in our atelier. The gear train is completely offset to make room for an oversized centered mainspring barrel for constant even torque to the escapement. There is no center through plate great wheel/cannon pinion to hold the hands in this watch, causing many movement design struggles over the years, but constant perseverance has proved to open new doors to an outstanding, mechanical-artistic accomplishment. Let's not forget the re-emergence of a dreamer's vision from the 1800s brought back to life in the form of a new kind of escapement, needing no oil, and running on titanium and jewels!"



Dan's Caliber J11.13.

Photo courtesy of [danj11.com](http://danj11.com)

It's no surprise Dan has said more than once, "I have new momentum here. Watchmaking in America at the highest level. I'm glad to be part of the new momentum." That's due to his decades of work and struggles to lay the groundwork of what he sees as the future of independent watchmaking. It's also why he was beyond excited to share some of the initial details of his latest project, the ZeRo bridge caliber, which he promises is another never-before-done invention in micro-mechanical art. Requiring five years of research and development, Dan recalls some of his first words when he paused to look at the finished prototype, "It is possible."

In our Zoom conversation, Dan was willing to share the actual, running raw ZeRo bridge caliber, his latest and greatest. "Hundreds and hundreds of cavities set at 1-2 micron precision, and modular. There are no screws, and it will work beyond the next 100 years," he said. Dan also shared that this invention is part of a larger effort to market to an audience he is quite familiar with and a part of—heavy metal, and with the artists in all fields who simply love music. "Many outside of heavy metal music don't realize it, but they're super intelligent, creative people, accomplished in a variety of top-tier fields, and they're watch crazy. They're collectors, and this new timepiece is going to blow their minds," he said.

As he is quick to blur the lines between heavy metal music and micro-mechanical art, he shared how working on this latest project reminded him of hearing Van Halen's music for the first time in the late 1970s. "I heard it on the radio while I was driving, and I had to pull over. I sat there, frozen, thinking 'What was that sound? That can't be a guitar. How did someone make that sound?' I had never heard anything like that before. It's the same with my latest invention because history is being made."



Dan Spitz, 2017.

Photo courtesy of retaholic.com

## A Call to Future Independent Watchmakers

Dan is humbled by his work, but also his journey, and the many like him who have lived the struggle, and are now dedicated to furthering independent watchmaking. The momentum he feels so strongly about is a call to future independent watchmakers. He shared, "My whole goal in staying in this country, versus going to Switzerland where it would have been easy, to come here and do it all here, is so hopefully I can open this door to other young watchmakers and show them the perseverance. Classically trained watchmakers can gain a foothold and the experience needed to go out and do the same thing I'm doing. Be independent."

His credo is strewn with gratefulness for his education, his training, and the many talented people he considers to be not only his esteemed peers, but his friends and family. Many of them he credits not only for his success, but also for paving the way for others. Dan also applauded the many peers who lived through the initial struggle and are now part of the momentum, giving of their time, talents, and resources, including Kari Voutilainen and Stepan Sarpaneva.

Dan's perspectives on the past offer keen insight, sage advice, and hope to those interested in becoming independent watchmakers. He said, "There are many avenues you can pursue. It's a winding road until you find your way, but really, that's the beauty of it." Dan also believes strongly that independent watchmaking has reversed itself and opened the doors wide to micro-mechanical artists. "We don't need a watch to tell time anymore. It's not 1953, when people would save money to buy their first Rolex, only to see someone wearing a Patek Philippe and think, 'Oh there are other options, maybe better options.' Now is when we can just make micro-mechanical art that people want to wear on their wrist. Telling time is secondary," he said.

Dan also notes how the industry channels and accessibility have changed over the decades. He cites not only his love of *Horological Times* but also how much he relied on it in the days before the internet. "HT magazine was a godsend for me. It showed me, in great detail, what was being done, and how." In particular, he recalled once seeing an ad by Paul Gerber for his triple rotor movement. At the time, it was really the only way for an innovator to share what he was doing, by coming up with the money to

advertise in a magazine. “Today, it’s basically free to learn and to show your art. All the independent watchmakers are all over social media, showing you the parts they’re making and how they’re doing it. Newcomers can showcase their work and find partners, suppliers, or investors,” Dan said.

Dan’s feed on Instagram is part of how he tells his story and shares his work, but his first foray into social media was in 2020, in partnership with McElherron. “In the Metal,” a series of videos on YouTube, is a treasure trove of authentic conversations with more than

50 independent watchmakers, with McElherron and Dan as hosts. According to the channel’s information page, “[the series] takes an informal, behind the scenes look at the fascinating world of independent watchmaking...an online conversation forum, where we talk with the finest talents and personalities in the industry about watches, watchmaking, life, and music. Sit back for a lively, uncensored, in-house, hand finished insight into the extraordinary world of independent watchmaking.”

Dan believes it to be invaluable, even today. “So many of the independent watchmakers, me included, are recluses. These are just recorded Zoom calls, but these conversations are real; not ‘tell me about your new watch’ but the humanness behind what we do. For some of these masterminds, it was the first and maybe the only time they have given an interview. They’re all cool stories full of cool insights, there forever for the young watchmakers.”

Besides taking advantage of all that social media offers, Dan also recommends that young watchmakers look to the past to know the history of independent watchmakers, including Paul Gerber, Vianney Halter, George Daniels, and Roger W. Smith. He adds, “You can gain notoriety now, not after you’re gone, because



Dan is thrilled to be part of the momentum of micro-mechanical art and independent watchmaking.

Photo courtesy of Dan Spitz

of how unique your work is, and because it’s what collectors (not customers, Dan notes) are looking for. Watches by Roger W. Smith are being auctioned at Sotheby’s because he only produces 10 of them in a year. He, like many, is a living legend.”

Dan sees the current landscape as an incredible opportunity to keep the momentum of independent watchmaking and micro-mechanical art going, and to represent the United States. Dan said, “You can do it here...be a part of bringing it back at its highest level. As a country, we have birthed so many inventions. We have the opportunity to bring it back.” Dan believes it’s definitely about what you create but it’s also the journey in creating it. In talking about ZeRo bridge caliber, he shared that there are imperfections and marks, but they’re supposed to be there. That’s because what he creates comes from him, it’s in his DNA. “Ninety percent of the timepiece is the story and the struggle. Each one of us are imperfect and unique and so my mechanical art presented to each collector reflects these same honors,” Dan said.

*Follow Dan on Instagram at [danspitzofficial](#) and learn more about his work at [danspitz.com](#). Catch episodes of “In the Metal” on YouTube at: [www.youtube.com/InTheMetal](#).*

**If you have a story to tell or you want to recommend a friend, colleague, or family member for the Traditions & Transitions series, email us at [editor@awci.com](mailto:editor@awci.com).**

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