



Gear Stories With Sylvia Massy: Mr. Williams and the Fairchild 670

Dec 1, 2010 9:00 AM, By Sylvia Massy



SECRET SOURCES REVEALED?

Inside Mix

Mr. Williams led me through the darkened third-floor corridor of an abandoned brick office building in downtown Joliet, Ill. Cardboard boxes and ceiling plaster lay strewn on the floor, and a jolt of fear pulsed through me as we stepped over piles of debris to reach the illuminated doorway at the end of the long hall. I wasn't sure where this creepy old guy with the mustache was taking me, but it could be very bad news for a foolishly trusting single girl like my self. He smelled like old leather and cigarettes. His lips curled back to show a toothy smile as he pushed open the door, waving me inside.



This Fairchild 670 sits in Sear Sound Studio A, New York City.

Photo: Christopher Allen

I squeaked past him into the room. And there was the hoard. Stacks of old tube broadcast compressors, Altec amps, rotary-knobbed Western Electric mixers, lonely Sparta turntables, Voice of the Theater horns—an armory of equipment collected from radio stations and movie houses stacked from the floor to the roof. I had finally found the mother lode, but the one thing I really, really wanted wasn't there. I had traveled 1,200 miles and put myself in harm's way to find the Holy Grail—the [Fairchild 670 compressor](#)—and there wasn't even one Fairchild in the whole darn place.

Because I'm writing this story now, I suppose it's obvious that I made it out of there alive. And I managed to bring out a massive collection of tube broadcast equipment, too; even today, I still have most of that collection. But there was no Fairchild in that ancient red-brick building and for a very good reason—Fairchild 670 compressors were mainly found in disc mastering houses, and creepy Mr. Williams only dealt with broadcast equipment. I was barking up the wrong tree!

THE HOLY GRAIL, BUT WHY?

So why are these old analog compressors such a big deal? Well, for starters, they are filled with magic. Putting a mix through the stereo 670 will turn a mediocre song into a hit. Okay, maybe I exaggerate, but today these stereo tube compressors go for \$30,000 if you can find one. And that's no exaggeration. Some may think it's a myth, but they really do something that no other compressor does. As the last element across your mix bus, the Fairchild 670 adds excitement and fury, while clarifying every part of the program going through it. The 670 smooshes everything together without becoming glassy or brittle or hard. And it can make the kick and snare on rock records go "pah-powww."

In 2007, *Mix*'s George Petersen initiated a conversation where [Les Paul described the birth of the Fairchild compressor](#). It jumps back in time to a dining-room table in New Jersey in the 1950s, where the famed guitarist was discussing a compressor design with Rein Narma, a young tech who had proven his skills by building a recording mixer to use with Les' new Ampex 8-track. Les got a list and bought all the parts so Rein could assemble his new exciting design, but before Rein could put the darn thing together, another friend of Les' named Sherman Fairchild hired Rein away to have him build what would become the 670 and its mono counterpart, the 660, at his Fairchild facility in New York. Les never got his compressor built, and the parts just remained in a box in his basement for years!



Analogue Tube's AT-101, showing off its colorful wiring—as close as you can get to the real thing

Fairchild licensed Rein's compressor design, and a handful of 660s and 670s were manufactured in the early 1960s. Fairchild's mastering equipment was in competition with the Scully and Neumann gear of the same era, but the Fairchild compressors managed to jump into other audio processing applications and became very desirable for recording popular music. Paul McCartney and Geoff Emerick were rumored to have used their Fairchilds across nearly everything they recorded. "Grey Ghost" Jim Scott (Barenaked Ladies, Red Hot Chili Peppers, Sting) would never leave the house without his 660, and, of course, Jack Joseph Puig (Weezer, Green Day, Jellyfish) drove his 670 like a rented mule across his major mixes. In fact, JJP has a terrific, modern, digital version of the Fairchild 670 in his current Waves JJP plug-in collection today.

REIN-CARNATION

Names like DeMaria, Fairman, Esoteric and D.W. Fearn come to mind when looking for a modern analog equivalent to a classic Fairchild compressor. But the one unit that seems to be the most honest, accurate reproduction of the stereo 670 seems to be the Analogue Tube AT-101. Just like the original, the AT-101 uses eight of the 6386 tubes. In fact, the developer behind the AT-101, Simon Saywood, worked directly with JJ Electronics to put the impossible-to-find 6386 back into production. Of course, you'll need to pump up your wallet to put an AT-101 into your rack. They list for around \$18k on a day that the UK exchange rate is good.



Sylvia's vintage Fairchild 670 compressor, manufactured circa 1960

Photo: Sylvia Massy

Fueled by hazy stories of discovering a real vintage Fairchild 670 being used as a doorstop, I thought if I just put my mind to it I'd eventually find one. This quest took me to some pretty scary places. Finally I just couldn't wait any longer, biting down hard and paying a boatload for a sweet beautiful 670 in the mid-'90s. I never looked back. Today, my 670 gets used on almost every session, either for recording a good squashy drum room or finishing a mix by patching it across the stereo bus. So everything worked out just fine in the end.

One last thing to you fellow treasure-seekers. Forget trying to find Mr. Williams in Joliet. Because his name isn't really Mr. Williams and he doesn't live in Joliet. You gotta be kidding. You really thought I'd give up one of my best sources? You should know me better by now!

The unconventional producer and engineer of artists including Tool, System of a Down, Johnny Cash, Red Hot Chili Peppers, Tom Petty and Prince, Sylvia Massy is a member of the NARAS P&E Wing Steering Committee and Advisory Boards, and is a resident producer at [RadioStar Studios](#) in Weed, Calif.