First word

Greg Simmons

The boiled frog returns, diminished...

"I'm not trying to tell you what to write," smirked Chris, slapping the page onto his desk in mock disgust, "but the title sucks." Good old Chris, always a reliable sounding board. "It belongs in a cryptic crossword or a French cookbook, not AudioTechnology!" he scoffed. "But it's a sequel", I explained. "Sequel to what? Your other Boiled Frog story? You haven't finished writing that one yet. You can't release a sequel before finishing the first part!" he yelled. "Why not?" I protested, trotting off down the corridor, "George Lucas did..."

Twelve months ago I noticed faint brown rings forming on the circumference of my ATCs' tweeters, where the dome meets the voice coil. They were very subtle at first, but gradually became more prominent. I hadn't noticed any obvious change in sound quality, and figured it was a harmless discolouration in the dome's fabric. But recently, during an AudioTechnology Spontaneous Human Consumption event, Rick Dowel of Control Devices and AudioTechnology's Scott Christie dropped in for a listen, and both expressed their concern over the sound. Rick has never been a fan of the ATCs, and was the importer of a competing brand of studio monitors, so I took his criticisms with a grain of salt. But then Scott chimed in, commenting on how they weren't sounding right to him, either. I trust Scott's hearing implicitly, so his comments added validity to what Rick was saying. The whole evening was quite unnerving, and resulted in an argument between Rick and I regarding whether the problem was the monitors or the acoustic treatment of the room. I was banking on the room acoustics, because I could see no reason why the monitors would not be performing to specification.

Could there really be something wrong with my monitors? After listening critically for a couple of hours (something I had not done for a long time), I raised some doubts of my own. The stereo imaging wasn't as good as it used to be, and there was a general lack of low level resolution. Some of the ATCs' magic was definitely missing.

A week later I had the good fortune of lunching with ATC's founder, Bill Woodman. I mentioned the brown rings and received one of his typical matter-of-fact responses: "Osmosis". Osmosis, Bill? "Osmosis. The ferrofluid has leached out of the magnetic gap and into the fabric of the dome tweeter. It looks like rust stains, which in fact it is. It very rarely happens, and we don't know what causes it. But it's happened to both of your tweeters simultaneously, which suggests it might be environmental..." I explained to Bill that my ATCs had spent a long time in AudioTechnology's office above the shores of Dee Why beach, where the ocean breeze blows in a constant stream of salt air. Perhaps that would trigger it? "Whatever the cause, osmosis is your problem", said Bill thoughtfully. "Osmosis. You ought to replace those tweeters immediately. You won't be hearing the true performance of your monitors until you do. Oh, and if you're going to write about this, Greg, please mention that we don't manufacture those tweeters ourselves!"

I followed Bill's advice and the ATC magic came back. I couldn't believe the improvement. I also couldn't believe that such a dramatic loss of quality had eluded me for so long – an imperceptible degradation, slipping beneath my radar each and every day, and building into one big loss of quality. It needed someone with fresh ears to point out that my monitors were not sounding right.

Scientists call it the Boiled Frog Syndrome. If you drop a frog into a pot of hot water, it will try to get out. However, if you drop that frog into a pot of cold water and slowly turn up the heat, it will stay there until it is boiled alive. The frog's nervous system cannot sense very slow changes in temperature, and so it feels no need to panic. The same logic applies to human perception: if you change something slowly enough, people won't notice the difference.

After getting my ATCs back to spec, I noticed how poor the rest of my system had become. Little changes that didn't seem to make any difference at the time (obviously due to the bad performance of my monitors) were now being revealed. I've upgraded to a balanced version of The Pot (see First Word, issue 10), replaced many of my cables, and I'm currently auditioning two excellent 24-bit 96k D/A converters: a Weiss DA1 and a Prism Sound DA2. Each of these changes offers a very subtle improvement, some are almost imperceptible on their own, but collectively, they add up – both sonically and financially. You have to spend a lot more money to get a little more improvement. The Law of Diminishing Returns conspires with the Boiled Frog Syndrome!

My studio is sounding better than ever, for now. Are there any boiled frogs in your studio? Think about each piece of equipment you own. Is it working to spec? Is it in need of repairs or maintenance? Are you getting full performance? A bit of critical listening never hurt anybody...

I'd like to end here, but there's more. This is actually the sequel to a column titled 'Boiled Frogs & The Golden Years of Hollywood', which discusses how engineers and musicians often still favour the sound of vintage audio equipment, despite the enormous advances made in circuit components and designs over the last 50 years. In our quest for less noise, wider bandwidth, lower distortion, and cheaper manufacturing, we've lost some of the special magic that made those old designs sound good. The loss has occurred very slowly over time, an imperceptible amount with each new generation of equipment. It's the Boiled Frog Syndrome applied on a grand scale to audio equipment design.

So, why haven't I finished that column? Because it also discusses how the market has inverted to favour the manufacturers, and exposes a number of outright lies told to ignorant end-users by manufacturers whose best interests are served by maintaining the market's ignorance. I'm proud of the effort, but our legal advisers are less than impressed. For now, at least, it must remain in AudioTechnology's X files...