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SOUND ADVICE By Chris Denison · Photo By JP Van Swae

"Pop quiz: You have two motorcycles that register 100 decibels each. How many 93-decibel motorcycles does it take to produce as much noise as the two 100-decibel bikes?"

I, along with the rest of the class, stared blankly back at my instructor. He patiently repeated the question, and I felt my head tilt slightly, similar to the expression a dog makes when you attempt to explain why it does not need to be eating bacon. My peers and I were sitting in a state-sponsored class officially known as "Measurement of Exhaust Sound Pressure Levels of Stationary Motorcycles." We were being taught how to properly perform motorcycle sound tests, and prior to this last question I was pretty confident that I understood the material. But as soon as the math started flying, I felt my cognitive engine-braking kick in.

Presented by Chris Real, president of DPS Technical and hands-down the most knowledgeable sound expert in the business, this particular

"AND AT THE VERY LEAST, THIS TRAINING

course was structured to help students understand sound, learn how to take an accurate measurement and also have the ability to provide guidance to those whose bikes are over the sound limits. The majority of the class was made up of members of various off-road clubs and AMA districts, but a variation of this same course is also taught to law enforcement officers and park rangers. The thinking is that by offering this training to civilians like myself, the state won't have to put so many resources toward enforcement and can thus save money and chase real criminals. Paid for by the state, this class is an example of our OHV

After gaining a basic understanding of sound—how it travels, what frequencies are detectable and how much it dissipates—we were taken through the safe and accurate setup of a motorcycle sound test. As a veteran off-road enthusiast and an absolute technical genius, Real's experience in the field was made evident to the class by way of his strict and repeatable protocol for collecting accurate data. He also provided several useful hints—like using pancake batter instead of lime to mark off a sound-check area (beware of fat squirrels)—as well as an understanding

of how communities react to motorcycles (generally, badly) and how different types of mufflers (reactive and reflective) work to minimize sound. The information was flying at us like roost off a brand-new knobby, and having pulled all of my mental tear-offs

at that first crazy question I was just trying to take it all in. Several hours and some hands-on experience later, we were

officially certified as sound testers. Successful completion of this training will help promoters keep race day noise to a minimum, and the things I learned will help *Dirt Rider* stay informed of

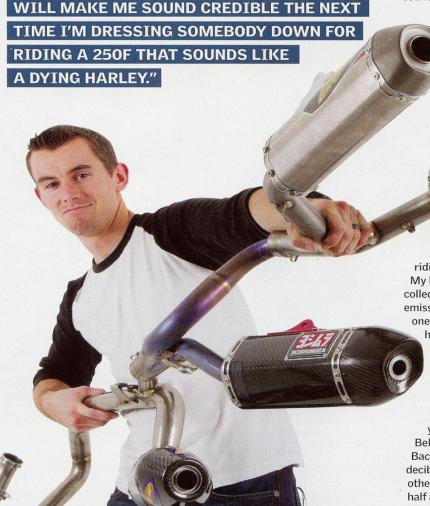
sound issues both during testing and in real-world applications. And at the very least, this training will make me sound credible the next time I'm dressing somebody down for riding a 250F that sounds like a dying Harley.

My biggest takeaway from the class is this: When our industry made the collective switch from two-strokes to four-strokes, we effectively traded emissions for sound as our biggest issue. Excessive noise is the number one reason why our sport is being targeted, because if people can't

hear us, then they won't feel nearly as bothered by the way we enjoy the outdoors. It's going to take strict self-management to minimize excessive sound, and this can absolutely be done without compromising performance or fun. You can do your part by running a properly-maintained and quiet muffler, by always using a spark arrestor when riding off-road and by educating others as to the disastrous effects of running an overly loud machine. Better yet, take a class like Real's and start enforcing sound in your area.

Believe me, it'll make a difference.

Back to that brain-busting question: The combined sound of two 100-decibel motorcycles is more noticeable than *eight* 93-decibel machines. In other words, two blown-out mufflers will produce more noise than nearly half a starting gate full of compliant bikes. Off-road riding is quite possibly the greatest sport on earth, but facts like this make it clear that we're going to have to manage ourselves, and that involves being quieter.



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