

On Sunday, March 21, 2021, the monthly meeting of the Atlanta Audio Club was held via “Zoom” due to the Covid-19 pandemic. The meeting featured Bill Dudleston of Legacy Audio. As in meetings past, Steve (club president) had a list of prepared questions from club members on various related topics for Bill. The meeting was attended by about 20 participants. It started at 3 pm and lasted until 5:30 pm.

Due to the nature of this meeting, these minutes will simply list the discussions in roughly the order they occurred.

Bill first gave us a quick history of his work in the audio field. He is not a musician but has worked as a recording engineer. He first got into audio building Heathkit electronic kits as a teenager. He comes from a family of carpenters, so he also built his own speakers.

Bill believes that it is important to isolate the speakers from their environment (the listening space).

Bill said that advances in audio make it easier to build better quality for less money.

What are the specific sound characteristics he designs for? He wants to have neutral speakers with tone accuracy and make sound in the correct time domain, there is more clarity in the sound with the proper time domain. A new 2 channel product coming from Legacy will help do this.

Bill mentioned that many performers have their favorite microphones they want to record with. For example, Lyn Stanley who he has worked with. Different microphones produce different sounds. Some performers, such as Madonna, had to develop her voice over the years.

Changing technology is changing the way speakers sound and are voiced. Speaker design process is first getting the right transducers. Bill is constantly working on designing new transducers. He showed us a new woofer design he is working on. He has other manufacturer’s drivers to look at to see what he could improve. He has even looked at woofers for cars (“boom” cars) for ideas. He also starts with a performance goal, then the enclosure size. This is how he came up with his dual “tweeter” driver, which uses a ‘V’ shape.

The challenges of manufacturing in the US includes supply issues, but Legacy is a “vertical” company that lessens these. Covid-19 has not impacted Legacy too much, although they did have to replace some workers who took too much time off (blaming Covid-19). They do outsource the assembly of their drivers, since the gluing process is an art. Legacy “emulates” David Wilson’s cabinet work.

Legacy started out as a mail order firm. He has less dealers now (mainly due to closures), and right now there is no Legacy dealer in the Atlanta area. He considers customer service as very important, so there is no big discount for Legacy products. He thinks Legacy offers high value.

Bill was asked about the advantages and disadvantages of different amplifier designs. He said they all work if kept within their limits. He noted that 50 folks (not at Legacy) are working on improving the sound of Class D amplifiers. He said that consistency (of sound) and reliability of amplifiers are very important!

Bill was asked about ferro-fluid design for speakers. Yes, he has used this technique in the past, but there is a long term issue with the oil (fluid) drying out. He has not used this for a while.

An issue with speakers is the voice coils getting too hot, and that the material used for the spiders for the drivers is critical for performance.

How do you divide your budget when building a system? He said to be sure to have money for a subscription service and for other music program material. Speakers are usually the weakest link in the system chain, so choose these wisely. He says the amplifier chosen is not as important but should mate well with the speakers. What is very important is the turntable stylus and turntable isolation.

The Wavelet from Legacy is a multi-use processor. It contains a preamp, a DAC, and time domain processing. It is customizable for each customer and can be (now) used in any system. They use data from the customer to fine tune the Wavelet for their system. Another product called the WaveLaunch will be a “stripped down” version of the Wavelet which will have 4 channel input and 8 channel output with DSP processing and a parametric equalizer. The Wavelet performs time domain processing not just at the listening position, but the listening “path”, which means more freedom of head movement and listening position in the room.

Sealed box or ported box? A car is a sealed box (essentially). Their Focus model has less port noise due to its size. Legacy does use passive radiators instead of ports in some of their products.

Finally, Bill “deep down” loves to have the pros like his products. He likes it when they tell them that the music “sounds real”.

The club thanks Bill a whole lot for his time and insights and spending extra time with us!

Minutes written by Thomas Horner, Secretary, Atlanta Audio Club.