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Subject: Re: Acoustic research

Posted by [granch](#) on Tue, 31 Jul 2007 03:13:52 GMT

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To tweak your answer a bit: The AR-1 hit the market in 1955. I was at the audio show in NYC for its debut (on TDY from the Signal Corps Engineering Labs at Ft. Monmouth). It had the 12 inch "air suspension" speaker invented by Edgar Vilchur who realized that air was much more linear in compression than conventional suspension designs were. The cone had a natural free air resonance around 10 hz which was raised by the sealed box to around 30 hz. It also had an Altec 755 as the midrange/tweeter so that most of what you heard was the Altec/Western Electric (Bell Labs) design. The AR-1 blew everyone's minds. The favorite disc playing on that speaker and every other speaker in the show was "Fabulous Eddie Osborne" playing a humongous theater pipe organ. (Vol.1). I still play several of his tracks every year in my organ concerts for our lake. I first heard the 755 in the Audio Visual Ed Dept at the UofMN about 1950. It was a wonder! The room had a big monitor speaker of local build and the 755 blew it away. The AR-2 had a 10 inch woofer and the AR-3 a 12", but by then Vilchur had dropped the 755 to save money. It took him a long time to equal it. I have a pair of AR-3a's which still sound pretty good. He hit his peak with the AR-9 of which I have a pair. The AR-90 was a scaled down version of the AR-9. I gave a pair to my daughter. Vilchur's patent on air suspension was successfully challenged as "obvious" - which of course it had never been. -Dick

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