Subject: Lone Star Bottlehead Meeting Pictures Online
Posted by FredT on Sun, 05 Nov 2006 10:46:32 GMT
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See the link below for pictures from the Nov 4th Lone Star Bottlehead Meeting in San Antonio. The AudioRoundTable Group Build Line Arrays were played in public for the first time at the meeting, and they were well received.
Lone Star Bottlehead Pictures

Subject: Re: Lone Star Bottlehead Meeting Pictures Online
Posted by colinhester on Sun, 05 Nov 2006 14:59:35 GMT
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Fred, Can you please compare the sound of the GB Line Arrays vs. the Straight 8s? Thanks you.....Colin

Subject: ART Arrays Compared to Straight 8's
Posted by FredT on Sun, 05 Nov 2006 16:09:48 GMT
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I listened carefully to the differences and will give my subjective impressions, but first I'll point out some design similarities and differences. Both speakers obviously use an array of eight approximately 5" woofers with a point source 1" tweeter. Both woofer arrays are wired for 16 ohms, and there the similarities end. The Straight 8's MCM woofers and tweeter are metal cone/dome while the ART Array's Dayton woofers appear to be doped paper, and the Vifa tweeter is a silk dome. The MCM woofers are advertised as 5", but the cone diameter inside the rubber surround is only 3". The Daytons are advertised as 5.25", but the cone ares is a full inch greater than the MCMs at 4". This gives the 8's about 56 sq in total radiating area while the Daytons have almost twice that much at 100. The MCM titanium dome tweeter's resonant frequency isn't advertised, but it appears to be in the 1.5khz area. Sensitivity is 96dB. The Vifa's resonant freq is 650hz, and its sensitivity is 93.5dB.Bottlehead Corp. designed the 8's so a pair could be built from one sheet of mdf, which limited the height to 48" and requires tweeter mounting at the top of the array. I designed the ART arrays with the tweeter at ear height (35"), which requires a 64" high enclosure but permits tweeter placement in the middle of the woofer array. The 64" enclosure gains quite a bit of interior volume (4 cu ft) which is needed for the larger ART array woofers to realize their full bass potential.The Straight 8 uses a 3rd order woofer crossover; the tweeter crossover is a 2nd order with a notch filter. I believe the crossover frequency is about 3.5khz. The ART array's prototype crossover is 2nd order for the woofers and 1st order for the tweeter at about 2.5khz. The final crossover, which Wayne will design and test, may be very different.Now the sound: In a few words, the ART arrays are more neutral across the full spectrum, but with

greater bass impact, and about 3dB greater sensitivity.The most obvious difference is that the Straight 8's are brighter than any other speakers we auditioned at the meeting, while the ART arrays are slightly laid back, especially in the 2khz to 3khz range. I would have padded the 8's tweeter a bit, but some people like a bright speaker. The second standout difference is in the bass. The ART array's woofers move quite a bit more air, and you can hear it clearly in the strike of the timpany in a classical recording we heard and with Brian Bromberg's bass in his "Wood" album. The ART arrays give you a taste of that "feel-it-in-your-chest" bass I'm accustomed to with my big Selah arrays; the 8's don't. Another clearly audible difference is that the ART arrays are quite a bit more sensitive; about 3dB to my ears. The ART woofers are rated only one dB greater sensitivity (88 versus 87). Possibly the greater enclosure volume plus the lower order crossover also contributed to the difference.So which did I prefer? Ask my wife whether her children are prettier and smarter than our neighbors' and you'll have my answer too.