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Subject: Re: Resonance

Posted by [Wayne Parham](#) on Mon, 08 Nov 2004 01:31:05 GMT

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Hi Tom, Yes, it's two ways of saying the same thing. I think sometimes people get a negative impression of certain traits that "just are." It's like talking about how friction is bad because it wears things out. But without friction, there would be nothing to push against. Same thing with properties like "resonance" or "group delay" or "phase." Sometimes they are excessive, but sometimes, they aren't. Your illustration is a good one: While one might associate the increasing group delay numbers with lower frequency alignments with a "problem", one has to remember that in the context of the wave period, a nominal 2nd order alignment at 40 Hz and another at 20Hz, both exhibit a 180 degree rotation in phase through resonance while (because of the period) the lower one has twice the GD. Wayne

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