Subject: min size of port
Posted by Observator on Wed, 10 Oct 2001 08:14:22 GMT
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Hi Wayne,I would ask you about port dimensions of Pi Alignmodel: back to my PiAfterburner Eminence Beta12LTA:Fs=45,Qts=0.51,Vas=2,4548cuft, PiAlign give me Ve 2,454828132 cuftFre 33,08823529 HzQe 1,388888889 -to achieve exact Fre and Qe for this box, the optimal port Diameter is 2.408" and Length is 2.515" (calculated in excel).Use of a larger port cause rise of the Qe/Fre.Using this port dimensions in other software (WinISD for example)show me the red numbers for this port: 0,41 mach in Vent, thatmeans noise or Doppler distortion risk.Have I to consider this risk or is it something differentfor the Pi align approach ?Thanks in advance,O'Tor

Subject: Re: min size of port
Posted by Wayne Parham on Wed, 10 Oct 2001 14:33:27 GMT
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Depends on the displacement. The Beta LT has peak displacement volume of 42cc, which is only 2.5 cubic inches. That's not very much to push through a 2" diameter port, so airspeed won't get anywhere near 40% mach, which is 300mph and 480kph. By the way, maximum airspeed is at fb, and falls off above that.