

Pop-pop competition (!)

By Jean-Yves

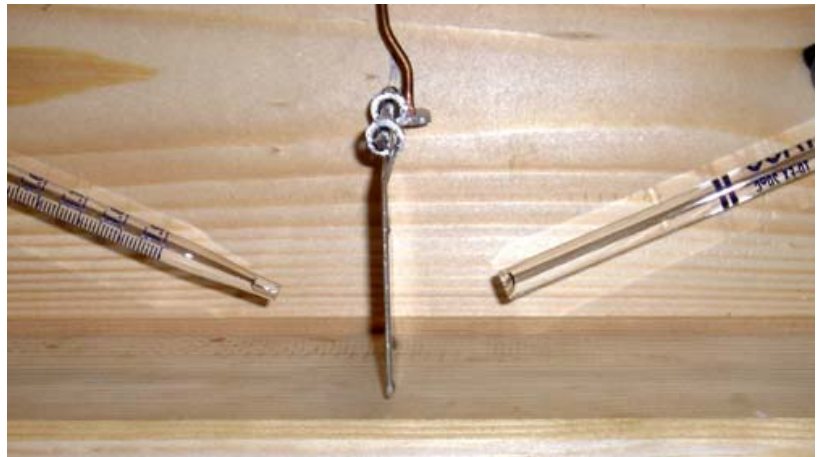


On my left hand side a pop-pop engine. On my right hand side another one. Same volume (4cm^3), same pipe diameter (3.85mm) and length (145mm). In between: a thrust measuring device.



The competition begins... And the winner is...

The left one... using a convergent nozzle (Diameter 1.8mm).



Note: On both sides the conditions were assumed to be the same but couldn't be guaranteed identical, therefore several tests were run. The drums (shortened test tubes) were interchanged to eliminate any possible volume difference, and several candles were burnt. Every time the thrust was slightly higher on the convergent nozzle side. Really slightly higher. This test was just a game. We think that a bigger difference could have been measured by using a not so narrow nozzle.