Instrument: Clarinet

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Article Title: The Physics of a New Clarinet Design

Author: Arthur Benade and Douglas Kefe

Summary (Outline form):

* Tuning a clarinet
	+ - * Play E5
			* Make sure embouchure is set
			* Play E5 down to B4 relaxing embouchure
			* Center each pitch
			* Don’t pitch too much
			* Play scale and try tightening embouchure
			* Notice reed resonance
			* Reed-mouthpiece ratio is not constant throughout range
			* Lots of physics behind all of these embouchure and pitch changes
* Design Considerations for the NX Clarinet
	+ - * Register hole system
				+ Return to old small tone holes-for different tone
				+ May sharpen tone and change necessary air flow
			* Non-linear Effects
				+ Effects in air column and tone holes
			* Conical Terminations and flaring bells
				+ Acoustics of air and bell
* Experiments on the NX Clarinet
	+ - * Experiments through playing conditions
			* Test different registers
			* Find best acoustical range