

Energy Pipe Math Reveals Mechanics Of Energy Generation

by

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Recent inspiration concerning field equations involving electric and magnetic energy density have provided a simple proof of why energy builds inside of an antenna mast pipe when excited acoustically. The antenna mast pipe consists of three ten foot galvanized thin wall pipes. The bottom section having a 2 and 1/4 inch diameter. The middle section has a 1 and 3/4 inch diameter and the top section has a 1 and 1/2 inch diameter. The middle section is inserted into the bottom section so that there is 8.31 feet from the bottom of the 2 and 1/4 inch diameter pipe to the step diameter change to 1 and 3/4 inch diameter in the middle mast pipe. Likewise, a distance of 8.31 feet from the bottom of the middle pipe section to the bottom of the transition from 1 and 3/4 inches of the middle pipe to the 1 and 1/2 inch section of the top pipe.

The top pipe is plugged with a hard plastic cap at the upper end. It was observed that when the pipe was struck near the bottom end of the bottom pipe with a short length of 2" by 2" wood, a voltage pulse appeared on an oscilloscope screen of several tenths of a volt. This was measured as an echo pulse also at the bottom end near where the pipe was struck. The entire assembly was aligned East-West and supported by hard plastic saw horses.

The next testing phase involved building a speaker frame that focused the output of the speaker into a plastic cone that had the small end of the funnel inserted several inches into the bottom end of the bottom mast. The speaker frame held the speaker and also fit around the bottom pipe with an extension brace to hold it securely. The speaker was then connected to an audio power amplifier which was driven by a variable frequency audio generator.

The fundamental idea is to generate a standing acoustic wave train inside the pipe assembly that is equal to the free space wavelength of the hyperfine frequency of Hydrogen. It is shown in my previous work that the hyperfine frequency of the hydrogen atom is fundamental to the generation of the proton pressure wave¹ that sets the lowest energy level of the Bohr hydrogen atom. Then *all* protons have this pressure wave that is normally a standing wave that does not radiate. The standing wave is established between the proton and the ground state electron and thus no energy radiates. If the balance of the standing wave is disturbed by an outside influence, it radiates. When balance is restored from energy space, it ceases to radiate. This occurs in a quantum frequency burst equal to 1.420405 GhZ. The synchronized wavelength acoustic standing wave will interfere with the hyperfine standing wavelength and cause energy to be released into the pipe that will build the energy level of the acoustic wave and vis-versa. When I adjusted the frequency upwards above 400 Hz, I heard a roaring sound that was rapidly becoming louder and it appeared to be coming from above the pipe assembly. I do not know how far up the sound was but it alarmed me to the point of shutting everything down and the roaring ceased abruptly after that. My wife yelled at me from inside the house, "what are you doing out there"? I did not have a good answer.

The grayed areas below (on pp 1&2) are SI standard parameters used for actual value computations. The yellow areas are important final results. Equations 4 and 5 are standard expressions for field energy density² of the electric and magnetic fields respectively. Note that eq. 9 and 10 introduce Einstein's $E=mc^2$ in a straightforward manner. Finally, the sub-radius is derived that is exactly equal to the n_1 Bohr radius divided by $4/\pi$. This is derived quite separately from other methods previously introduced in my work or other sources that I know of. Undoubtedly, the reader will associate the $4/\pi$ to the pitch of the Grand Gallery of the Great Pyramid and also that it is equal to the square root of the Golden Ratio.

EnergyPipeProof.xmcd

1

$$S = \frac{\text{Energy}}{\text{length}^2 \cdot \text{sec}} \quad \text{Poynting Vector in watts/meter}^2 \quad 1)$$

$$\text{Press} = \frac{\text{Energy}}{\text{length}^2 \cdot \text{sec}} \cdot \frac{\text{sec}}{\text{length}} \quad \text{Field Pressure in Newtons/m}^2 \quad 2)$$

Electric field energy density in joule/length³

$$\text{Let, } \epsilon_0 := 8.854187817 \cdot 10^{-12} \cdot \text{farad} \cdot \text{m}^{-1} \quad \text{where, m = length in meter units and} \quad 3)$$

$$E_V := 1 \cdot \frac{\text{volt}}{\text{m}} \quad E_{DE} := \frac{1}{2} \cdot \epsilon_0 \cdot E_V^2 \quad (2) \quad E_{DE} = 4.4270939085 \times 10^{-12} \cdot \frac{\text{joule}}{\text{m}^3} \quad 4)$$

Magnetic field energy density in joule/length³

$$\text{Let, } \mu_0 := 4 \cdot \pi \cdot 1 \cdot 10^{-07} \cdot \text{henry} \cdot \text{m}^{-1}$$

$$B := \frac{\text{volt} \cdot \text{sec}}{\text{m}^2} \quad E_{DM} := B^2 \cdot \frac{1}{2 \cdot \mu_0} \quad (2) \quad E_{DM} = 3.9788735773 \times 10^5 \cdot \frac{\text{joule}}{\text{m}^3} \quad 5)$$

Note that ϵ_0 and μ_0 are the electric permittivity and magnetic permeability of a field in free space, respectively. E_{DE} and E_{DM} are calculated solely for the purpose of demonstrating the correct unit results. Also, note that:

$$\frac{\text{joule}}{\text{m}^3} = 1 \text{ Pa} \quad \text{where Pa is the unit of newton per square meter and is pressure.} \quad 6)$$

The following equates kinetic energy per cubic meter to a shorter form as:

$$\left(\frac{1}{2} \cdot \text{kg} \cdot \frac{\text{m}^2}{\text{sec}^2} \right) \cdot \frac{1}{\text{m}^3} = 0.5 \text{ Pa} \quad \text{simplifies to} \quad \frac{\text{kg}}{2 \cdot \text{sec}^2 \cdot \text{m}} = 0.5 \text{ Pa} \quad 7)$$

The magnetic potential known as the A vector has the units of (volt x seconds)/meter.

$$\frac{\Delta \Delta \text{kg}}{2 \cdot \text{sec}^2 \cdot \text{m}} = \frac{1}{2} \cdot \epsilon_0 \cdot \frac{\text{volt}^2}{\text{m}^2} \quad \text{OR} \quad \frac{\Delta \Delta \text{kg}}{\text{m}} = \epsilon_0 \cdot \left(\frac{\Delta \text{volt}^2 \cdot \text{sec}^2}{\text{m}^2} \right) = \epsilon_0 \cdot \Delta A_{\text{vec}}^2 \quad 8)$$

Notice that the 1/2 terms canceled out. The A vector term is squared and introduces a non-linear aspect to a changing mass with distance. Thus is the delta delta mass term. Next, dividing both sides of the above equation by meter squared, we arrive at:

2

$$\frac{\Delta\Delta\text{kg}}{\text{m}^3} = \epsilon_0 \cdot (\nabla \times \Delta A_{\text{vec}})^2 \quad \text{leads to} \quad \frac{\Delta\Delta\text{kg}}{\text{m}^3} = \frac{1}{\mu_0 \cdot C^2} \cdot \Delta B^2 \quad 9)$$

Where C is the speed of light in free space.

Finally, we solve for an expression that yields E = mass x C² rather directly.

$$\frac{\Delta\Delta\text{kg} \cdot C^2}{\text{m}^3} = \frac{\Delta B^2}{\mu_0} \quad \text{leads to} \quad \Delta\Delta\text{kg} \cdot C^2 = \left[\left(\frac{\Delta\text{volt}^2 \cdot \text{sec}^2}{\text{m}^4} \right) \cdot \text{m}^3 \right] \cdot \frac{1}{\mu_0} \quad 10)$$

Magnetic flux is volt times time and μ₀ is henry/meter. Then:

$$\Delta\Delta\text{kg} \cdot C^2 = \frac{\Delta\text{volt}^2 \cdot \text{sec}^2}{\text{m}} \cdot \frac{\text{m}}{\text{henry}} \quad \text{or,} \quad \Delta\Delta\text{kg} \cdot C^2 = \frac{\Delta\Phi^2}{\text{henry}} \quad 11)$$

where Φ is magnetic flux in webers. volt·sec = 1·weber

The above applies directly to a situation of increasing density due to reduction of volume along a line of action by a moving sound wave for example. This occurs in a pipe which is reducing its diameter per unit length.

Finally, the following arrives at a startling conclusion.

Let: $\Phi_0 := 2.067834610 \cdot 10^{-15} \cdot \text{weber}$ Quantum fluxoid in units SI

$m_e := 9.109389700 \cdot 10^{-31} \cdot \text{kg}$ Electron rest mass

$C_{\text{vel}} := 2.997924580 \cdot 10^{08} \cdot \text{m} \cdot \text{sec}^{-1}$ Speed of light in free space

Also, since μ₀ = henry/meter: $L_{\text{new}} := \frac{\Phi_0^2}{m_e \cdot C_{\text{vel}}^2}$ Now let: $a_0 := 5.291772490 \cdot 10^{-11} \cdot \text{m}$

which is the n1 energy level of Hydrogen radius. Next, a new sub-radius is found:

$$\boxed{\text{radius} := \frac{L_{\text{new}}}{\mu_0}} \quad 12) \quad \boxed{\frac{a_0}{\text{radius}} = 1.2732395363} \quad 13) \quad \boxed{\frac{4}{\pi} = 1.2732395447} \quad 14)$$

This proves that there is a fundamental sub-radius to the n1 energy level of Hydrogen and the standard radius divided by the sub radius is exactly equal to the square root of the Golden Ratio. Also the case is made for why the Great Pyramid's Grand Gallery rises at the 4/π angle.

QED

END

References:

1. http://www.electrogravity.com/HydDisEnergy/HydDisEnergy_1.pdf
2. Beiser, Arthur, Modern Technical Physics, Copyright 1966, pp 385 and 458.

Post Comments:

There is a chance that if perfect resonance between the wavelengths acoustic and electromagnetic is achieved, an energy inrush and corresponding cyclone action may be dangerous to personnel safety. This is something I have some reservation about. When the evidence of the huge explosion in the Kings Chamber of the Great Pyramid at Giza is considered, I cannot ignore the likely hood of something like that occurring during the next test. Also must be considered possible high voltage phenomena such as occurred many years ago when I was erecting a similar mast for an amateur radio antenna. Equation 10 above has voltage as an active parameter as shown in the generation of the A vector. In tornados, it is well known that huge voltages are generated as evidenced by the lightening flashing about in them. I am pretty sure that the testing will go forth however. J. E. Bayles