

## Scalar Electromagnetic Energy, Making STAR TREK Physics Real

William S Alek

CEO, Intalek Research, Sarasota, USA

### \*Corresponding author

William S Alek, CEO, Intalek Research, Sarasota, FL 34231-4807, USA.

**Received:** February 09, 2024; **Accepted:** February 15, 2024; **Published:** February 22, 2024

Back in 1997, I first heard about energy researcher, Tom Bearden on the Art Bell show, "Coast to Coast AM." Tom spoke about Free Energy and Anti-gravity. He also spoke about an upcoming conference featuring him lecturing about this incredible topic. What is Free Energy and Anti-gravity I thought? Everyone heard of or perhaps seen a UFO flying about in our skies above? But how does this amazing technology work? So, without question, I had to go to this conference. I booked a flight, made my hotel and car reservations and off I went on this grand adventure not knowing where this was going to lead? Art Bell frequently mentioned on his late-night radio show, "You want to take a ride?"

I attended the full conference, and I was blown away by Tom's in-depth knowledge regarding this incredible subject material. When you "walked away" after this conference you had the feeling, "No Problem, I'll have a working Free Energy device working on my test bench in no-time." Wrong! Tom managed to leave out critical information that made the task rather difficult at the time. He designed the lecture in as such a way as to protect his intellectual property and for him wanting a big DARPA contract to develop the technology for the US government. It never happened! Why? DARPA already developed the technology years ago, or most likely decades ago. It's Top Secret? Maybe, according to Ben Rich, ex-director of Lockheed, Skunk Works.

What Tom lectured on is called Scalar Electromagnetics. What is Scalar Electromagnetics? According to Tom, the most important concept he spoke about is what is known as the Zero Vector. The Zero Vector is where two like fields, could be electric, or magnetic, meet head-on. For example, take two like charges in close opposition to each other, and oscillate them. Where the two fields meet in vector mathematics terms is known as the Zero Vector. This Vector is also known as an Equilibrant Vector.

An English self-taught mathematician and physicist comes along by the name of Oliver Heaviside in the late 19th century. He completely rewrites or simplifies what are known at the time as the Maxwell Equations. The Maxwell Equations were originally written in Quaternion mathematics, which had many degrees of freedom. The simplification process involved taking the Zero Vector in Electromagnetics and making it zero or empty. Simple right? In doing so, Heaviside completely removed the Scalar component from the Maxwell's Equations. So, in regard to this component, Heaviside is quoted as saying, "Mystical, and should

be murdered from the theory." In one fell swoop, the concept of Gravity or Anti-Gravity represented as a Scalar function was completely removed from Electrodynamics. This was probably the biggest FAILURE of modern science ever! Tom said, "Oliver Heaviside threw the Baby out with the Bath Water." I say it's, "The main reason why we don't have Star Trek today." So, the original Maxwell Equations written in Quaternion form, which included the Scalar component, has a Zero Vector entity that is not empty! This is very important.

So, given that the original Maxwell Equations were written in Quaternion form, we can now write the complete Scalar Wave Theory that Tom spoke about in Figure 1 below:

Let  $q_n = w + ai + bj + ck$  where  $n = 1, 2$

So,  $q_1 \times q_2 = a^2 + b^2 + c^2 + 0 \text{ vector}$

Simplify:

$$q_1 \times q_2 = \underbrace{A^2}_{\text{SCALAR ENTITY}} + \underbrace{0 \text{ vector}}_{\text{ZERO VECTOR ENTITY}}$$

Use an input Sine Wave,  $\sin(\omega t)$ :

Let  $q_n = A \sin(\omega t)$

So,  $q_1 \times q_2 = \underbrace{A^2 \sin^2(m\omega t)}_{\text{SCALAR WAVE INSIDE}} + \underbrace{0 \text{ vector}}_{\text{VACUUM ENGINE}}$  where  $m = 1.5$

**Figure 1:** Scalar Wave Theory

Tom called the Zero Vector a Vacuum Engine. The Vacuum Engine contains the Scalar Wave function. This wave function is created by  $q_1$  and  $q_2$ , which Tom called a Pump Wave. We take the cross product of these pump waves, or sine waves. For the circuit to properly operate, it must be operated in resonance with minimum input current. Tom called this device a Phase Conjugate Mirror Resonator or a PCM Resonator. The Scalar Wave that is produced is both Time-Reversed and Longitudinal meaning that we're producing an Anti-Gravitational Wave. I produced a simulation on MathCAD of a  $q \times q$  solution in Figure 2, which shows what to expect:

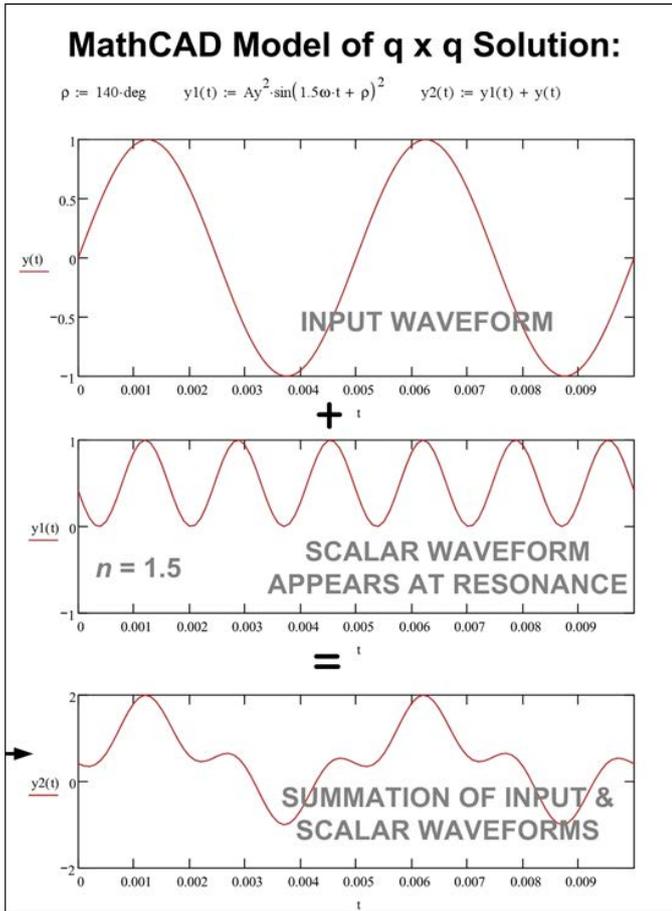


Figure 2: MathCAD Modeling

What is of particular interest is the Scalar Waveform, which appears at resonance in Figure 2. It's represented as the  $\sin^2$  term and is correctly identified in Maxwell's calculation. The Input Waveform plus the Scalar Waveform produces the Output Waveform,  $\sin + \sin^2$  term. The actual Waveforms are what I see on the Tektronix TPS 2024B Oscilloscope shown below in Figure 3. It's important to note that the Scalar Waveform is time-reversed. This means the Waveform is moving backwards, not forward in time. The Waveform is, therefore, Anti-Gravitic.

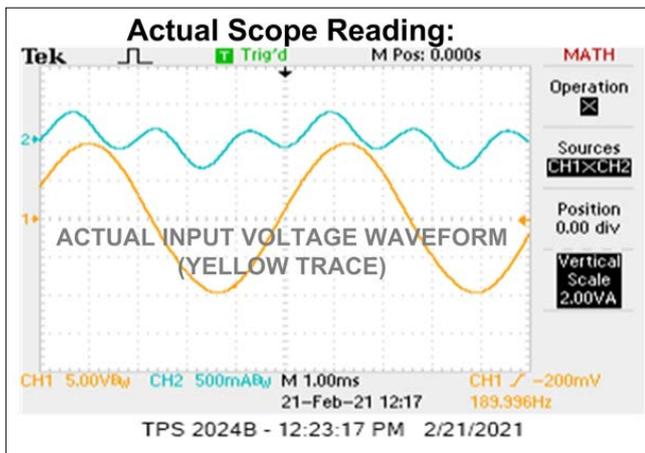


Figure 3: Tektronix TPS 2024B Oscilloscope waveforms

See how close the modeled vs. the actual Waveforms are?

The yellow input waveform is the  $\sin$  term, and the blue output

waveform is the  $\sin + \sin^2$  term above in Figure 3.

A key component that produces the Scalar Waveform is the Split-Flux Transformer (US Patent US 9,620,280B2) or SFT. The SFT circuit is shown below in Figure 4:

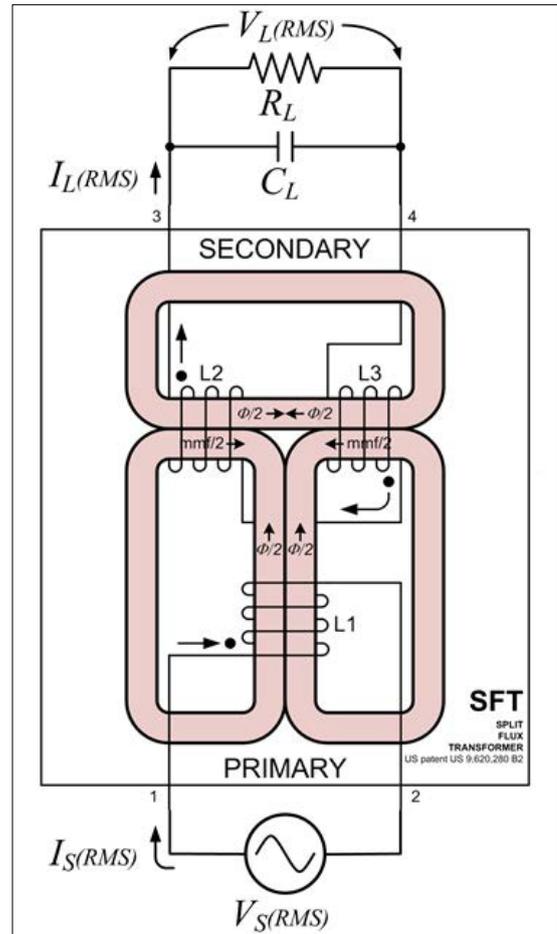


Figure 4: Schematic of SFT Output Section

Shown in Figure 4 is the Convergence of the Magnetic Flux required to produce the Scalar Waveform at circuit resonance. If Heaviside/Maxwell analysis were applied, the Net Zero Vector is zero, end of discussion. However, using Maxwell's Quaternion analysis, the Next Zero Vector is not empty, but contains the Scalar Entity and this is what is observed experimentally.

So, at circuit resonance, the minimum power delivered by the ASR-2100 Power Supply is shown in Figure 5:

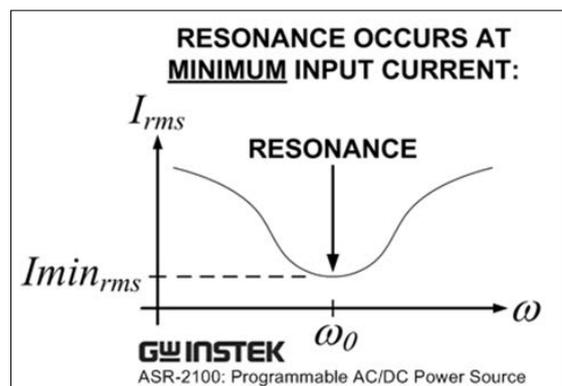


Figure 5: Circuit resonance occurs at minimum input current

A practical application of this Anti-Gravitic technology is the development and implementation of a propulsion system utilizing high frequency, high voltage skin effect on the outer hull of a Space Craft. This example is shown in Figure 6 below:



**Figure 6:** Scaled mockup of the Adamski Lifter for testing

My objective is to build a full-size version of the “Adamski Lifter” and fly it into space. I found an investor that wants to make this happen. With his help, I’ll make this incredible event happen in a timely manner and if YOU have what it takes and want to help, please send your resume to: jobs@intalek.com, and we’ll make this happen together!

William Alek is the CEO of Intalek Research, LLC., email: william.alek@intalek.com. My mailing address is: 6601 S. Tamiami Trail, #336, Sarasota, FL 34231-4807. Website: <https://intalek.com>  
William is a 1979 graduate of Illinois Institute of Technology with a BS Degree in Electrical Engineering.

William had a long career in the contract software/hardware computer-engineering field and worked for companies such as Rockwell International, Mack Truck Diesel Engine Controls, Motorola, Garrett AiResearch, etc.

William Alek is also a member of APEC: Alternative Propulsion Engineering Conference moderated by Tim Ventura, email: tim@altpropulsion.com. Contact Tim to find out more about APEC. Live meetings happen once a month on ZOOM Open Mic.

#### References

1. William Alek (2023) SEM 2023 William Alek presentation. NAMI-TECH. <https://www.youtube.com/watch?v=Yj1ftxy0KzU>
2. William Alek’s Website. <https://intalek.com>
3. Tom Bearden (2013) New Energy Vol. 1 Tom Bearden (Free Energy). YouTube, Time: 50: 38. <https://www.youtube.com/watch?v=hJY8XqFnAyg>
4. Tom Bearden’s Website. <https://billstclair.com/www.cheniere.org/>
5. Tom Bearden’s Website. <https://www2.mathematik.tu-darmstadt.de/~bruhn/Bearden-ch4.html>
6. Jean-Louis Naudin, JLN (2001) The Tom Bearden Free Energy Collector Principle, <http://jnaudin.free.fr/html/tbfrenrg.htm>
7. Tom Bearden, YouTube play list Videos. [https://youtube.com/playlist?list=PLUbRjbdT5AStnwIVZ8rRZvPi6WpG4M\\_rv](https://youtube.com/playlist?list=PLUbRjbdT5AStnwIVZ8rRZvPi6WpG4M_rv)
8. William Alek on Linked-In: <https://www.linkedin.com/>
9. William Alek on Facebook: <https://www.facebook.com/>

**Copyright:** ©2024 William S Alek. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.