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Main » Energetic Form Posts

Recent posts by Eric Dollard on the Energetic Forum

Enhanced with some links, etc and some *Notes* in bold.

Earlier work by Eric Dollard can be found [here](#) as well as on the side-bar.

T-Rex Speaks:

<http://www.energeticforum.com/90090-post71.html> at 03-27-2010, 03:23 PM

There are some very serious misconceptions in the world of Electrical Engineering today. (The writings of [Oliver Heaviside](#) and [Proteus Steinmetz](#) gravely warned about this...) Let us start with the YouTube MIT Physics Demo video that Armagdn03 posted a link to on 11-10-2009 on page 2 of this thread.

Note: This one:

This is a good demonstration for several reasons.

1.) Glass is a dielectric which can store electrical energy within its physical form. This should be common knowledge and not a surprise to anyone today...

2.) That this simple fact and reality "blows some people's minds" clearly illustrates that it's just all gone way, way, too far... The Einsteinian Lie has succeeded in instilling a mind virus in most everyone and also in confusing Main Stream "Scientists", who today waste billions of dollars of funding each year, only to chase their own tails in a canonic sequence.

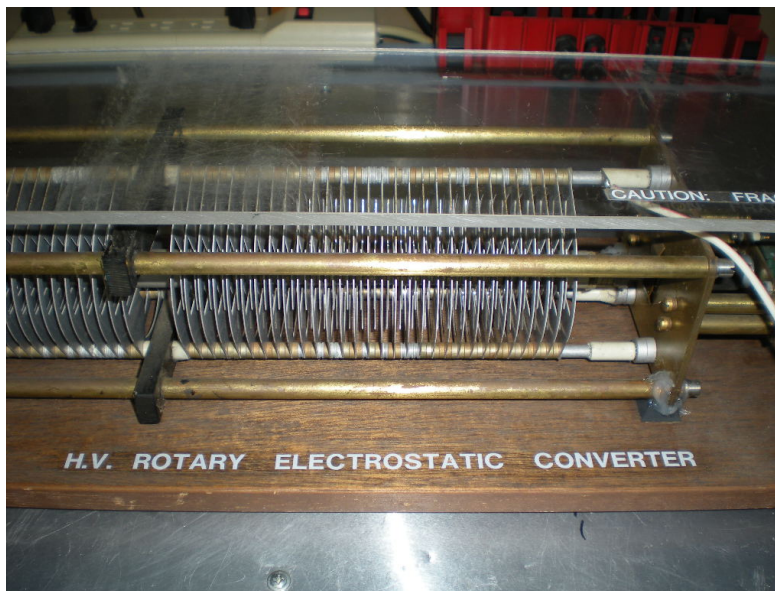
Chris Carson Built the **Rotary Electrostatic Converter**. His design was based entirely on my electrical theory and math. It was designed to demonstrate and validate the concept of Synchronous Parameter Variation and the [Four Quadrant Theory of Electricity](#). The device worked well. It had to spin up to around 10,000 RPM. This unit took Chris months to complete; to get all of the parts together, and to get it perfectly balanced and operational. Chris determined that it was starting to exhibit the effects of synthesis of electrical energy from the electrostatic field. This is a result of the variation of capacitance (C in Farrads) with respect to time (T in seconds) which results in a negative conductance G (in Siemens). Hence the generation of electric energy. Then, disinformants, whom I refer to as the "Montauk Crowd" swooped in on him after he completed this device, and he was never the same again, - he died of Brain Cancer a year or two later..

Note: Also see the patent [Parametric electric machine by Ferdinand Cap](#)

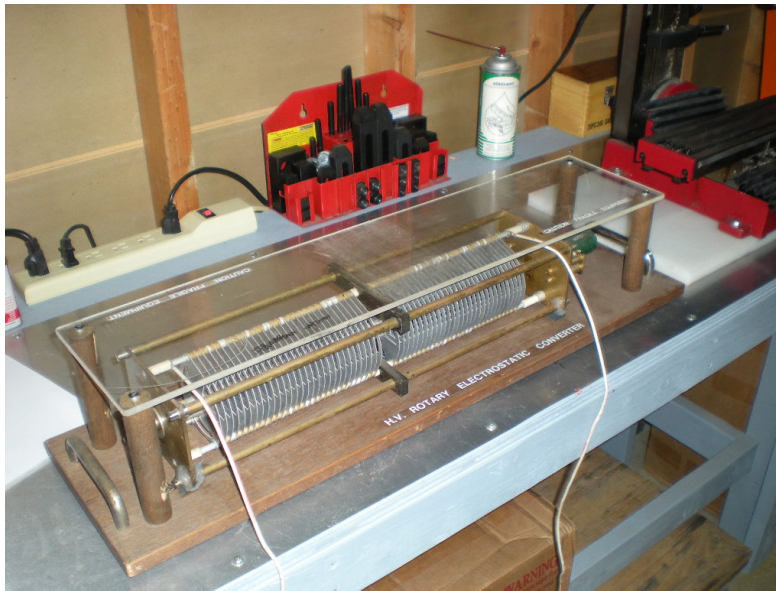
There was also the **Rotary Electromagnetic Converter**, constructed by Michael Knots and Peter Lindemann with the help of Chris Carson.

Note: Apparanly, two types of converters, **Electrostatic** and **Electromagnetic**, were built. Peter Lindemann published some pictures of Carson's [Rotary Electrostatic Converter](#):

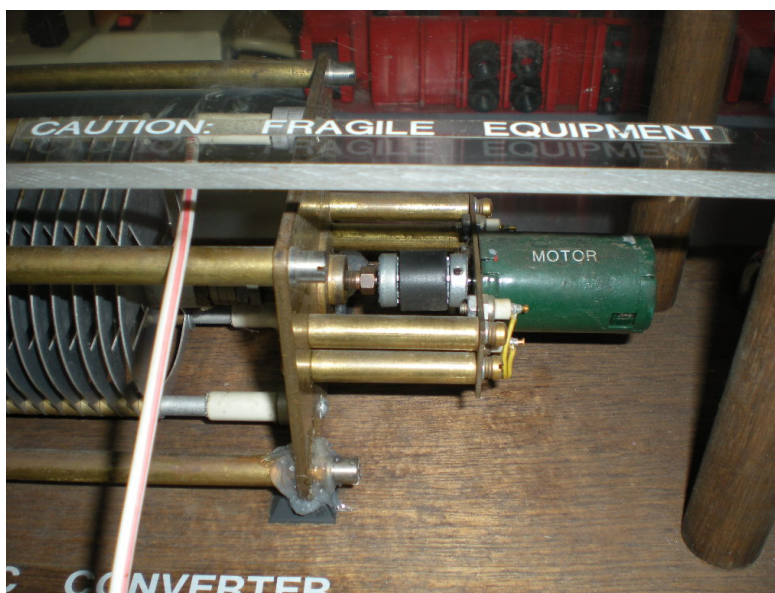
OK, here it is. Chris built beautiful models. The first picture shows Chris's name for the machine.



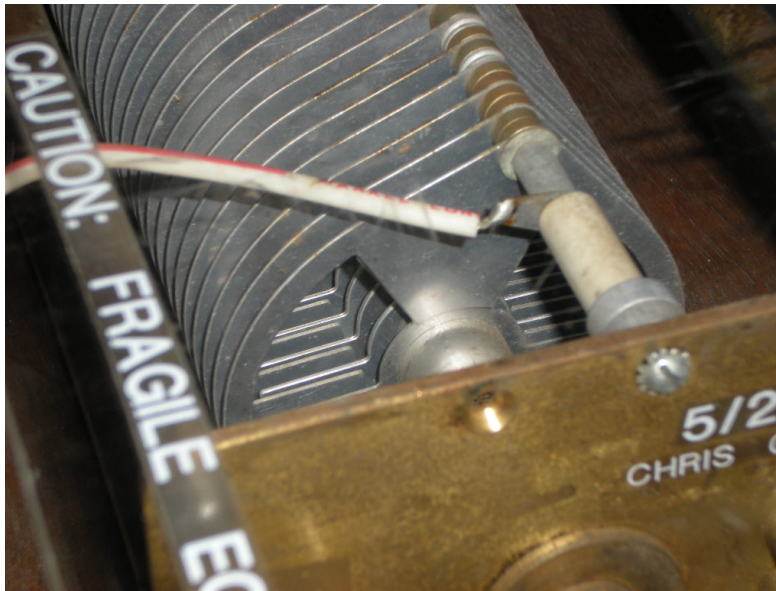
The second picture shows an oblique view of the whole machine. Total length of the machine is about 24 inches long, while the mounting base is about 30 inches long. The little green device at the far end is the DC drive motor used to rotate the plates.



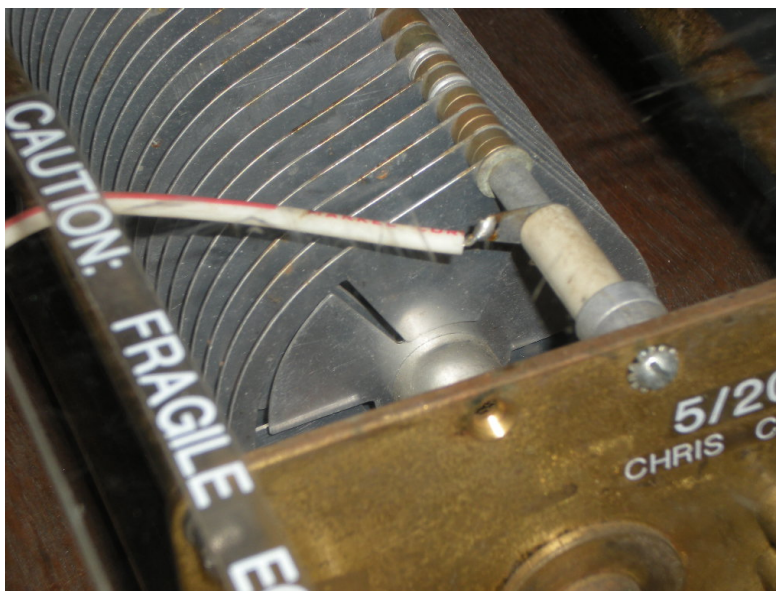
The third picture shows the motor drive unit. The motor is a DC brush type, with a permanent magnet field. It is 2.125 inches long and 1.25 inches in diameter.



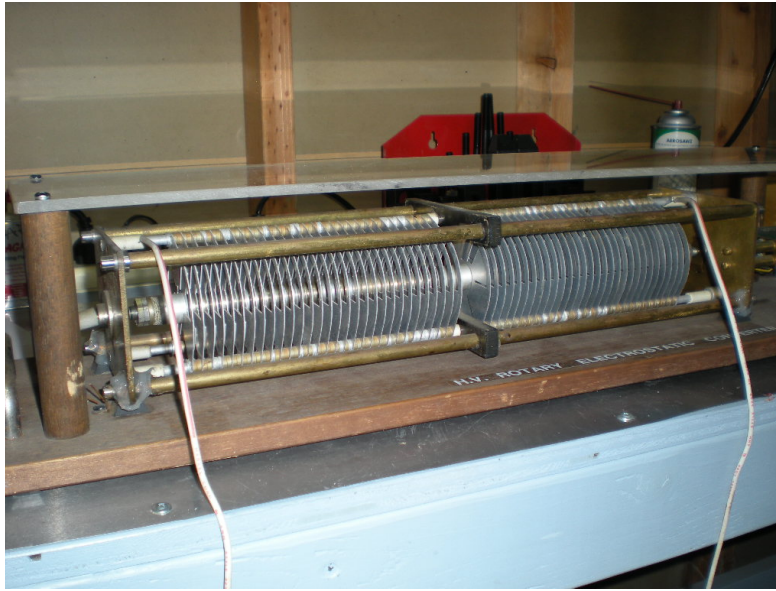
The fourth picture shows an end view when the rotor plates are in alignment with the stator plates. This is the position for highest capacitance in that section.



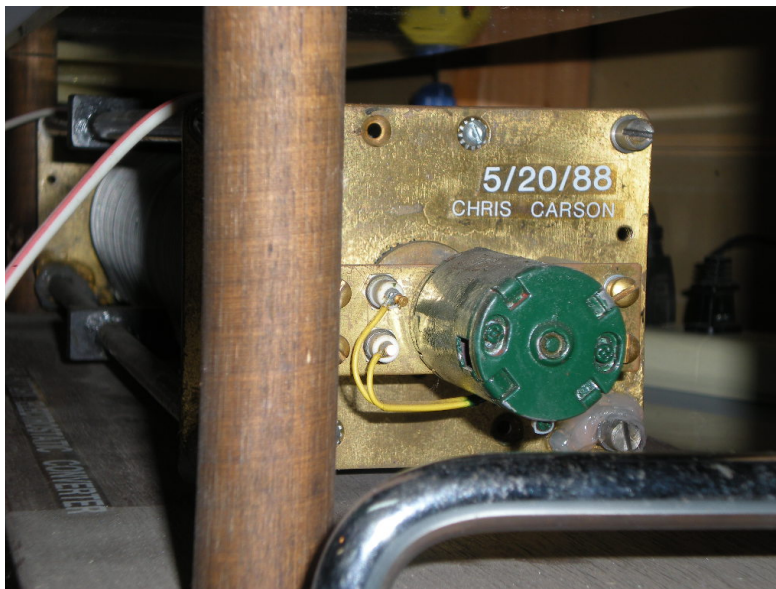
The fifth picture shows an end view when the rotor plates are out of alignment with the stator plates. This is the position for lowest capacitance in that section.



The sixth picture shows another, lower angle shot of the whole machine. It also shows how one section is out of phase with the other.



The last picture shows the end plate with Chris's name and the date the machine first ran, May 20, 1988.



<end note>

This unit exhibited the property of materializing and dematerializing electric energy without regard for the Law of Conservation of Energy. This is another example of synchronous parameter variation. In this case inductance (L in Henrys) time (T in seconds) gave rise to positive resistance (R in Ohms), hence the unaccounted for destruction of electric energy. It must be just as illegal to destroy energy as it is to create it – don't you think? E is NOT equal to MC squared. There is no Matter to Energy equivalency – this is: The Great White Lie...

(Where is the video that was made of this device being tested with my Navy electrical switchboard instrumentation anyway????)

I have a device, built for the Army Air Corps during World War 2, A/N number PP-18/AR Power Converter, which self-sustains the electrical system in my car. It uses the same theory of operation as Chris's device but involves a different mechanical implementation utilizing a vibrator, several capacitors and 12V and 24V batteries that are connected in parallel through the device, rendering them as one.

Note: Some more information on this device has been posted by [Rau:](#)

"A friend of mine gave me these documents and said post them here. Not sure if the friend wants a whole heap of fuss in his direction I'm sure he'll post here sooner or later but for now he's an anonymous friend. I think a few of you out there will see these for the goldmines they are!"

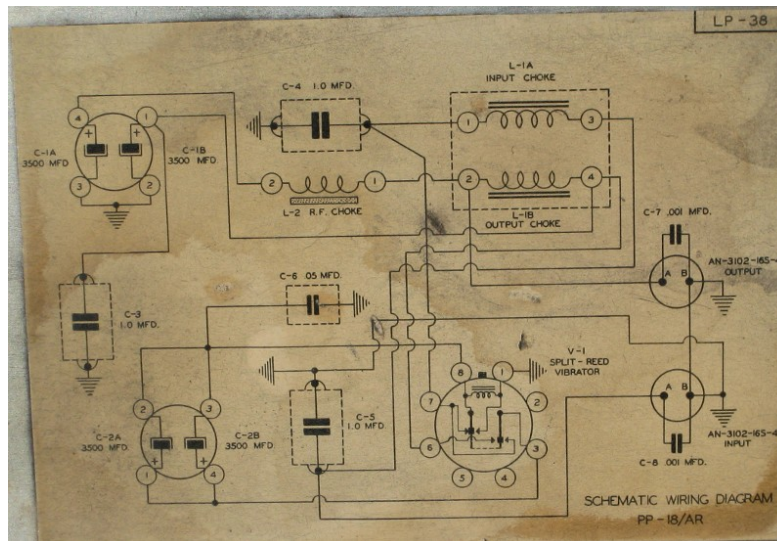
"The documents contain information about the PP-18/AR Voltage Converter, for those who are unaware of what I am talking about it is the device Eric Dollard uses to power the electronics in his car. The first couple of images are picture of the device and the last image is of the wiring diagram!"

"Also I have [an explanation of it](#) from Eric himself (attached). I didn't find it too helpful but maybe that's just me. I knew how the device would have operated the problem is seeing how this results in extra energy. I do believe I know how this works though and I think it proves you don't need a nice sinusoidal variation of parameters because in this case a plot of the variation per unit time results in a square wave type signal."

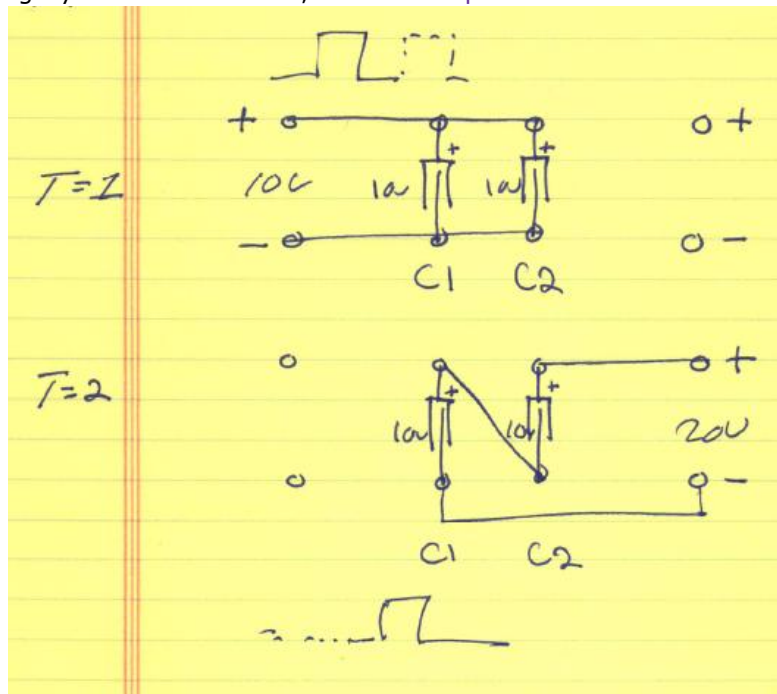
This what this device looks like:



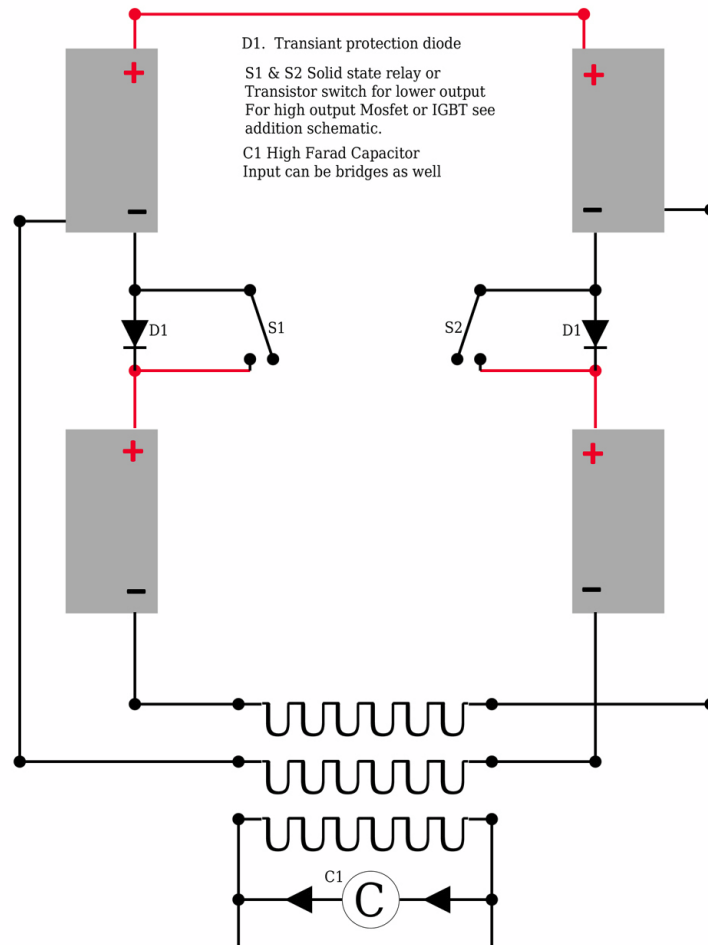
This is the schematic of the PP-18/AR Power Converter posted by [Rau:](#)



This is a drawing by Eric on the device, from Rau's [pdf](#):



It is very interesting to compare this one with the schematic [posted by Matthew Jones](#), of which he says he is testing "with good results".:



Matt's schematic is a variation of a circuit known as the "Tesla switch".

The images posted by Raui as well as some images grabbed from a unit recently sold for \$18 as "PP-18/AR WW2 Military Radio 13-24 Volt Converter" are available [here](#).

<end note>

I had a young student from Korea visit me a few years back. He had no problem understanding the basic concept of producing an energy synthesizing apparatus, because his mind was uncontaminated by all of the Bedini/Bearden falsehoods. **The term Scalar Wave is an oxymoron, as scalar is part of the propagation constant that is NOT A WAVE!** (Idiots!)

Most are clueless about the importance of the Variation of Inductance and Capacitance with respect to time – and **synchronous parameter variations**. Read [chapter 21 \(XXI\) titled REACTION MACHINES](#) in [Charles Proteus Steinmetz's](#) book titled "Alternating Current Phenomena".

There is also a Russian paper (brought to me by the Korean student as a gift) titled: "UBER DIE ERREGUNG VON ELETRISCHEN SCHWINGUNGEN DURCH PARAMETERAENDERUNG" von L. Mandelstam und N. Papalex, published in 1934 in: J. ZEITSCHRIFT FUR (umlaut on the U - as should also be on the first U in the title of the paper) TECHNISCHE PHYSIK Band IV, Heft 1, that continues with what [Steinmetz](#) teaches in his books, and takes it all the way (Title translation: Concerning the Excitation of

Electrical Waves Through Parameter Changes). In one picture in the paper, there appears to be a brightly glowing incandescent lamp connected to a network, with no apparent connection to a power source. It appears to be an [Alexanderson](#) type Mag. Amp. operating in a self oscillation mode. ([Alexanderson Patent # 1,328,797 Jan. 20, 1920](#)): Even though my copy of the paper is in Russian, the equations speak for themselves and echo the work of [Steinmetz](#) and [Alexanderson](#).

Note: There is an English translation available [here](#) (pdf) now.

Ernst [Alexanderson](#) emigrated to America because of [Steinmetz](#)'s book, - he was determined to work with [Steinmetz](#) after studying it. [Steinmetz](#) was forced to reverse many of his equations in later books and was severely criticized by physicist Michael Pupin of Columbia University for not using [Maxwell](#)'s ideas and instead developing a methodology that was actually useful and practical for engineers. (Read, "[Steinmetz, Engineer and Socialist](#)" written by [Ronald R. Kline](#).) Here it was said that General Electric gave [Steinmetz](#) permission to create Electricity from the square root of minus one...

Note: There is also an English "[Report on Recent Research on Nonlinear Oscillations\(1935\)](#)" by a.o. Mandelstam and Papalexi. And there is "[Parametric Excitation](#)" by Minorsky.

I personally created so much Electricity from the square root of minus one out of the compressor plant's synchronous machines at the Richmond Ship-yard that I was working in at the time (which also housed one of my laboratories) that it tripped the reverse power relays of the Richmond substation and shut off all power to the City of Richmond. For that to have happened, means that the City of Richmond was producing more power than it was consuming, hence the reverse power relays tripped and shut the city down. PG & E trucks were there almost immediately. Shortly thereafter, I presented my [Four Quadrant Theory](#) to Pacific Gas & Electric Co. executives and engineers on behalf of the lease holder of the shipyard and they became my friends (however they would not allow the shipyard meter to turn backwards). So much for Corporate Suppression... In actuality PG & E would love to have energy sustaining devices connected to their power grid. Profits would soar and pollution would drop. Such devices tend to operate above 500 kva and are not scalable into smaller devices, and therefore are only appropriate for substations. In West Marin, the Tocaloma PG & E substation on the Ignacio/Olema 66 kv line, has only one line for both the input and output. It represents the vestige of such devices, - an installation that has been in operation for at least 70 years. Today, probably no one in PG& E, even knows how it all works. (Don't expect the lights to stay on for too much longer... today, engineers have been replaced by lawyers and safety has been replaced by insurance. It's a LET-IT-BURN policy...)

At the time, the Bolinas RCA-Marconi Station, through corporate encouragement by RCA and Bell Telephone, gave me free run of that site to set up one of my laboratories. My plan was to produce a system utilizing no rotating machinery but only static devices, such as coils and condensers in an [Alexanderson](#) configuration to possibly power the town of Bolinas and at least provide PG & E with all of their reactive power needs. The network experiments would consume no energy to operate and therefore cost nothing. The plan was to use the electrical substation on-site to connect to PG & E's grid, giving power to them for free, in exchange for being able to use the 12kv power line for my experiments. Everything of importance including engineering records and notes as well the equipment at the Bolinas RCA-Marconi Station was destroyed by State of California Environmentalists through Jerry Brown (former California Governor) and the environmental politician Burr Henneman, this in conjunction with The National Park Service. The NPS is an EMBEDDED FOREIGN ORGANIZATION within the United States Government. Massive quantities of polychlorinated biphenyls and mercury were released into the environment by environmentalists in their endeavor to destroy the Station as quickly as possible. (See the [link already posted by phi1.62 on 01-21-2009](#) on page 2 of this thread) (**Note:** copy [here](#)) The same group destroyed my Civil Defense Facility in the town of Bolinas which was on the property of Nashama Franklin. The same property was embezzled afterwards from Ms. Franklin by the same crowd that embezzled the Reynolds funding.

Also in Bolinas, U.S. Coast Guard Communication Station NMC worked with me on certain problems they were having and their reutilization of the RCA site. This enviro-group went to NMC and warned them of the consequences of doing business with Eric Dollard. Today NMC cannot even be heard in Half Moon Bay 50 miles away, if they are on the air at all. (Who needs Bin Laden?) Who doesn't like [Tesla](#) then? Is it the government? (no). Is it the environmentalists? (you got it) They call themselves Commonweal. Altman link

As far as inventing the log periodic: it was invented by Raymond H. Du Hammel, I believe, as an Air Force Project and the University of California Berkeley was where most of the work was done. Check [patent number: 2,985,879](#), it is a fascinating design.

On the other hand, I did invent the Log Periodic Multiple Wave Oscillator based on the initial Lakhovsky patent. I got rid of all the bull and added a Golden Ratio Log Periodic antenna which was etched out of a double sided printed circuit board and then Gold plated which was widely sold and probably still is, for which I did and do not receive a dime. It seems to have some sort of radionic effect even with out power being applied.

Individuals in the guise of Borderland Sciences embezzled \$50,000, money that R. Joshua Reynolds had provided me with to continue my research. At the "Last Supper" where Joshua invited everyone for dinner, (everyone that he had funded with millions of dollars that is) he cut off funding for [Andrea Puharic](#) et al (the Soviet Scalar Conspirators) and pronounced that I had done more on USDA food stamps than any one else that he had funded. Needless to say, I made no friends at the dinner table that night... The Voodoo was hideous...

Note: Andrea Puharic should be: [Dr. Andrija Puharich](#), I think.

Am I concerned about the CIA, the NSA or any other alphabet soup organizations' supposed suppression or retribution?... No! Common swine that's who I am concerned about. An example of this is a situation that I encountered in Montana. A group in Missoula (which was later found out to be a group of international criminals) showed up to "HELP ME" and in trade I would help them extract gold from spent tailings utilizing [Tesla](#) methodologies. They helped me alright, by entrapping me, assaulting me and stealing my classic Celica and threatened to kill me if I were to do anything about it. They strong armed their way into my Desert laboratory to steal all related equipment. The property owner of the desert lab died shortly thereafter, within weeks of Chris Carson's death. Friends of yours Peter?

As is well known, I was the last engineer involved with getting the Integratron operational. My efforts were thwarted and ruined, not by the Men in Black, but rather by the Woman in White. Today the Integratron is a Goddess worship temple...

So in light of all the above, why should Eric Dollard involve himself in the useless or criminal behavior of others. There are those who wish to republish my earlier writings and to make this information freely available to everyone. Unfortunately, much of it has already gone to the dump. I have no interest in teaching anyone about [Tesla](#) except under the department of the Navy or the likes thereof. The door is shut!

73 DE N6KPH SK

Scalar explained...

<http://www.energeticforum.com/90344-post94.html> at 03-29-2010, 06:38 PM

..for those who's minds have been polluted by the prevalent quantum goddess reality:

Let us turn to the [Heaviside](#) Equation which is the most fundamental equations in all of Electrical Engineering:

$$(RG + XB) + j (XG - RB) = \text{propagation constant squared}$$

where:

R resistance in Ohms G conductance in Siemens X reactance in Henrys per second B susceptance in Farads per second

Therefore:

RG is the scalar or DC component that is NOT A WAVE, XB is the longitudinal or AC component and is an alternating electric wave

XG is the transverse or OC component and is a forward moving oscillating electric wave. RB is the transverse or OC component and is a reverse moving oscillating electric wave

This equation allows for all electrical conditions in time and or space and combinations thereof. The example equation is the dimensions of time (see: [Steinmetz Theory of Transient Electric Waves and Phenomenon](#) and also my paper: [Symbolic Representation of the Generalized Electric Wave.](#))

Example:

The air in the room; the room is filled with air and has atmospheric pressure of 2998 mB, your stereo is blasting away, the speakers are creating longitudinal waves having length and frequency and exert a oscillating force centered on 2998 mB (+ or - 10 mB)

RG is the air pressure, a scalar XB is the sound of the stereo, a longitudinal wave

$XG = RB$, thus no transverse waves exist $(XG - RB) = \text{ZERO}$

Hence $(RG + XB)$ is what is going on in the room, the disinformers have convinced you that this whole quantity $(RB + XB)$ is scalar, RG is the only scalar component. It is DC and has NO FREQUENCY, no WAVELENGTH and thus NO WAVE! SCALAR = NO WAVE - GET IT???

If people don't get this fundamental concept - my time is better spent talking to my pet Coyote... I have nothing further to say...

T-Rex Emergence

<http://www.energeticforum.com/111339-post56.html> at 09-22-2010, 03:56 PM

I) The military concept does not offer praise but delegates higher order of responsibility. So let us begin:

1) Purge the mind virus, establish new thinking processes. Regular exposure to the music of J.S. Bach will help facilitate this endeavor.

2) Replace the concept of "free energy" with the concept of energy synthesis, that is the synthesis of energy from its component parts. Nothing is free in the free world except the freedom to pay, that is the law. Stay out of trouble.

- 3) Discontinue the practice of habitually exchanging the terms power and energy as if they are equivalent, they are not. Engines are not motors, etc.
- 4) Eliminate the notion that electronic particles convey electricity, they do no such thing. Electrons represent the dissipation of electrical energy and its conversion to noise.
- 5) Realize that the energy is not equal to mass times velocity squared. Electricity is mass free.
- 6) Seek in your experiments to develop a system that destroys energy, this as well as the creation of energy invalidated the notion of conservation of energy.
- 7) Return to the works of the masters, perform their calculations & experiments. Do not just read, but do. Attempting to invent anew before this effort only multiplies the confusion.
- 8) Endeavor to be in direct contact with nature while thinking on electrical ideas, the intrinsic archetypes of nature will provide answers to your questions. Social situations weaken this process. Keep your mind and body in good shape by avoiding adulterated food; living food for living people, dead food for dead people.

End part (I)

Ref.:

- (1) Occult Ether Physics by [William Lyne](#)

Note: Available at [Amazon](#), [Scribd](#), [Freenrg.info\(pdf\)](#) and [Biblioteca Pleyades\(html\)](#)

- (2) Survival into the 21st Century by Victor Klaus

Attachment: http://www.tuks.nl/pdf/Eric_Dollard_Document_Collection/EPD%20Update.PDF

Eric is fighting off the rats in the Mojave desert!

<http://www.energeticforum.com/150697-post298.html> at 08-09-2011, 12:03 AM

T-REX is in the spirit world of Inyo right now. I am very sorry that I vanished on you all midspan on your effort to make my equations into physical form. A Mr. Olin Bales has taken my Mojave research facility at 57474 Linn Rd. Landers, CA away from me and put it up for ransom. All my cars, notes, tools, etc. have been sold off. You can contact the San Bernardino county supervisor's office for update. They tried to help, but to no avail. It doesn't stop there. Forces at Mare Island Shipyard where I was rebuilding the LCS-102 WW-II navy vessel, took my pet coyote from me, gave away my other Corolla as well as all my military gear. Then left me there destitute. After this two other parties one in Fallon, another in Santa Cruz attempted to entrap me. Upon escape attempting to start work at Cal Tech in LA, I discovered my car was sabotaged. Car barely works and I'm living in it destitute in the desert. The San Francisco Tesla Society has blocked access to my four very important lectures, which I presented. These lectures are very important for your efforts, but don't know how to get them to you. Someone is helping me now, and has started email for me. You can contact me at: n6kph@lonepineradio.net. Hopefully we can pick up where we left off.

General Response

<http://www.energeticforum.com/150821-post304.html> at 08-09-2011, 08:53 PM

Greetings All,

I will begin to formulate explanations for you all as time goes on but the violence I have suffered will make it hard;

First my paper - [Symbolic Representation of Alternating Electric Wave](#).

Second - Ernst Gillimen, Vol 1 Communication Networks.

Note: This should be [Ernst Guillemin](#). Some of his books can be found over at [google](#)

Third - Carl [Steinmetz](#), [Impulses, Waves & Discharges](#).

Read these books, that is necessary to understand my work.

Also, force the S.F. Tesla Society to release my work and stop censoring me. Ask them also why they did not inform the public of what happened to me. (Are they a Lawrence Livermore front?)

I need all of you to complain to San Bernardino County that they let Olin Bales take my stuff and ransom my site. This is EXTREMELY IMPORTANT, or my telluric wave (earthquake) work will be lost forever.

Thank you all if you do this

73 DE N6KPH

ps - I have a new friend here in the Mojave desert that is going to help me construct a new website that will include whatever [Tesla](#) information I can recover as well as PayPal options for those who wish to help out financially

73 DE N6KPH

Energy Defined

<http://www.energeticforum.com/151040-post315.html> at 08-11-2011, 12:50 AM

I will conclude my complaint about the horrid events terminating my research here and now. I will hence leave it to others to investigate. Hereby; find Olin Bales by contacting Roy Stolti, the person who was site security guard (email me for his phone number n6kph@lonepineradio.net) he will provide the necessary information as to what are the terms of the ransom set by Olin Bales to recover what might be left of the site. This is the starting point for an investigation. Further investigations can be derived by the key words that follow;

- 1 Bolinas / Commonweal
- 2 Canning / Integratron
- 3 Greenpeace / Point Reyes National Seashore
- 4 S. F. Tesla Society / Livermore Labs
- 5 See S. F. Tesla Society website, "The Bolinas Incident."

You must pick up from here I can have no further negativity in my life without damaging my mind.

Now, why are we all gathered here? The focus is on "Energy", but what is energy, and why is it so important to everyone anyway? It seems somewhat obsessive. The definition of it is the ability to do work, but vernacular has broadened this so now energy can mean almost anything. This must stop.

Energy in its most arch-typical form is embodied in the phenomenon of Electricity, but what is Electricity? Now our wheels even more stuck in the mud! But we have important clues, namely that of polarity, not plus or minus so much but more like male or female. This thought follows from Goethe to Tesla and Steinmetz. Thus Electricity, in order to manifest, a UNION must develop. This is the union of the "male", or projective, and "multiplied by" the "female", or receptive. Hereby, the male is the dielectric field in counterspace (of per centimeters), and the magnetic field or female in space (of centimeters squared). Space in c.m. squared is what you pay for in "real estate", counterspace in per c.m. is the space between the lines on a ruler, or between molecules in a crystal.

For the Electricity extant between a pair of wires in your lamp cord, the closer the wires, the more capacitance, and thus the more Dielectricity. Conversely, for the same cord, the farther apart the wires, the more inductance and thus the more Magnetism. Therefore it is seen that the smaller the space (the more counterspace) the more Dielectricity that can be stored, and conversely the larger the space between the wires (the more real estate) the more Magnetism that can be stored. Very simple, do not let your mind make it any more complicated than that!

Now let us reach out for a few quantative relations: The product (line, cross, or dot – unrestricted) of the total amount of Dielectricity multiplied by the total amount of Magnetism (when both are in union) gives the total quantity of Electricity. We will call this quantity of Electricity the letter "Q" and name this "The Planck" after Max Planck. For the Einsteinischen dimensions of the Planck are Energy – Time, but let us not think backwards – ass. Saying this in engineers lingo, the quantity of Electricity Q is given as Watt – Seconds – Seconds or Watt Seconds squared.

Now, in one foot of lamp cord, bounded between the wires, I have say, one million Plancks of electric induction. The frequency is 60 cycles (377 radians) per second. Thusly the quantity of Plancks Q is being produced or consumed at a time rate of 377 radians per second, or in other words, Plancks per second, Q divided by t, the ratio of Q to t, etc. Hence the time rate of variation of the quantity of electric induction hereby gives; Watt seconds squared per second or dividing out, gives Watt seconds. But Watt seconds is the dimensions of energy. Well golly-gee Mr. Wizard, we have defined energy! And hereby energy is defined as the time rate of the production or consumption of the electric induction, or Q divided by t gives W.

It is that simple. So push the "Erase Button" on your head for two notions: Energy is the product of mass times the velocity of light squared, erased? Next, Electricity is the flow of electrons in wire, erased? Good!

Now I must go find if I can fix my car and if I can get on welfare. We possibly can continue at some future interval in time.

73 DE K6KPH

Energy Defined continued

<http://www.energeticforum.com/151376-post323.html> at 08-12-2011, 11:41 PM

Hello All,

In the previous transmission it was shown that the electric induction, bound between the wires of a lamp cord, was the union of two distinct fields of induction, the dielectric in counterspace, and the magnetic in space. These fields consist of discrete lines of force. Thus these lines exist as individual units or quanta of inductive force. Both fields exert mechanical force upon the bounding system of so-called "conductors". These mechanical forces, those of the dielectric, and those of the magnetic, exert actions so as to increase their coefficients of induction, that is the dielectric "capacitance", and the magnetic "inductance" are increased. Hereby, the dielectric field draws the conductors nearer to each other, increasing the counterspace. Conversely the magnetic field pushes the conductors away from each other, increasing the space. Hereby we may say that the dielectric field is contractive, and the magnetic field is expansive. Hence the resulting electric field of the union produces a resultant force upon the bounding conductors. This resultant force thus may be expansive, null, or contractive, depending upon the relative densities of the dielectric and the magnetic force fields respectively.

So now our previous discourse upon these matters brings important questions to mind that heretofore remained unanswered: First, how big is a Planck? In other words, how many Plancks per one second (unit time) equal one Watt-second (unit energy)? Second, what ratio of dielectric field density to magnetic field density results in the contractive force just balanced against the expansive force, thereby canceling any mechanical forces upon the bounding conductors? Who can solve these important questions?

References:

1. Electro-magnetic Theory Vol. 1 by Oliver [Heaviside](#).
2. [Impulses, Waves and Discharges](#) by Carl [Steinmetz](#).
3. Electricity and Matter by [J.J. Thomson](#).
4. [Recent Researches Into Electricity](#). By [J.J. Thomson](#).

Note: Eric wrote 'J.J. Thompson', which should be J.J. Thomson.

5. [Discharges In Windings](#) by E.P. Dollard
6. Occult Ether Physics by [William Lyne](#)

73 DE N6KPH

For your information

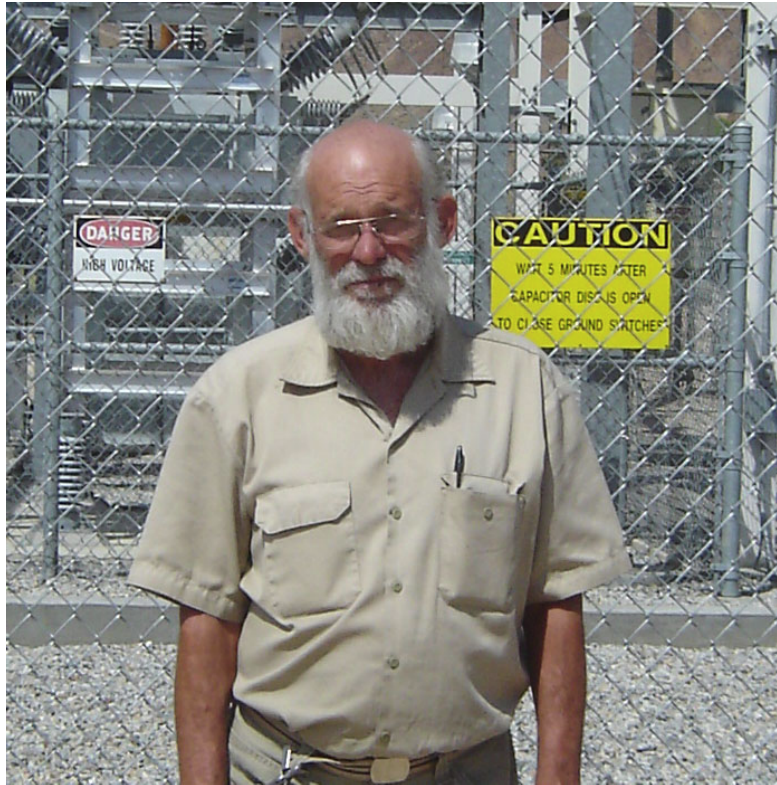
<http://www.energeticforum.com/151383-post324.html> at 08-13-2011, 12:15 AM

Hello All,

FYI My friend set me up with a PayPal account today, so you can use my email address:
n6kph@lonepineradio.net.

We also created a yahoo group to help keep non-technical discussion off of the Forum. The group is:
n6kph@yahoogroups.com As time goes on I will be adding photos and voice talks to the files section of the group.

At this time and location I have no control of the American-Marconi website. My friend here will soon put a sub-page on his website where I will have PayPal links for anyone who wants to help out.



Yes this really is Eric Dollard

73 DE N6KPH

Rates of Change

<http://www.energeticforum.com/152446-post353.html> at 08-18-2011, 10:42 PM

What I am attempting with these internet transmissions is to sequentially establish the correct semantics for terms that we flail with (like parrots) such as volt, watt, & etc. [Oliver Heaviside](#) did this over a century ago with his famous "Electromagnetic Induction" series of writings in England, which was eventually censured by the Royal Society (William Preece). On the other side of the coin, as far as the conspiracy against my efforts, all the necessary elements have been given and I leave it to you all to expose its fetid body to the atmosphere. This is very important work also. I will do my part in these definitive writings, but you must do your part in "cleaning the toilet bowl." OK?

So far I think the concept of space and counterspace in its basic form is established. Counterspace, as that space between the lines on a ruler is an apt descriptive analog. A ruler divided in millimeters has less counterspace than a ruler divided in nanometers. This is obvious. (think in terms of capillary action) Also, the Planck is our undivided fundamental quantity of electricity and all else will be a development of the Planck.

What needs to be focused upon at this point in writing is the concept of VARIATION WITH RESPECT TO TIME, that is the dimension of per second. This also is known as the "Time Derivative", ΔX over

delta T in the Newton – Liebnitz infinitesimal calculus. Let us say the rate of change with respect to time.

Everyone's intimate mechanical relationship with their automotive apparatus (today the metal maggot or horned exoskeleton) render it useful tool for analogy. Various phenomenon make their appearance, somewhat ghostlike, during the process of variation with respect to time. Let us take the dimensional relation of velocity, that is, the ratio of the dimension of length (space) to the dimension of time. This is the velocity V , let us say specifically miles per hour. Now we know that if the dimension of mass m is moving at a given velocity V , that is, the "weight" of your body in the auto, in CONSTANT motion at the speed limit let's say, no forces or perceptible sensation is imparted to your body. In other words you feel sitting in the car seat the same as you feel in the seat in front of the television set (so the auto is like a rolling TV). So long as the velocity remains unchanged nothing is experienced or felt. Now a deer jumps in front of your auto, you slam on the brakes and miss it, now you are moving at 1/10th of the speed limit. During the interval in time in which the velocity varied with respect to time, that is miles per hour per second, or the ratio of the velocity V to the time interval t , from somewhere your physical body experienced a powerful force pushing you forward. The more quickly the auto changed speed the more this force impacted your body. So we can say that this force F is given as the ratio of velocity to time, for any unit mass of your body. That is, the force F equals your body's mass times the ratio of the velocity to the time interval of the velocity's variation with respect to time.

So back to the Planck, that quantity of electrical induction Q . So long as there is no variation of the electrification, that is so long as it is static, no other phenomenon manifests. Just as with the mass of your body and the velocity of its motion in space, so long as there's no variation no sensation of force is experienced by your body. Completing the analogy the concept of energy is then entirely analogous to that force you felt when you hit the brakes. Hence they are both phantom like derivatives of things that you otherwise can perceive as real.

So now we are getting a further "feel" that what we call energy is not really that primary phenomenon that the Einsteinishen would like us to believe, but in reality is only a secondary derivative of some more concrete phenomenon, or ghost associated with something physically tangible or real. Now the idea that energy can be "created" or made to go away can now be brought to mind.

73 DE N6KPH

Continuing with Variation of a Dimension with Respect to Time

<http://www.energeticforum.com/153060-post383.html> at 8-22-2011, 10:40 PM

Hello All,

Continuing with the concept of the variation of a quantity (or dimension) with respect to time (another dimension). We may say then we are talking about a RATIO of a physical dimension to a metrical dimension. Previously given, the ratio of a physical dimension, the Planck Q to a metrical dimension the time t gives then the dimensional relation of energy W . Then from the Newton-Liebnitz concept we say ΔQ over Δt equals W , that is, the first order time derivative of electrification Q equals the energy W . Now the Einsteinier says the inverse, and that is, the time integral of W , the energy, over time interval t' to t'' is the electrification Q . This is to say Q is the PRODUCT of the energy W and the time interval T . W times T equals Q . This is backward-ass, thereby occluding the interrelationships of these three distinct relationships.

Further, hit your erase button on the gibberish of 1, 2, or 3 dimensional space, there is only ONE DIMENSION OF SPACE – SPACE! Coordinates are NOT dimensions. Example, the volume of a cylinder can be expressed in TWO terms, height and circumference. So where is the third "dimension", erased?

Continuing then it has been given that the total electrification Q is the union, or product, of the total dielectric induction Ψ and the total magnetic induction Φ , Ψ times Φ equals Q . In other words, the dimensional relationship Q , the total electrification, is the product of the dimension of total dielectric induction Ψ , and the dimension of total magnetic induction Φ . Hence we have FOUR primary dimensions in electrical engineering. These are

- 1) Time
- 2) Dielectricity
- 3) Space
- 4) Magnetism

Every other relation, quantity, or expression, Volt, Amp, Ohm, etc. is derived from these FOUR dimensions. Time and Space are the metrical dimensions, Dielectricity and Magnetism are the physical dimensions. It is that basic! We are now prepared to move forward in our effort to stop being parrots.

Break – more to follow DE N6KPH

Time Variance and Its Products

<http://www.energeticforum.com/154434-post392.html> at 08-31-2011, 09:41 PM

Time Variance and Its Products

Continuing on the concept change with respect to time. The total electrification Q in Plancks is a resultant of the union, of PRODUCT, of a pair of inductions, the total dielectric induction, Ψ and the total magnetic induction, Φ .

Now let us deal with these two inductions individually. Variation of the total dielectric induction Ψ with respect to time t , that is, the RATIO of the dimension of dielectric induction to the dimension of time, dielectric induction over time, or the time rate with which the dielectric induction is produced or consumed, the DISPLACEMENT CURRENT in amperes I . * Ψ over t equals current I . This makes sense since the charge in a battery is given as Ampere–Hours, that is I times t equals Ψ .

(* Let us call this Maxwell law.

Hence we have arrived at a new dimensional relationship, the “current” in Amperes.

Analogously, we have the variation of the total magnetic induction Φ with respect to time t , that is, the RATIO of the dimension of magnetic induction to the dimension of time, magnetic induction over time, or the time rate with which the magnetism is produced or consumed, is the electro-motive force in Volts. Φ over t equals the voltage E . We know this as the “Faraday law”. Hence we have arrived at a new complimentary dimensional relationship, the E.M.F. in Volts.

Taking the one step further, consider the ratio of the variation of the magnetic induction ϕ with respect to time t , E , to the variation of the dielectric induction Ψ with respect to time t , i . Since the dimension of time appears on both top & bottom of the ratio this dimension cancels leaving simply the ratio of Φ to Ψ . Hereby the RATIO of the total magnetic induction Φ to the total dielectric induction Ψ gives the dimensional relation of impedance, Z , in Ohms. This can be arrived at some what differently. Since the variation of magnetism with respect to time is the electro-motive force, E , and

since the variation of dielectricity with respect to time is the displacement current, I , then the RATIO of the electro-motive force, E , to the displacement current, I , give the impedance, Z , in Ohms. That is, the ratio of E to I is Z in Ohms.

Inversely, from the standpoint of dielectricity rather than magnetism the RATIO of the total dielectric induction Ψ to the total magnetic induction Φ , that is the ratio of dielectricity to magnetism is the "Admittance", Y , in Siemens. Hence the ratio of the displacement current I to the electro-motive force E gives the Admittance, Y , in Siemens. I over E equals Y .

Here by we have arrived at four new distinctive dimensional relationships;

1. Displacement current in amperes I
2. Electro-motive force in volts E
3. The impedance in ohms Z
4. The admittance in Siemens Y

Break- more to follow DE N6KPH



The Planck Revisited

<http://www.energeticforum.com/154435-post393.html> at 08-31-2011, 09:48 PM

Continuing with the conceptualization of RATES OF CHANGE with respect to time and the interactions that arise.

In summary it has been given that variation of a quantity of dielectric induction, ψ , with respect to time is the DISPLACEMENT CURRENT, in amperes, i . We will call this [Maxwell's](#) Law of Dielectric Induction after its' discoverer James [Maxwell](#).

Also given is that the variation of a quantity of magnetic induction, ϕ , with respect to time is the ELECTRO-MOTIVE FORCE in volts, e . We will call this Faraday's Law of Electro-Magnetic Induction, after it's discoverer Michael Farady.

It should be noted that displacement currents flow thru the insulation (dielectric). It is NOT the familiar conduction current of the electronic ideologies.

Likewise the electro-motive force is a result of the conductor (metallic). It is NOT the electro-static potential of the dielectric field. A conjugate relation exists here, the "insulator" and the "conductor". So now we have TWO distinct "volts" and TWO distinct "amps", hence e and I are seen to have dual definitions. The ampere, I may be a displacement current, or may be a conduction current. Likewise the volts, e , may be an electro-motive force, or it may be an electro-static potential. These distinctions are important and misunderstanding rests here.

The [Maxwell-Thomson](#) concept of electric induction, and the of the aether which engenders this induction, considers the dielectric lines of force, and the magnetic lines of force, as CONCREATE PHYSICAL REALITIES. (Read electricity and matter by [J.J. Thomson](#), and also read Theory of Light and color by [Babbitt](#), the Un-sterilized version).

These lines can be considered "tubes of force" a hydro-dynamical vortex tube of sorts. Here we find the "hydro-dynamical model of the aether" as given by James Clerk [Maxwell](#). Understanding of this sort has been buried by the relativists and quantum car mechanics. From the initial concept of Faraday, thru the theoretical reasoning of [Maxwell](#), into the experimentalist like Crookes and [J.J. Thomson](#), it gave an ENGINEERABLE CONCEPT of the primordial aether. Finally [Nikola Tesla](#), [Oliver Heaviside](#), and Carl [Steinmetz](#) turned this into today's electrical technology. The roots of Edison sprang to life.

So what may aether be? Consider what are called the "states of matter".

1. SOLID
2. LIQUID
3. GAS
4. PLASMA
5. AETHER

Hence, the five distinct states of matter.

Electricity is embodied in the aetheric state of matter, or "proto-matter". Electricity is aether in a state of

dynamic polarization; magnetism is aether in motion, dielectricity is aether under stress or strain. The motions and strains of the aether give rise to electrification. Φ times Ψ gives Q .

In defining the hydro-dynamical tubes of force as concrete realities, a distinct phenomenon taking place with the aether, the constitution of the Planck sticks its snout out of the sand. The tubes of force are discrete, fiber-like, quanta as some would say. Experiments by [J.J. Thomson](#) indicate this. Lines of force are a quantum phenomenon, distinct concrete entities.

Further, we have the idea of "Planck's Constant", any variation in the total density of electric induction Q , in Planck's, cannot vary continuously but must exhibit its variation in discontinuous, or discrete steps. Hence a distinct quanta Q . We may infer that the union, or CROSS PRODUCT, of a single tube of DIELECTRIC induction, with a single tube of MAGNETIC induction, gives birth to a single unit of ELECTRICIFICATION Q . This idea embodies the concept of the photon, a QUANTUM UNIT of electro-magnetic induction. Also consider the [J.J. Thomson](#) concept of the "electron" (his own discovery). [Thomson](#) considered the electron the terminal end of one unit line of dielectric induction. One tube, one electron. So then, how big is a unit Planck, the quantum unit of electric induction, Q ?

Let us summarize the knowledge we have gained from what has been given to this point. The basic engineering dimensional relationships are hereby:

Q , the undivided quantity of the total electrification, "Planck"

W , the time rate of the production or consumption of this electrification, "Joule". (energy)

Ψ , the total dielectric induction, or the ratio of the total electric induction Q , to the total magnetic induction which is embodied in this electric induction. This is the "Coulomb" (charge)

Φ , the total magnetic induction, or the ratio of the total electric induction, Q , to the total dielectric induction, ψ , which is embodied within this electric induction. This is the "Weber" (induction)

E , the electro-motive force which results from the production or consumption of the total magnetic induction Φ . The unit is the "Volt"

I , the displacement current which results from the production or consumption of total dielectric induction Ψ . The unit is the "Ampere".

1. Q , Planck; Ψ , Coulombs; Φ , Webers

2. w , Jjoules; E , Volts; I , Amperes.

Group one consists of PRIMARY quantities, group two consists of REACTIONS by the primary quantities to their variation in quantity with respect to Time . 73 DE NGKPH

Φ , the total magnetic induction, or the ratio of the total electric induction, Q , to the total dielectric induction, ψ , which is embodied within this electric induction. This is the "Weber" (induction)

E , the electro-motive force which results from the production or consumption of the total magnetic induction Φ . The unit is the "Volt"

I , the displacement current which results from the production or consumption of total dielectric induction Ψ . The unit is the "Ampere".

1. Q , Planck; Ψ , Coulombs; Φ , Webers

2. w, Jjoules; E, Volts; I, Amperes.

Group one consists of PRIMARY quantities, group two consists of REACTIONS by the primary quantities to their variation in quantity with respect to Time .

73 DE N6KPH

Reply to Sputins

<http://www.energeticforum.com/154442-post395.html> at 08-31-2011, 10:12 PM

Originally Posted by Sputins View Post

Thankyou for continuing the internet transmissions from where you have previously left off.

Questions:

If total eletrification $Q = \Psi \cdot \Phi$

Or the total eletrification $Q = \text{Total Dielectric induction, times the Total Magnetic induction.}$

The more dielectric induction (capacitance), the more Counterspace.

The more magnetic induction (inductance) the more Space.

So then of the four primary dimensions of Electrical induction Q , we have the two primary physical dimensions. One of Dielectricity (more Counterspace) and the other physical dimension of magnitism (more Space). But there is only one dimension of Space?

Of the other two primary metrical dimensions Space and Time, it follows then if there is space and counterspace, then is there then time and counter-time? But then there is only one dimension of time?

The more magnetic induction, the more Space, the more time? - (Makes sense to me, the bigger the inductance the lower the frequency).

The more dielectric induction, the more Counterspace, the more Countertime?

Thank you DE N6KPH for your electrical engineering, mustard seed planting, internet transmissions. Wonderful!

One dimension of space that is space raised to the positive exponent is simply called space (acre). Space raised to the negative exponent is called counter space (per sq. centimeter). One dimension of time that is time multiplied by positive one is called forward time and the dimension of time multiplied by negative 1 is called reverse time. Space is multiplicative (exponential) and time is additive (linear). One dimension of time(second), one dimension of space (centimeter). System of base one numbers converts the dimension into forward, backward, counter, etc.

The Time Tunnel

<http://www.energeticforum.com/155363-post397.html> at 09-05-2011, 08:50 PM

Oliver Heaviside one stated that "The law of continuity of energy" is maintained when the energy existant at one time disappears but reappears at another time. In H.G. Wells' "Time Machine" The professor argues with the doctor saying that his time device (which just vanished) is still at the same

spot in the room, but the doctor can't see it because it is there, yes, but in another time. It moved through the dimension of time.

The motion of electricity in time has been the primary topic so far. Given is the three basic relations;

1. Plancks per second gives Joules.
2. Coulombs per second gives Amperes.
3. Webers per second gives Volts.

Joules, Amperes or Volts, are SECONDARY reactions in response to variation of our known PRIMARY dimensions, the total electrification in Plancks, the total dielectrification in Coulombs, the total magnetization in Webers.

In terms established by [Oliver Heaviside](#), the Volts of E.M.F. are a MAGNETIC REACTANCE, and the Amperes of displacement are a DIELECTRIC SUSCEPTANCE. The degree to which the reactance and the susceptance manifest is proportional to the time rate of variation, that is, per second. Here the dimension of time is not seconds, it is PER SECONDS, one over T. Somewhat like counterspace, but this is NOT COUNTER TIME. One instance of a per time arrangement is cycles per second. This is known as the FREQUENCY F, in cycles per second. Here is a dimensional relation of per second, frequency F. This frequency F represents only a rotational (alternating) cycle, and thereby is only a partial frequency. Also existent is a cycle of geometric progression or regression. This "frequency" is given in decibels per second. Hence our general frequency is given as decibel-cycle per second, or for Newton-Liebnitz methodology, it is neper-radian per second, ν . Hereby:

1. νQ equals W, Joule or Planck per second.
2. $\nu \text{ PSI}$ equals I, Ampere, or Coulomb per second.
3. $\nu \text{ PHI}$ equals E, Volt, or Weber per second.

The dimensional factor, ν , in per second we will call the [Heaviside](#) "Time Operator" This time operator describes the variation with respect to time as a "versor operator"

E and I are NOT necessarily time coincident, but one may lag or lead another. Cause and effect become separated by what is known as HYSTERESIS. It can be said that E and I exist in different "time frames." This subject rapidly accelerates into a Bach type reality and is much too complex for now.

73 DE N6KPH

Ratios and Products Continued

<http://www.energeticforum.com/157495-post423.html>

Ratios and Products Continued

Up to here has been covered the concepts of dimensional relationships known as ratios, dimension "one" per dimension "two." If dimension two is that of time, the ratio becomes a time rate or time derivative, from the Newton - Liebniz concept. This ratio is known as a first order time derivative, or differential equation. The dimension of time is in PER SECOND and this may be called a FREQUENCY ν , in NEPER - RADIANS per SECOND. But let us not plunge these depths quite yet.

So what about products, the union of dimensional relation "one" by the dimensional relation "two", the product of one and two? Given thus far is the product of the magnetic induction, Φ , and of the dielectric induction, Ψ , giving forth the total electric induction, Q . The product of magnetism united with dielectricity gives rise to the total electrification of the aether. Ψ times Φ .

But consider the union of the law of magnetic and dielectric induction. Faradays' times Maxwell's. Thus the union, or product, of the electro-motive force, E , in volts with the displacement current, I , in amperes. E times I . Here specifically is the product of the dimensional relation WEBERS per SECOND, and the dimensional relation COULOMB per SECOND. The resultant relationship is hereby

WEBER - COULOMB

per

SECOND SQUARED

But it has been given that

WEBER - COULOMB

equal

PLANCK

Thus the dimensional resultant of the union of the pair of dimensional laws is PLANCKS per SECOND SQUARED. We will call this the electrical ACTIVITY, also known as the electrical power, P . Hence the dimensional relation

PLANCKS PER SECOND SQUARED

equal

WATTS

E times I equals P , Volts times amperes equals watts. However it has been given that the energy, W , in Joules is dimensionally the time rate of the total electric induction, Q in Plancks, that is,

JOULES PER SECOND

equal

WATTS

That is, the electrical activity in Watts represents the variation of the total energy of the electric field, this energy itself resulting from the variation of the total electric field of induction. This is not unlike the situation in the automobile. No forces appear with the first order time derivative of miles per hour, but manifest in direct proportion to the second order time derivative of,

MILES per HOUR per SECOND

or

MILES per HOUR - SECOND

Hence, there is a distinct similarity between the dimensional relation for mechanical reactive force and the dimensional relation for electric activity

PLANCK per SECOND - SECOND

The Watt of electrical power, P.

73 DE N6KPH

Space the Final Frontier

<http://www.energeticforum.com/renewable-energy/1631-peter-whatever-happened-eric-p-dollard-15.html#post158045>

Space, the Final Frontier

As a dimension space is distinct from the dimension of time, and is devoid of any physical dimension. It is hereby eternal, and empty. Like time, space is a metrical dimension, it exists to quantify. Bounded space can define a volume, area, distance, span, or density.

It is customary to consider space boundaries as a CUBIC, or third degree set of co-ordinates. The three co-ordinates are length, width, and height, taken from a corner of the cube. Think of a sugar cube, the sugar is the space and the corners define the boundaries. These three co-ordinates, length, width, and height are WRONGLY known as the three dimensions of space. This is a major mind virus and is hard to erase.

There is only one dimension of space, SPACE, a metrical dimension. Any number of co-ordinates in any number of geometries can serve to define the boundaries of said space. The use of the cubic three is habitual.

The dimension of space is considered to exist in degrees, or powers of a unit space dimension, here centimeters, l (lower case L). So we can say cubic centimeters, or square centimeters, etc. hereby, on a cm basis;

cm to the +1 power , distance

cm to the +2 power , area

cm to the +3 power , volume

and

cm to the -1 power , span

cm to the -2 power , density

cm to the -3 power , concentration

Cm to a positive degree is called conventional - spatial relations, or simply space relations, whereas cm to a negative degree is called counter - spatial, or simply counterspace relations, all the above constitute

a single dimension, space, this space bounded by a co-ordinate construct upon a given degree.

Hence cm to the Nth degree serves as our "space operator", operating upon a physical dimensional relation. For example, Q times cubic cm, the volume of electricity, psi per square cm, the metrical dimension of space is applied to a physical dimension of substance. Even aether is a substance.

- mathematically;

I (to the third) Q gives Planck - cm cubed

I (to the second) Psi gives Coulomb per cm squared

In situations involving the dimension of time, the system of algebra serves well in expressing dimensional relations. It may even be said that algebra is the mathematics of time. (see [Alexander McFarlane](#), American Association for the Advancement of Science). For situations involving the dimension of space no suitable algebra has yet been developed. All efforts by the great mathematicians during the 19th century were fruitless, except [Oliver Heaviside](#)'s. Heaviside gave a system of vector expressions, divergence, curl, and potential, which today are WRONGLY called "Maxwell's Equations." They are not, they are Heaviside's equations, and they are NOT algebraic. But these equations have become the "Tablets of Moses", bringing from the skies the laws of electro-magnetism. But no mention or ever found on the laws of magneto-dielectricity, a serious drawback. (see space versor part in "Theory of Wireless Power", by E. P. Dollard). Therefore at present there is no true understanding of the spatial relationships of electricity. It is this algebraic absence that, in general renders occult the real workings of electric induction, and specifically renders occult the work of [Nikola Tesla](#). Space is then the final frontier.

73 DE N6KPH

N.F.G. Interlude

<http://www.energeticforum.com/159015-post464.html> at 09-25-2011, 10:33 PM

N. F. G. Interlude

After eating up the horse feces the coyote pukes it up in the car. Then Rube Goldberg makes the following propositions:

1. Hyper – Complication
2. Useless info overload
3. Reliance upon a technology understood, untested and infested with bugs.

These serve as the commandment triad of science & engineering today. No other form of behavior is known, nor would it be tolerated if it were.

Advancement will receive only a HINDRANCE, H, in the dimensional relation of B. S. Three primary dimensions give rise to hindrance H, in GOLDBERGS.

- 1) One will be PENDANTS, the Prostitutes of Electrical and Electronic Engineers, the P.E.E.E.
- 2) Another will be MYSTICS, the Quantum Car Mechanics, the Q.R.M.
- 3) Finally, will be DIS-INFOS, the Soviet Scalar Xenophobes, the S.S.X.

Real life stories abound, for example;

1) Animal control is notified when a parrot is spotted flapping about with furiously with only one wing, the other is missing. It is screeching "E equals M C squared, E equals M C squared." 2D and 3D fecal matter is ejected thru time by the injured animal. It can't be caught.

2) The S.W.A.T. team is called in when a mass shooting is reported at the School of Energy Synthesis Research by an adherent to the law of energy perpetuity sect. 8 are killed including the gunman, 15 more are injured.

3) Sheriff deputies respond to a report of 20 guys spilling out of the bar engaged in a brawl over the constitution of the aether. Next day the city council passes a resolution forbidding the existence of the aether.

So then, how do we pull the signal out of the noise? It is done by bandwidth reduction, power increase, coherent reception. Taking the inverse of the Goldberg triad gives:

1) Hypo - complication

2) Useful information

3) No belief in any theory or related technology without experimental verification of proof AND disproof.

Thru application of the inverse Goldberg law, and by phasing out the P.E.E.E., Q.R.M., S.S.X. components the signal will come thru loud and clear, 5 - 9 - 9.

73 DE N6KPH

Note: <http://www.hamuniverse.com/rst.html>

"If you got a report of "599" on CW, it means the following: The five means your signal is very easy to understand with absolutely no difficulty. The first nine means your signal registers a very strong reading on your S meter, usually 3/4 scale or more. The second nine means your CW tone has a nice pure clear tone or sound."

Dimensional Meanings

<http://www.energeticforum.com/159158-post466.html> at 09-26-2011, 09:22 PM

Dimensional Meanings

So far we have strongly emphasized dimensions and dimensional relations. Dimensional representation is the most direct method of analysis and synthesis with regard to the electric phenomena.. Electrical engineering has four primary dimensions; Metrical,

(1) time, t, second

(2) space, l, centimeter Substantial,

(3) magnetism, Phi, Weber

(4) dielectricity, Psi, Coulomb

There are no other electrical dimensions, that is it! The electric-dimensional RELATIONS are derived from these primary dimensions, but the relations are not new dimensions. There are no others than "the four."

Consider a certain hypothetical transmission system, the Integratron system of George Van Tassle. (not the Goddess temple "Integratron" of today) The Integratron effects transmission around space. Let us say one is on earth and another is on mars. If you enter the "in door" on the earth unit, you exit the "out door" on the mars unit.

In performing this operation you did NOT travel from earth to mars thru any intervening dimensional relation of space. No velocity or space per time, was effected. However time has not been altered so it may be said that the dimension of space has been cancelled out. Space was the transmission obstacle and the electro-geometrical structure of the Integratron neutralized the dimension of space. This is called a SPACE SCALAR, no variation in space.

At this point the Einsteiner would say that you traveled from earth to mars in "another dimension." Then, after a big blast off the bong, now it's a wormhole!

Another example, long distance D.C. power transmission. Long distance power transmission utilizing alternating current suffers from the effects of electro-motive force, E and the displacement current I both time derivatives. The compounding of E & I over long distances results in serious transmission impairments. The dimension of time is eliminated. Thus the dimensional relations involving time such as E and I disappear, but not into "another dimension", there is none.

D.C. has zero frequency hence it has no relation to time. It is eternal, invariable, constant. Direct current is a TIME SCALAR, no variation in time. The Quantum Car Mechanics and the Soviet Scalar Xenophobes, each in their self edification, have twisted this basic dimensional reality of the engineer into a distorted labyrinth of utter confusion. Wormholes, scalar waves, and etc. represent an oral/anal equivalency. Such concepts confuse, not clarify, engineering concepts. Yet the parrots lap it up eagerly, it has such a sweet taste. So does anti-freeze.

73 DE N6KPH

Dimensional Relations of Volts and Amperes in Time and Space

<http://www.energeticforum.com/159939-post471.html> at 09-30-2011, 07:19 PM

Dimensional Relations of Volts and Amperes in Time and Space

We have heretofore firmly established a concept of the two fundamental laws of induction, Faraday's law of electro-magnetic induction and Maxwell's law of magneto-dielectric induction. Electro-motive force E is a magnetic reactance to a change in the net quantity of magnetic induction, displacement current I is a dielectric suceptance to a change in the net quantity of dielectric induction. E in Volts and I in Amperes are the result of inductive variation with respect to TIME.

However, also in the same units of volts and amperes exist the electrostatic potential, e in Volts, and the magneto-motive force (M.M.F.), i in Amperes. This situation does not recommend itself.

The E.M.F. E and the M.M.F. i have a conjugate relation thru the metallic structure of the electric system. The displacement I and the electro-static potential e have a conjugate relation within the dielectric structure of the electric system. E and i in the metal, e and I in the insulator. This suggests the electric activity E times i and another activity e times I, both in Watts. Conversely, electrical activities of

E times I, as well as e times i suggest themselves. Hence we have arrived at a four polar form of electrical activity. Four distinct wattages. These represent the four terms of the "Telegraph Equation" of [Oliver Heaviside](#) in their primordial form.

The reactance E.M.F., E, via the dimension of time, T' , gives rise to an electro-static potential, e, across the dimension of space, l. In conjugate form the susceptance displacement, I, via the dimension of time, T'' , gives rise to a M.M.E., i, across the dimension of space, l. It may be said that E & I are the cause, where e & i are the effect, chicken or egg.

The metallic-dielectric geometric structure bounding the electric field of induction engenders the mechanical forces developed by this bounded field. Where E and I are strictly electric forces, e and i give rise to mechanical forces upon physical matter thru the dimension of SPACE. i and e are the seat of magnetic forces pushing the metallic and of dielectric force pulling the metallic. i is a pushing force, e is a pulling force.

How does the dimension of space enter into e and i, both spawned of the dimension of time? From time to space, but Volts and Amperes in both. This is a problem yet to be solved, a dimensional complication. e and i are not complete but are misrepresentations. They are figments of time. Forces due to e and i are more properly expressed as the dielectric gradient, Volts per centimeter and the magnetic gradient, Amperes per centimeter. e over l gives d the dielectric, and i over l gives m, the magnetic. d is the dielectric force, m is the magnetic force, of the dielectric field Psi in Coulombs and the magnetic field of Phi in Webers respectively.

Hence we have arrived at a pair of new dimensional relations:

1 Dielectric force, d

Volts, e, per c.m., l.

Or Weber per centimeter – second.

2 Magnetic force, m

Amperes, i, per c.m., l.

Or

Coulombs per centimeter – second.

The dimension of time and its relation to space is evidenced by these dimensional expressions. Here a condition exists where dielectric force is derived magnetically, and magnetic induction is derived dielectrically, both thru the dimension of time. However, we are not interested in time here, we are interested in only space. It seems like we are stuck in a loop.

The way out is to utilize the new pair of dimensional relations, that is

d the dielectric gradient

and

m the magnetic gradient

as primary dimensional relationships.

Effort will be made along the way to express these relations in an alternate expression, thru the concept of inductance and capacitance.

If this pair, d and m , both with no one's name, or real definition, are taken as primary dimensional relations then the electro-static potential e is derived as a secondary relation to d . Likewise the M.M.E. i is derived as a secondary relation to m . It is then

e equals the product of d and c.m.

Volt – centimeter per centimeter

And

i equals the product of m and c.m.

Ampere – centimeter per centimeter

These dimensional relations give rise to centimeter per centimeter. What can we make of this, a space scalar. This dimensional condition represents a SPACE INTEGRAL. Integration, as it is known, is derived from the Newton – Liebnitz concepts and represents the inverse of differentiation. This application to c.m. per c.m. is called the line integral of d or m . Integration is best avoided.

What we are doing is this; the electric forces dimensionally are in PER C.M., that is, in a counter-spatial form. In the integration, the product of the counterspace span in per c.m. is multiplied by spatial distance of the span. Per c.m. time c.m. the product of counterspace and space results in a dimensional cancellation, or numeric. This is called a SPACE SCALAR condition. It is dimensionless but possesses an "angle."

In conclusion, the force exists in a counter-spatial gradient, where as the potential, or M.M.E., exist in a spatial distance. The potential e is the integral of the force d , and the M.M.E. i is the integral of the force M . Read the introductory chapters of [Heaviside's](#) "E.M. Theory, volume one."

73 DE N6KPH

Response to the forum

From: Eric Dollard Sent: Friday, September 30, 2011 1:55 PM To: n6kph@yahoogroups.com Subject: [n6kph] Response to the forum

Santa Barbara Rotary Parametric Transformer, tested gave transformation ratio, power it to power out, of 108% +or- 5% error of measurement. It works, see video.

No one yet on how many Plancks constitute a Watt-second-second. Where is an understandable quantity of this dimensional relation? Look at laser light on white surface, notice all the tiny little Plancks? Well?

I have a D.C. transmission line, the conductors are 2 inches in diameter, spacing is 18 feet. How many ounces of force are developed upon a 600 foot span of this line, for the following;

1. 1000 ampere line current.
2. For 1000 KV line potential?

I am waiting.

Whoever answers these two basic questions will then possess knowledge for discussion of energy related apparatus. The law of energy perpetuity was invalidated at Santa Barbara. Free yourself from bondage.

There is an interposed relation between energy in and energy out, an angle of hysteresis. Find a switchboard power factor meter and its related wattmeter. Study them and make large models of them for study. Read [Steinmetz's](#) "Theory and Calculation of A.C." book, chapter on "Power and Double Frequency Quantities." (cross product – "conjugate product", dot product, and also scalar product) Here math useful for Phi, Psi to Planck unions.

Forget about f*ck*ng electrons. [J.J. Thomson](#) says that a hydrogen atom has 1000 electrons, we say 1 electron, what do you know about them, nothing. Go read and learn before parroting. Find Sir William Crookes' work.

In general, whatever fragmentation is produced in forum is just fine. I'm just "instigating the ants" to watch them swarm. N.F.G. frequency will be in proportion to idiot factor. Some just can't help being idiots. Those who make equations and machines relevant to energy synthesis more than make up for all the repetitive idiots. I'll take care of them with N.F.G. fun.

My interest in Russian paper is the equations, not the machines. It is the compound differential forms. Use a damn Alexanderson Mag-amp, not mechanical rotors, etc. Use harmonics of line frequency on the control winding. Use a car alternator or other machine to generate them, not solid state. Tune the control winding with a series condenser (watch for high voltage)

As for oscillating solenoidal winding, read these;

1. Theory of Wireless Power - E.P. Dollard
2. Abnormal Voltages in Transformers, A.I.E.E. Proceedings or Transactions – Boyajin and Bloom.

No velocity of light when coil oscillates. How many times must I repeat, NO VELOCITY OF LIGHT. Read Tesla Colorado book, do the math on the "extra coil." Find that it is 1.8 times light. Read! Yes, harmonic oscillations in coil windings generate parametric dielectric energy storage co-efficients. Farads per second. Good path to follow.

See also, on aether, Gustav Le-Bon's books, may be important. Also find the Mendelev pre-hydrogen series periodic table. Report your findings on the forum.

So get cranking... Eric

Impedance and Admittance

<http://www.energeticforum.com/160482-post488.html>

Impedance and Admittance

At this point the next level of dimensional relations can be derived from the primary dimensional relations given thus far;

(I) The law of electro-magnetic induction, Faraday's law, that is the electro-motive force E , in volts, is given by the proportionality (ratio) of the total quantity of magnetic induction Φ , to the time rate of

the gain or loss of this quantity of magnetic induction, in per second. The voltage E is given by the rate of variation of magnetism. Change in magnetism is volts of E.M.F. (II) The law of magneto-dielectric induction, Maxwell's law. That is, the displacement current I , in amperes, is given by the proportionality (ratio) of the total quantity of dielectric induction Ψ , to the time rate of the gain or loss of this quantity of dielectric induction, in per second. The current I is given by the time rate of variation of dielectricity. Change in dielectricity is Amperes of displacement.

In both cases "quickness" is the factor of direct proportionality. Example, 120 volts at 60 cycles per second applied to a transformer winding results in a greater rate of change in magnetism than 110 volts, 60 cycles applied to the same winding, despite both being 60 cycles. Why? The slope of 120VAC is greater than 110VAC. Try it on your oscilloscope and see.

E and I are not to be considered opposites of each other, but they exist in a COMPLIMENTARY-SYMMETRY form. The four pole archetype of electricity shows itself in that there is E and e or I and i . This leads to the answer for our second question, the null force condition, that is what ratio of E to I , and thus e to i give rise to a cancellation of "e pulls" and "i pushes." Another ratio to be investigated. Taking the ratio of the E.M.F. E , and the displacement I , that is E over I , we have evoked "Ohms law": The dimensional relation of E.M.F., Φ over T ; divided by the dimensional relation of displacement, Ψ over T . This results in a new dimensional relation. This relation is known as the IMPEDANCE Z , in OHMS. E per I is Z . For a given product of E and I in Watts. We may have a large E and a small I , a high impedance, or we may have a small E and a large I , a low impedance. Hence, a unit of power (activity) in Watts may be in the form of a high impedance (12KV, 1 Amp) or a low impedance (1KV, 12 Amp), both the same power (12 KVA). Think of the transmission in your car. The engine is delivering 20 horsepower (activity) and this is delivered to the wheels. The engine is running 1800 R.P.M. (volts), but the drive shaft is running 180 R.P.M. (volts). The engine is a high impedance, the driveshaft a low impedance, but the power is 20 HP in both. We call this an IMPEDANCE TRANSFORMATION and this is effected by what is known as a TRANSFORMER, (the transmission, it has a RATIO of ten to one).

The dimensional relation of impedance, Z in Ohms, can be expressed in an alternate manner from the primary dimensions. E divided by I equals Z , Ohms law. But we have dimensionally that the E.M.F. E in volts is given by Faraday's law

Webers per second

Likewise the displacement I in Amperes is given by Maxwell's law

Coulombs per second

Taking the ratio of E over I and substituting, the impedance is given by

Weber-second per

Coulomb-second = Ohms

Here, dimensionally speaking, we have second per second which is thus dimensionless, or scalar, a TIME SCALAR. Hence the primary dimensional expression for impedance, Z in Ohms, is given

Weber per Coulomb

Equals Ohm.

Hereby the impedance of the electric field of induction is defined as the ratio of the total magnetic induction to the total dielectric induction, Φ over Ψ gives Ohms Z . This is known as the characteristic

impedance of the electric field of induction.

It must be remembered that the scalar term of seconds per seconds expresses the hysteresis angle between the time frame for E and the time frame for I, as the pair weave their dance thru the dimension of time (note, get that 2D or 3D out of your head, we are in the dimension of time!) The ratio Z, the impedance, is therefore a "directed quantity" in the dimension of time. This is to say the impedance has magnitude and a position in time. Listen to Bach organ music for further as this is too complex for now.

Since arriving at the concept of impedance it may be asked what results from its inverse I over E, the ratio of displacement current to electromotive force. This ratio is called the ADMITTANCE Y of the electrical system. Following the same path dimensionally as was done with impedance it is,

Coulomb – second

Per Weber – second

Hence the admittance Y is given dimensionally by,

Coulomb per Weber

Equals Siemens.

Admittance Y in Siemens is the ratio of Psi to Phi, the ratio of the dielectric field to the magnetic field of the electric field of induction. This is called the characteristic admittance of the electric field.

As for the scalar term of seconds per second the same situation exists as with the impedance Z in Ohms. It is however that there is also a time "angle" between the time frame of impedance Z in Ohms and admittance Y in Siemens, just as there is with Volts and Amperes. Hereby results that the impedance is NOT just the inverse of the admittance, that is, Z is NOT one over Y, they are MIRROR IMAGES. Look in the mirror. Your head is up, your feet are down, but your right is left and your left is right. This is much too complex.

In conclusion, the impedance and admittance serve as proportionality factors between the magnetic and the dielectric, or the dielectric and the magnetic, fields respectively.

73 DE N6KPH

The End of Time

<http://www.energeticforum.com/161445-post509.html> at 10-08-2011, 10:42 PM

The End of Time

This dimension of time, and its dimensional relation to electric phenomena, thus far has been the primary discussion. This metrical dimension, in seconds, and its relation to the substantial dimensions of Q, Psi and Phi has yielded a set of fundamental electrical relationships. As of yet the dimension of space is regarded as a frontier, occult from the human mind.

The idea of the dimension of time is a relatively modern development, beginning with the "age of clocks" in Europe. Out of this evolved the epic time dimensional works of J.S. Bach, 1685 to 1750. Following Bach the Newton – Liebnitz system of mathematics allowed for an analytical treatment of the dimension of time. The development of a base one number system, such as given by [A. MacFarlane](#),

and a system of electrical dimensional relations by [O. Heaviside](#), led to the epic time dimensional works of [C.P. Steinmetz](#) 1865 to 1923. [Steinmetz](#) writing in "Theory and Calculation of Transient Electric Phenomena" stands as an algebraic analog to Bach's last work, "Die Kunst der Fuge", BWV – 1080. Time in both forward and reverse, as well as multiple hysteretic time frames, within a complimentary – symmetrical geometric construct are portrayed in both the works of J.S. Bach and C.P. Steinmetz. A persistent rumor exists, starting with Edison's attempts to make contact with the dead. An unknown Christian organization contracted [Steinmetz](#) to develop an apparatus to allow viewing in present time the life of Jesus Christ in his time. Quite a story but no possible verification. However, in the realm of fiction, it was noticed that an old 1963 Outer Limits episode titled "Borderland" portrayed a layout like [Steinmetz](#) may have used in his G.E. laboratory. It is unfortunate that few, if any, have, or will follow the footsteps of the giants, they are too deep. Most will, without a thought, lap up the sweet neurotoxins administered in liberal doses by the pendants, mystics, and dis-informers. Coyotes however are hard to trick and thus are hard to poison. We will continue to follow their path, hard as it may be.

Up to this point in time these time sequential internet transmissions have been intent in presenting, in a hypo-complex fashion, the primary electrical relations previously relegated to the tongues of parrots with only one wing. The only unique dimensional relation has been the Planck, Q . The Planck is defined as the undivided quantity, Q , of the total electric induction. In a Biblical sense an analog is, "and in the beginning..." Every other substantial relation found its derivation in the Planck. A pair, Phi and Psi were arrived at by a divorce, four more by direct interaction of a substantial dimension with the metrical dimension of time, these being E , I , W , P , and finally two more Z and Y , were derived in a pair of paths, one path thru the metrical dimension of time, the other path thru direct relations of the primary substantial dimensions of Phi and Psi. These give us the ONE and a following set of EIGHT.

It is important to remember not to become enamored to our models, or the models of others, with regard to the nature of the inductive process, or the nature of the medium which engendered it. These constructs, here and elsewhere, are illustrative, not concrete, but that is not to say that concrete constructs should not be sought. The primary intent and effort here is the establishment of concrete engineering formulation applied to the development of specific electrical apparatus. It is goal orientated much like the actions of large aggressive reptiles. Too bad they are extinct. What one does after that big blast off the bong, or the Nth beer in the bar, is considered a personal issue, not for publication or enforcement.

Concluding this sequence of time dimensional relationships the following tables are given. Table 1 The One: The undivided quantity of electric induction. Given as: The Planck, Q , in Weber - Coulomb.

The primary pair of dimensions:

One: The total dielectric induction. Given as: The Coulomb, Ψ , a primary dimension.

Two: The total magnetic induction. Given as: The Weber, Φ , a primary dimension.

The first set of secondary dimensional relations:

One: The displacement current. Given as: The Ampere, I , in Coulomb per second.

Two: The electromotive force. Given as: The Volt, E , in Weber per second.

The second set of secondary dimensional relations:

Three: The energy. Given as: The Joule, W , in Planck per second.

Four: The activity (power). Given as: The Watt, P , in Joule per second.

And finally the pair with dual derivation:

One: The impedance. Given as: The Ohm, Z , in Volt per Ampere, or in, Weber per Coulomb.

Two: The admittance. Given as: The Siemens, Y , in Ampere per Volt, or in, Coulomb per Weber.

Also, throughout the dimensional relation for time is given as:

The complex frequency in Neper – radians per second, v .

And thus closes our system of electrical units in a dimensional relation with time.

Table 2

DIELECTRIC ELECTRIC MAGNETIC

Planck -----	
Coulomb -----	Weber
Ampere -----	Volt
Siemens -----	Ohm
Joule -----	
Watt -----	
(Neper – radian per second)	
73 DE N6KPH	

Space

<http://www.energeticforum.com/161729-post512.html> at 10-10-2011, 11:25 PM

Space

Our discussion on the theory of electric phenomena will now shift from the metrical dimension of time and develop the application of the metrical dimension of space. As a frontier, space will be treated in an experimental manner. One is cautioned against being, or becoming, enamored to any particular concept of space presented here or elsewhere. The importance of the study of [J.J. Thomson](#), "Electricity and Matter", and [O. Heaviside](#), "E-M Theory", volume 1, (introductory chapters), this cannot be over-emphasized. Do your homework. And as said by Heaviside, it is said here; "If you think these are hard to read, well, they are even harder to write (in the front seat of my car).

Greater complexity is encountered in the application of the dimension of space than that of time. Space relations are not well understood in the contemporary engineering world, and misconception abounds. N.F.G. relations introduced by the QRM mystics, such as curved space and 2D, 3D thinking has all but eliminated any real comprehension of the application of the dimension of space to electrical study.

Relations in the dimension of time are ADDITIVE, relations of forward and reverse. Time relations are linear, so to speak, along w versor path in time. Not so in the dimension of space, here it is MULTIPLICATIVE. Time relations are arithmetic progressions, whereas space relations are geometric progressions.

Consider a numerical illustration:

For the time relations, it is;

3 and 3 gives 6

For space relations, it is;

3 and 3 gives 9

Two distinctively different results.

In time it is expressed as;

3 plus 3 equals 6

In space it is expressed as;

3 times 3 equals 9

Taking an alternate approach we have for time, a pair of 3's, that is, two 3's. The same for space, two 3's.

Then it is for time;

3 times 2 equals 6

And for space it is;

3 to the 2 power equals 9

Hence, it can be stated that the time relations are LINEAR whereas the space relations are LOGARITHMIC.

In working with time dimension relations there has been developed a versor algebra, an "algebra of time." The development of this time algebra is primarily due to the efforts of [Carl Proteus Steinmetz](#) of General Electric Corp. (also see [A. MacFarlane](#), "The Imaginary of Algebra").

Versor algebra utilizes a BASE ONE number system, that is, the number ONE raised to a specific power. In common use is the base TWO number system, binary, and the base TEN number system, decimal. But a base one number system seems unlikely, it can only give one. This is exactly what we want in a versor system, as will be shown.

The versor concept applied to time relations has been established in engineering work for practical use, but not so for space relations. The concept of space versor algebra jammed up and seized with what is known as QUANTERNIONS. Development of space versors "finished" with quaternions (see [A. MacFarlane](#) "Principals of the Algebra of Physics") and little else progressed up to the "Theory of Wireless

Power" by E.P. Dollard where a space versor algebra is presented. Note that versors are NOT VECTORS.

So as to arrive at an understanding of versor algebra in general it is instructive to consider known concepts of versor algebra for time. Consider a second order time relation. This is given as, the square root of positive one, a seemingly useless statement. An alternate expression is given as, ONE raised to the one half power, let us say raised to the PER TWO power. This is a second order relationship and by definition must give a pair of roots, that is, two distinct values, thus the roots are given as (1) Positive one, and (2) Negative one. We will call negative one an IMAGINARY NUMBER. Both roots, (1) and (2) are more properly named VERSOR OPERATIONS. Their magnitude is unity and they are dimensionless. Therefore, by application to the concept of the additive process, it has now been extended to include subtraction. (plus and minus). We have arrived at an expression for time phase opposition.

Extending these ideas results in a versor expression for fourth order time relations, the fourth root of positive one. This is ONE to the ONE FOURTH power (one to the PER FOUR power). This can be partially resolved into a pair of square roots, each of which have two roots, giving the required four roots. It is given that the square root of positive one produces a pair of roots, that is,

1) Positive 1.

2) Negative 1

Now, in addition, is the second square root, the square root of negative one, this producing a pair of roots,

1) Positive j

2) Negative j

Hereby we arrive at the required four roots produced by the fourth root of positive one, four to the one fourth. These are given as;

0) Positive 1

1) Positive j

2) Negative 1

3) Negative j

Here the concept of the additive process, addition, is now further generalized. There is more than only plus and minus. This versor expression is for time phase quadrature and for time phase opposition. We now see versors as a degree of lead or lag on a given order of time, here in fourth order time. One to the one fourth power gives the four quadrature versor operators. CAUTION, do not view this as 2D or 4D time, this is NOT a VECTORAL system. Further on this is given in the "Symbolic Representation" papers by E.P. Dollard.

The versor algebra here given thus far has been orientated to represent the dimension of time. Versor algebra is based upon degrees or orders of the dimension to which they are applied. The following orders of space, in terms of perceptual understanding begins the degrees or divisions of the dimension of space. The fundamental unit of space here will be the centimeter, or cm.

I - First order of space:

(a) DISTANCE Space to the positive first power, cm.

(b) SPAN Space to the negative first power, per cm.

II – Second order space:

(a) AREA Space to the positive second power, square cm.

(b) DENSITY Space to the negative second power, per square cm.

III – Third order space:

(a) VOLUME Space to the positive third power, cubic cm

(b) CONCENTRATION Space to the negative third power, per cubic cm.

IV – Fourth order space:

(a) Space to the positive fourth power, quartic cm.

(b) Space to the negative fourth power, per quartic cm.

Finally Nth order space.

The (a) group are the spatial relations, and the (b) Group are the counter-spatial relations. Higher order space, such as fourth order lack definition, it is undefined space. Einstein 4D space, crystal structured? It remains un-defined!

These orders of space can be worked into a simple tale:

I ran out of orange juice, bummer. Now I got to drive a DISTANCE of 15 MILES to the lizard pit (store). Let's take Rathead, the poodle, along for a chance to get out of the house. Along the way I'll count the number of poles on that old J carrier line, they have a SPAN of one PER 150 FEET. Rathead has got to stay in the car, that 1000 ACRE AREA of land behind the store is infested with coyotes. They have a population DENSITY of one PER 50 ACRE. This store only sells juice in a VOLUME of half GALLONS. The CONCENTRATION of vitamin C in this juice is one unit daily requirement PER 8 CUBIC OUNCE serving. When considering next the fourth order of space, Rathead begins to bark his head off at some UNKNOWN THING. Stupid poodle, let's go. Break, more follows on Space.

73 DE N6KPH

N.F.G. In Space, Heavyside

<http://www.energeticforum.com/162049-post518.html> at 10-13-2011, 02:15 AM

N.F.G. In Space, Heavyside

The lord god sayeth to mooses : Thus rose the beast, and it arose as a giant one winged parrot, this hewn of solid plutonium. She delivereth the beast as an idol of worship to her supreme power. The surrounding multitudes casteth off their garments so as to feel the warmth of its radiant tongues of fire. It came to pass that the beast smote the multitudes by burning their eyes and leaving them to wander blind for eternity.

Verily this is the present situation for the science of electricity, just as told in the parable. Oliver Heaviside, a spurned English theoretician, devoted considerable effort toward straightening the path of progress in electrical science. He endeavored to lead the blind out of darkness, but their restored sight was only black and white. The idea of electricity as a flow of electrons in a conductor was regarded by Heaviside as a psychosis. This encouraged Heaviside to begin a series of writings to "de-program the Moonies." This often utilized "Tragic Tales" to make his idea clear about mathematical futility. "One such tale" is of a young child, "and this child would not smile. So his father beat him with a strap, in an effort to make him smile. But the child would not smile. Later he was eaten by a lion." This tale is what Heaviside thought about the mathematical system of QUATERNIONS

Quaternions represent a primordial form of a versor space algebra. It is however ultimately vectoral. The system of quaternions was a retrofit of the existing concepts of versor algebra that originally were adaptable to time, this to provide an analogous versor algebra useful for space. It is really not much use for this purpose. Oliver Heaviside despised quaternions, leading him to develop his own space mathematics. The work of J.C. Maxwell was encumbered by his reliance upon he use of the quaternion system. It is this complication with Maxwell that initiated Heaviside's efforts to "remove the baggage" that encumbered the understanding of Maxwell. Heaviside produced his "vector system" for this effort. He received little credit for his important work, and his famous set of equations are wrongly known as "Maxwell's Equations", ask any parrot.

Heaviside's vector system sought to provide a lucid description to the Maxwellian concept of electro-magnetism, or rather the Heaviside concept of the Maxwellian concept of eelctro-magnetism. That is transverse electro-magnetism. Plancks, or cross product relations But this vector system has no application to longitudinal magneto-dielectricity. But is not this the realm that gave Maxwell his fame? Displacement current, current in empty space, is the Maxwellian concept that leads to longitudinal waves. It is most likely that most of what is thought to be understood about Maxwell's work is in reality the ideas of others. Absolutely no mention should be made of anything Maxwellian without directly quoting Maxwell himself thru his writings! To study his work in its entirety will take a lifetime. So mute thyself.

The dis-informers, SSX, heap criticism upon Oliver Heaviside for his one sided representation of the works of J.C. Maxwell. Their real motive is to take one off the "Heaviside trail", but the coyote wants to run that path. Obviously this series of transmissions via internet is in the full "attitude" of Oliver Heaviside. Forgotten in pre-history is the effort of 19th century mathematicians given to space math. Major figures were Grassman, Hamilton, Tait, and MacFarlane. Review of their works provides a better understanding of what has been inherited . Only what Maxwell utilized out of necessity, and Heaviside developed out of deliberation exists today. Longitudinal electric waves are considered non-existent, a complete impossibility. But that is what propagates between the plates of any condenser or between the windings of any transformer, physical realities.

So today we labor under an absolutely one sided view of electricity. It cannot stand upright just as a bird with only one wing cannot fly. The entire misconception has now matured, become "frozen in stone" as an idol of worship to the supreme power of the pedant. In reality it is a monolith of self-edification, taught in every university.

The pedantic assault upon the pioneering efforts of Heaviside, Tesla, and Steinmetz is worthy of closer examination. Two particular characters, supreme pedants sink to the "bottom of the bowl." One is William Preece of the British Royal Society. Preece championed the entirely lopsided view prevalent in the "misunderstood, untested, and infested with bugs" undersea cable telegraph technology. This errant concept nearly ruined the trans-oceanic telegraph industry. It took the work of Oliver Heaviside to "balance the equation" thereby allowing a working telegraphic system. He did this through His serial writings known as "Electro-Magnetic Induction and its Propagation." These led to his most important

development, the "Telegraph Equation." William Preece F.R.S. censured the work of Oliver Heaviside and went so far as to attempt to make his own concept a law.

America's most (wanted) noteworthy pedant is Michael Pupin, of Columbia University. Pupin was a supreme pedant. He repeatedly assailed Tesla with rude attacks. He even went so far as to perform the same upon C.P. Steinmetz. Steinmetz received harsh criticism for his theory of hysteresis, which not only gave Steinmetz his world fame, but also saved the infant electrical industry from ruin. Pupin declared the important transformer equations developed by Steinmetz as un-Maxwell, heretical. But it is these ideas that lay the foundations of electrical engineering. Pupin's crowning swine behavior is his treatment of Heaviside. Pupin takes Heaviside's telegraph equation, re-packages it as a transmission concept, patents its implementation, then sells it to American Telephone & Telegraph for \$25,000. Long distance telephone is born, with not one word of Heaviside. In final disgust, during the "Einstein Age", Heaviside removed his furniture from the house and sat on granite blocks, then painted his fingernails pink. Later he was stoned to death by a pack of youngsters.

73 DE N6KPH

Application of Space to the Electric Dimensional Relations

<http://www.energeticforum.com/162271-post529.html> at 10-14-2011, 10:55 PM

Application of Space to the Electric Dimensional Relations

In order to gain an understanding of the electric field of induction a concept of the distribution of this induction in the dimension of space must be developed. An example is a 200 mile long power line. It has a span of 600 feet between towers. This is a 230 kilovolt, 60 cycle/sec, 3 phase line. It can be shown that for each span of line between supporting structures there exist an electro-motive force, E , in Volts, this in series along this span, and a displacement current, I , in Amperes, this in shunt along this span. The series $E.M.F.$, and the shunt displacement of each span compound with each successive span. The total $E.M.F.$ and total displacement for the entire length, 200 miles, of the line is found by integrating over the total number of spans. However, this integrated value is not given by the simple addition of the individual $E.M.F.s$ and displacements developed by each of the individual spans. Here we find an exponential function of space determines the relation between the individual values, and the total values of $E.M.F.$ and displacement. These considerations are developed by Carl P. Steinmetz in his "Theory and Calculation of Transient Electric Phenomena" book, in particular the chapter on "Transients in Space."

The general problem of the representation in space is given by the introductory part of "Transients in Space" and also by Ernst Guillemin in the introductory chapters in his "Communications Networks" vol. 2. Read these, they are a most important study. These writings form the basis for the theories of electrical engineering utilized today.

The metrical dimension of space is most often considered as a VOLUME, this representing an enclosed quantity of space. This space is filled with something substantive, often which must be paid for, such as a gallon of milk. The milk is the substantial dimension, the "throw away" gallon container is the metrical dimension. In general, this volume of space is considered a cubic quantity, or boundary, this such as a cubic foot, cubic yard, cubic centimetre, and etc. It is habitual to express a volume in cubic terms, this in three mutually perpendicular co-ordinates, wrongly called "dimensions." It is also habitual to express electric relations in the same manner, a corner of a cube, such as Ψ , Φ , and Q . This now is three dimensional, a 3D relation, since Ψ , Φ , and Q are dimensions. The cubic relation itself has no substantive dimensions, it is only the metrical dimension of space expressed by a group of three mutually perpendicular co-ordinates. This is important.

It is given here that a one centimetre cube is the elemental unit of the dimension of space, a volume of one cubic cm. This is about the size of a common sugar cube, but instead of sugar, this cube is filled with electric induction. It is a cube of electricity. What exists outside the boundaries of this cube is for now unknown, it is excluded by the boundaries. For most of the examples that follow, all space is filled with 10-C transformer oil, the dielectric. All boundaries enclosing, or dividing, this space are sheet copper, the metallic. Here given is the metallic-dielectric geometry, such as a power transformer, or a static condenser, two fundamental apparatus in electrical work.

In the case of the 200 mile long A.C. power line the basic element of space is the span. This is first order space. Here it is given as per 600 feet, this now a unit value. It now equals one, one span. This unit value is known as a differential element, it is indivisible, the smallest "line on the ruler." It relates to the Newton-Leibnitz concept of the infinitesimal.

It is considered that cubic, or third order space, is the most general expression of space, a metrical dimension. Since the ordinary transformers and condensers utilized in power engineering are of considerable volume, it is then allowable to consider one cubic cm. as a differential element, that is, an infinitesimal quantity of space. Taking the, one cubic cm. of space, as a unit value, gives the differential element of the metrical dimension of space. It is hereby about the size of a sugar cube, but filled with 10-C oil. Hence the VOLUME is given as ONE cubic cm., the AREA as ONE square cm., the DISTANCE as ONE cm., the SPAN as ONE per cm., the DENSITY as ONE per square cm., and the CONCENTRATION as ONE per cubic cm., all faces, corners, spacings, and etc. of this unit cube are ONE. Hence our differential, indivisible, element of the metrical dimension of space. All orders, or powers, of this space equals one, one squared is one, one cubed is one, and etc. All are one.

This may just as well have been a cubic yard, or a cubic nanometre. The consideration of "unit value" is to reduce the size to the point to which there is no distinguishable variation of the substantive dimension with respect to the unit of the metrical dimension of space. It is then a space scalar condition, no variation in space. For example, consider the 200 mile long A.C. power line. It has a propagation velocity very near that of light. For a frequency of 60 cycles per second, this gives the wavelength as 2880 miles in length. The total distance of this line is 200 miles, this a significant fraction of a quarter wave or an impedance to admittance transformation. However the per 600 feet of a span is an infinitesimal fraction of the quarter wave distance. Hence the distance between towers, the spans, serve as the differential element. It is then 600 feet is of unit value, indivisible. There are no intervening towers.

No perceptible variation of the series E.M.F., E in Volts, or the shunt displacement, I in Amperes, exist along this 600 foot span of A.C. power line. Hereby it is said the E.M.F. per span, or the displacement per span. In the general case it is given as Volts per span and Amperes per span. These dimensional relations represent the voltage gradient and current gradient along the length of line. Dimensionally it is;

1) Volts per cm. 2) Ampere per cm.

It should be noted that this pair of gradients exist in space quadrature to the previous given gradients, the dielectric gradient, d, and the magnetic gradient, m. This is a fundamental relation in electro-magnetic induction and its propagation.

It can be seen that each span has a back E.M.F. in series with the power flow, and a displacement, or charging, current in shunt with the power flow. These are a consequence of the electric field of induction in a time rate of variation, the 60 cycle, or 377 radians per second. These are transmission impairments and give rise to a delay in propagation which progressively compounds down the line, from span to span. These differential elements, or spans, must be summed up, or INTEGRATED, in order to

determine the total E.M.F., total displacement, and the total delay in propagation. This is not so easy of a task. Now for higher orders of space the situation is that order more difficult.

In the application of the metrical dimension of space to the substantial dimensions of electricity, the concept of magnetic inductance, and electro-static capacity, are utilized. Steinmetz, in his "Impulses, Waves, and Discharges", established the inductance and the capacitance as the "Energy Storage" coefficients of the electric field of induction. It must be noted that here the term ELECTRIC FIELD is NOT the "electro-static" field, it is the union of the dielectric and magnetic fields of induction. Erase the "electric field" wording of the one wing parrot. These two distinct dimensional relations, the INDUCTANCE and the CAPACITANCE serve to define the ability of bounded to contain the electric field of induction, this field representing STORED ENERGY.

What follows here is the development of the properties related to the dielectric and magnetic fields and the interaction of these with the bounding metallic-dielectric geometry. Considerations involving energy will be arrived at later on. In this view inductance and capacitance now represent GEOMETRIC CO-EFFICIENTS, expressing the relation of the BOUNDING GEOMETRY with the fields of induction which it bounds. In essence inductance and capacitance are of a scalar form. Here enters the concepts of what is known as "radionics." The inductance and capacitance each exist in distinction to the electricity itself. The inductance and capacitance ultimately serve as geometric expressions. This is important. Hereby they can be expressed as completely metrical dimensional relations, that is, having no substansive dimension.

We have of yet actually given the dimensional relations which make up inductance and capacitance. Further considerations involving the electric field have yet to be understood. Break, more to follow...

DE N6KPH

Basic Electrical Relations in Space

<http://www.energeticforum.com/162655-post530.html> at 10-17-2011, 10:12 PM

Basic Electrical Relations in Space

Let a one centimetre cube of the metrical dimension of space be given as unit space. The given metrical boundaries define a unit cube, a sugar cube with no sugar, no 10-C oil, not even any aether. This cube of space is empty, void. This unit of space, a metrical unit, is NOT in connection with any substantial dimension. This is a unit cube of void space.

It is postulated that electric induction, as a property of the aether, cannot be established without the presence of this aether, or another dielectric medium. This is to say, void space is not capable of supporting electric induction. Hereby it is reasoned that the aether is a substansive dimension, or it can be expressed as a substansive dimensional relation. The dimensional expression of the aether it is best given as a primary dimension, expressed only in a dimensional relation derived from a primary substansive dimension and its relationship to a primary metrical dimension, time or space. This is served by the concept of the Planck, Q, this in conjunction with a space versor system expressing the Planck in real (electro-magnetic) components. See E.P. Dollard "Theory of Wireless Power."

In general we have been speaking in terms of line of force, that is lines of magnetic and lines of dielectric induction. It is as of yet known "how big" these lines of force may be. These lines of induction can be expressed analogously, such as a bag of uncooked spaghetti. Its individual strands serve as analogs to the individual lines of induction.. Hence long, thin, strands with axes in a broadside bundle. If then the bag of spaghetti is snapped in two, when it is viewed endwise, a circular cluster of small end-sections of each strand are seen. These are elements of the strands of spaghetti.

This package of spaghetti is an analog to the total dielectric induction. Now there are 100 strands of spaghetti in this package, or boundary condition. Here Ψ is then given as 100 strands, the total quantity of spaghetti. Viewing this package endwise, 100 end sections of the individual strands are seen in a circular bundle. The cross sectional area of this bundle, bounded by the package is a one square inch AREA. This is analogous to a dielectric flux DENSITY, the density of dielectric induction, in PER SQUARE INCH. Hence the density of spaghetti is given as 100 strands per square inch. The total undivided quantity of spaghetti is 100 strands. The substantive dimension of spaghetti is in containment by the "throw away" package, this as the metrical dimension of space. Counter-spatial representation is given as 100 strands per square inch. The grocery store regards this as one indivisible unit quantity in space of spaghetti induction.

Here the substantial dimension of spaghetti, Ψ , is operated upon mathematically by the metrical dimension of space, per square inch. Here arrived at is the dimensional representation of spaghetti in space, strands per square inch. This is a second order space relation, in a counter-spatial form.

A pair of dimensional relations follow from the spaghetti analog. One is the dielectric flux density, Ψ over A ,

(1) Coulombs per square cm.

And the magnetic flux density, Φ over A ,

(2) Webers per square cm.

Here A is the area in square cm, a second order expression of space. A primary dimensional expression for second order space is the ACRE, the space for which she extracts her toll.

Since the total electric induction, Q , is the product of the dielectricity, Ψ , and of the magnetism, Φ , it may be asked, what of the product of the dielectric flux density, and the magnetic flux density? This is given as,

(3) Coulomb per square cm

Times

Weber per square cm

Substituting the dimensional relation,

(4) Coulomb-Weber, or Planck

Hereby gives the dimensional relation of the product of the flux densities as,

(5) Planck per quatic cm.

Hereby the product of the pair of flux densities, (1) and (2) Gives rise to a fourth order space relation (5), this in counter-spatial form. Now what in hell set off the poodle this time?

73 DE N6KPH

Experimental Cubic Volumes

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Experimental Cubic Volumes

It has been heretofore established an existence of a volumetric, or cubical, unit of space, the metrical dimension. This unit of the dimension of space is defined as one cubic centimetre, the size of a common sugar cube. It is given this metrical cubic volume of space is void of any substansive dimension, no sugar, no 10-C oil, and even no aether, since aether is considered a substansive dimensional relation. Hence, indivisible, void, and a pure metrical unit, this is our cubic volume of EMPTY SPACE.

Consider the axiom that a field of electric induction cannot exist in the absence of the aether. Then just how does this cubic void space interact with an electric field? Since the laws of lines of force as established by Michael Faraday, and developed by J.J. Thompson, and as further established by C.P. Steinmetz, maintain that no line of force can just end in space. The lines of magnetic induction exist as closed loops, no beginning, no end, continuous expansive or contractive loops. Magnetism is a circumferal force. In a conjugate manner the lines of dielectric induction terminate upon physical surfaces, where they bond into the intra-molecular dimensions. Dielectricity is a radial force.

The Maxwell concept of electro-magnetic induction and its propagation gives an altered concept of the nature of dielectric induction. In this situation the lines of dielectric induction may also terminate upon themselves, forming closed curves in a manner analogous to the loops of magnetic induction. This condition is a necessity for the propagation of electro-magnetic waves in a dielectric medium, (sugar, oil, aether, etc.) without guiding metallic structures (wires, waveguides, etc.) This eliminates the "charge carrier", that is, the dielectric induction is now completely independent of any terminal surfaces. The dielectric induction is now completely dielectric. This is the fundamental concept underlying the Maxwell theory of electro-magnetism. It is here that J.C. Maxwell found his fame. But the pedant tells us just the exact opposite! So intent is this mind-state in forcing a "materialism" upon electrical theory that Maxwell's work is re-worked to suit this view, it is then taken up by the one wing parrots, their screeches drowning out the original concepts of Maxwell.

It may be logically inferred hereby that, for the condition of a cubic volume of space, the line of magnetic, and the lines of electric, induction must bend around this cubic void of space. These lines cannot be interrupted or broken by this void. Hence by the insertion of a cubic void into a space supporting electric induction the lines of force are pushed aside. The overall induction in the supportive space is then hereby reduced, since now there is a unit volume less of this space. This is to say that the inductivity of the supportive space is reduced by the insertion of an aetherless cubic volume of space, the cube of empty space.

Consider certain experimental configurations. One configuration consists of a widely spaced pair of laser produced beam of light, side by side traveling through the aetheric medium. The second configuration is a pair of one square centimetre copper plates. These two plates face each other squarely and are separated by a span of one centimetre. This defines a partial boundary for our one cubic centimetre, or unit, cube. Hence any unit cube volume can be inserted between the pair of one square cm copper plates. It is also given that all space within and surrounding these copper squares is void, no sugar, no oil, no aether, just empty space.

In our first experimental configuration we have a set of three unit cubes, one is filled with 10-C oil, the second is filled with aether, and the third is void. Taking the side by side spaced laser beams, we measure the speed, or time delay of propagation of both beams through supporting aether through which they propagate. Here, both arrive at the end point at the same time, thus propagating at identical velocities of propagation. First, take the unit cube of oil and insert it into beam number one, leaving beam number two unchanged. It is hereby found that beam one arrives delayed in time relative to the arrival time of beam two. Here it can be inferred that light travels slower in the oil. By

measurement it is found to be about 70 percent of the light velocity in the aether.

Next, take a unit cube of aether and insert this cube into beam one, again leaving beam two unaltered. Obviously both beams arrive at the same time since both propagate through only aether.

Finally, take a unit cube of void space and insert it into beam one, beam two again unaltered. The poodle begins to bark. We now have two distinctly opposing possible outcomes.

(A) Beam one is stopped at the facing boundary of the cubic void. No beam one is detected at the receiving end. Now it may be asked, what became of beam one? Was it sent back, or was it consumed, thus in violation of the Law of Energy Perpetuity? This we are unable to answer.

(B) Beam one arrives advanced in time relative to the arrival time of beam two, this to say, that the propagation through the void space is now instantaneous, in other words with an infinite (un-defined) velocity. It takes no time to span the distance of the unit void space. How is this possible?

Now we take our next experimental configuration, the pair of parallel one square cm. copper plates, these in void space. Thus far we have no concept defining capacitance, but we do possess a capacitance meter. How fortunate! Upon connecting this instrument to the unit copper plates in a void it is found that this metallic-dielectric configuration has zero capacity. This is understandable since we now have no dielectric, and hence, no dielectric induction.

Next, we insert a unit cube of aether between the unit square copper plates. Now the instrument indicates one electro-static unit of capacitance, this as expected.

Finally, we insert a unit cube of 10-C oil between the unit square copper plates. Now the instrument indicates an increase in capacitance over that of the aether. This increase in capacitance is in EXACT proportion to the square (second power) of the decrease in the velocity of light through the same identical cube of oil. It is then given, the change in the velocity of light through a dielectric medium is the square root of the inverse of the change in capacitance effected by this dielectric medium. Hence capacitance exists in a direct relationship with the velocity of light in a given medium. Zero capacitance, infinite velocity.

Hereby this dimensional relation is given as,

Seconds Squared

Per

Centimetres Squared

This is to say, one over the speed of light squared, that is, one over c squared. Here it is useful to take the speed of light as a unit value, or one. See for example, C.P. Steinmetz's "Impulses, Waves, and Discharges", chapter on "Velocity Measure." It is in this relationship between luminal velocity and electro-static capacity that we find the luminal velocity concepts of the relativists, the c squared in the E equals $M \cdot c$ squared. Call it a "dimensional fluke" if you wish. However, capacitance is forever married to the velocity of light, to one over c squared.

Investigating dielectric capacitance a bit further, consider an experiment of Ben Franklin, the father of the electro-static condenser. Here we will dispel the "electronics nerd" concept that a capacitor stores "electrons" in its plates. Taking the pair of copper plates as in the previous experiment, but now we have two pairs of plates, one pair of plates distant from the other pair of plates. Upon one pair of plates is imposed an electro-static potential between them. The cube of 10-C oil is inserted between this

"charged" set of plates. This hereby establishes a dielectric field of induction within the unit cube of 10-C oil. Now we then remove this cube of oil, withdrawing it from the space bounded by the charged pair of copper plates, and taking this unit cube of oil, it is then inserted into the space bounded by the other un-charged pair of plates. Upon insertion it is found that the un-charged pair of plates have now in fact become charged also. It here can be seen that a cube of dielectric induction can be carried through space, from one set of plates to another set of plates. This induction is contained by the boundaries of the 10-C oil. Well golly-gee Mr. Wizard, what happened to all those electrons, Isn't oil an insulator?

Here given has been various examples of dimensional relations involving space. First order space has been the long distance power line, second order space has been the package of spaghetti, third order space has been the cube of 10-C transformer oil, and, over the incessant barking of the poodle, fourth order space has been invoked as a product of conjugate flux densities.

With the understanding hereby developed it is now possible to enter development of the concept of inductance and of capacitance, along with their use in the application of the metrical dimension of space to the substantial dimensions of electric induction. From this can be derived a substansive concept of the aether.

73 DE N6KPH

Inductance and Capacitance

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Inductance and Capacitance

In its most general form the basic concept of an electrical configuration in electrical engineering terms is;

- 1) A metallic-dielectric geometric structure,
- 2) A bound electric field of induction, this representing STORED ENERGY within the containing geometric structure,
- 3) An exchange of electrical and mechanical forces between the electric field and the material geometric structure.

It is in statement 3) that the concepts of INDUCTANCE and of CAPACITANCE enter the electric dimensional relations. It is through the dimensional relations of inductance and capacitance that the electric field engages in the interaction with the geometry in which it is bound. It is also here that we find the most significant dimensional misrepresentations which occlude the understanding of the phenomenon of electricity.

The existence of the dielectric field of induction, Ψ , in Coulombs, gives rise to an electro-static potential, e , in Volts. Conversely an electro-static potential, e , in Volts, gives rise to the dielectric field, Ψ , in Coulomb. It is a "chicken or egg", a matter of versor position along a cycle. Here we have a pair of dimensional relations, Ψ , and, e , that exist in proportion to each other. It hereby follows that a proportionality factor must exist expressing the ration of the pair of dimensional relations, Ψ , in Coulomb, and e , in Volt. Considering the dielectric induction as a primary dimension, not a dimensional relation, then the variation of the primary dimension is with respect to the secondary dimension. Primary per secondary, Ψ per e . An example is a package of spaghetti, spaghetti is a primary dimension, package, per square inch a secondary dimension. Hence the dimensional relation of the proportion of dielectric, Ψ , in Coulombs, to the electro-static potential, e , in Volts, is then given as,

Coulomb per Farad

The ratio, Ψ over e , establishes a new dimensional relation. This relation, a factor of proportion. Is called the CAPACITANCE, C , in FARAD. That is, C equals Ψ over e . If then it takes a very small magnitude of electro-static potential, e , to engender a very large quantity of dielectric induction, Ψ , then the geometry supporting this induction is said to have a high capacitance, C . It is then called a CAPACITOR. One electro-static unit of capacitance is close to one picorad, the one over C squared renders this 10 percent off.

Thus we can state a "Law of Dielectric Proportion", C , in Farads, is the proportion of the QUANTITY of dielectric induction, Ψ , in Coulomb, to the MAGNITUDE of electro-static potential, e , in Volts. The Coulomb per Volt, or Farad of electro-static capacity.

It hereby follows that for a given "package", or quantity, of dielectric induction, a variation of the capacitance must give rise to a proportional variation of the electro-static potential, that is, a decrease in capacitance must give rise to an increase in electro-static potential. This is the Law of Dielectric Proportion.

The same line of reasoning follows for the magnetic field of induction. The existence of the magnetic field, Φ , in Weber, gives rise to a magneto-motive force, or M.M.F., i , in Amperes. Again it is a versor, chicken or egg. Here again is a pair of dimensional relations that exist in proportion to each other, Ψ and i . Thus the ratio, or factor of proportion, is given as,

Weber per Ampere.

The ratio of Ψ to i results in a new dimensional relation. This factor of proportion is the dimensional relation called INDUCTANCE, L , in Henry. L equals Φ over i . L in Henry is the proportionality factor between the quantity of magnetic induction to the magnitude of the M.M.F. The Weber per Ampere, or Henry of magnetic inductance. It then follows, for a given "package", or quantity of magnetic induction, that a variation of the inductance must give rise to a variation of the M.M.F. This is to say, a decrease in inductance must give rise to a proportional increase in current, or M.M.F. This is the Law of Magnetic Proportion.

Heretofore established is the pair of dimensional relations,

1) The Law of Dielectric Proportion

Coulomb per Volt, or Farad, C

2) The Law of Magnetic Proportion

Weber per Ampere, or Henry, L

73 DE N6KPH

Reduction to Primary Dimensions

<http://www.energeticforum.com/164153-post547.html>

Reduction to Primary Dimensions

In the expressions for the law of dielectric proportion, and the law of magnetic proportion, that is, the

capacitance and inductance, the relations are not given entirely in primary dimensions. Both e , in Volts, and i , in Amperes, are not primary dimensions, they are secondary dimensional relations. These relations must be expanded in order to express capacitance and inductance in terms of primary dimensions only.

By the Law of Magnetic Induction

1) Volt, or Weber per Second

And the Law of Dielectric Induction

2) Ampere, or Coulomb per Second

Combining terms, for the dielectric capacitance, Farads, gives

3) Coulomb per Volt, or Coulomb-Second per Weber

This is the primary dimensional relation expressing capacitance, C , in Farad. Now the primary dimension of Time has re-emerged into what has been a space relation. More on this later.

It was established early on that the ratio of the total dielectric induction, Ψ , to the total magnetic induction, Φ , gives rise to the dimensional relation, Y , the admittance in Siemens. By substitution of the dimensions of Siemens for the ratio Coulomb per Weber, this into the expression for Farad, gives

4) Farad, or Coulomb – Second Per Weber

Gives,

5) Farad, or Siemens – Second.

Re-arrangement of terms in 5) results in an important dimensional relation,

6) Farad per Second, or Siemens.

That is, C over T give the dimensional relation of Siemens. This new relation is the SUCEPTANCE, B , in Siemens. It is hereby established that the dimensional relation of Siemens can now be expressed in two distinct forms,

7) Admittance, Y , in Coulomb per Weber,

8) Suceptance, B , in Farad per Second.

More on this later on.

The same considerations apply to the magnetic field of induction, and its Law of Magnetic Proportion, the inductance, L , in Henry.

9) Henry, or Weber per Ampere.

Substituting gives,

10) Weber – Second per Coulomb, or Henry.

And by the relation,

11) Weber per Coulomb, or Ohm

It is then given,

12) Henry, or Ohm – Second

Thus

13) Henry per Second, or Ohm.

This hereby derived dimensional relation for Ohm, or Henry per second, is called the REACTANCE, X , in Ohm. Again, as with the Siemens, a dual dimensional relation exist with regard to the Ohm, the impedance, Z , and the reactance, X .

We here have established a new pair of dimensional relations. These relations involve a time rate of variation, this analogous to the time rate relations, the Faraday and Maxwell Laws of Induction, given again,

A) Farad per Second, or Siemens, B .

B) Henry per Second, or Ohm, X .

Two alternate views present themselves as to the time rate of variation. One is the condition that the capacitance and inductance in themselves are constants, time invariants, it is that the forces, electro-static potential, and magneto-motive force, are time variant. The e , and i , are in variation with respect to time. This is the condition for the relations of susceptance, B , in Siemens, and of reactance, X , in Ohms.

For example, take a one Henry inductance coil. The given line voltage is 120 volts A.C. in variation at a rate of 377 radians per second, or 60 cycles per second. Hereby the reactance of the one (1) Henry inductor is thus the product of 1 and 377 or 377 Ohms, or Henry per Second. The application of 120 volts A.C. to this inductor hereby gives rise to a current of,

$120 / 377$ Ampere, or Volt per Ohm.

For the sake of simplicity let us say this is about a quarter ampere, one fourth of an amp. The product of 120 volts and one fourth amp gives the electrical activity as,

$120 / 4$ Volt – Ampere, or 30 Volt – Ampere reactive.

This is the electrical activity of the one Henry coil across 120 volt A.C. at 60 cycles.

Carrying the Law of Magnetic Proportion one step further, this one Henry inductance coil, in its windings, has 1000 passes, or turns around its core. This hereby gives rise to a M.M.F. of 1000 times one fourth ampere, or a total of 250 ampere- turns. This magneto-motive force, or compound current is developed in a one, 1, Henry coil. Hereby, by the Law of Magnetic Proportion, for a current of one quarter ampere through 1000 turns gives rise to the quantity of magnetic induction, 250 Webers.

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