

The Mystery of the Ammann Brothers of 1921...

THE ARIZONA REPUBLICAN, PHOENIX, SUNDAY MORNING, AUGUST 28, 1921

SUBSTANTIAL CUT IN PIERCE-ARROW PRICE ANNOUNCED

A substantial reduction in the prices of its touring car models effective after September 1, and a reduction on the prices of its truck models, effective immediately, has been announced by George W. Mixer, president of the Pierce-Arrow Motor Car company.

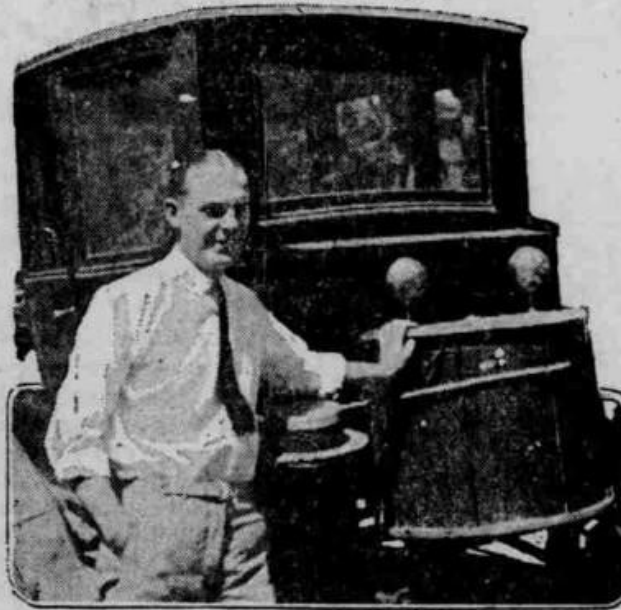
The new price of the standard seven-passenger touring car is \$6,500 at the factory, the included car prices being graded proportionately.

The new prices of its truck models are: \$4,850 for the five-ton size; \$4,350 for the 3½-ton and \$3,200 for the 2-ton.



This Tire

ELECTRICITY "TAKEN FROM AIR" DRIVES AUTOMOBILE



C. E. AMMANN AND HIS "ATMOSPHERIC GENERATOR" ATTACHED TO AN ELECTRIC AUTOMOBILE

DENVER, Colo., Aug. 28.—Demonstrations are being made on the streets of Denver of a new electric generator that is claimed by the inventors to take electricity from the air.

The inventors are J. E. Ammann of Denver, and his brother, C. E. Ammann of Spokane, Wash.

To demonstrate, the brothers borrowed an old electric auto, took out the batteries, and after roping their new "atmospheric generator" fast, they got in and rode off at high speed.

"There is nothing inside the drum that moves; the contents consists only of iron, wire and minerals," says C. E. Ammann.

"It can be used to drive any electrical apparatus and can be made in any size."

The brothers are closely guarding their secret, and even take their "brain-child" when it is not in use, to their room in the Argonaut hotel. So far the brothers have not offered to sell their proposition.

Electrical men in Denver are waiting "to be shown," but they grant the thing works.

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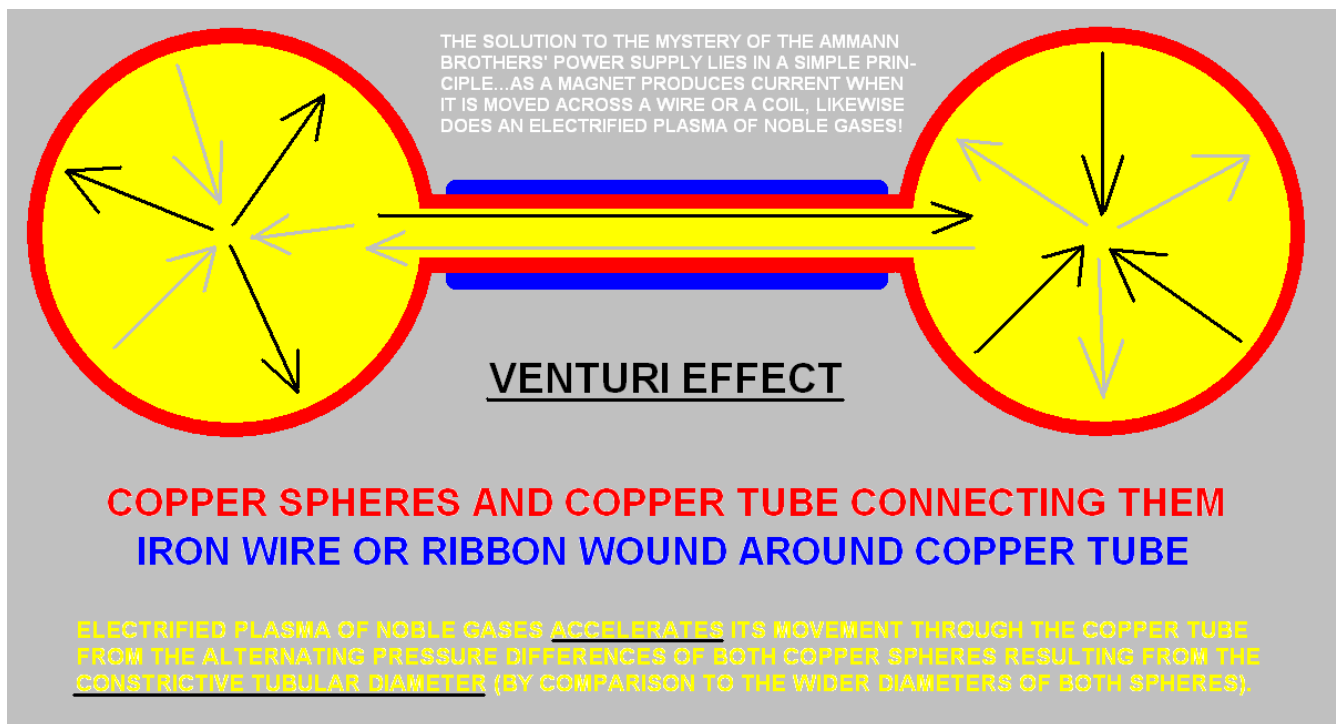
"TWO REAL

Dodge Coupe
car for private use
1921 Nash 7
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Special terms on e
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Dodge Comr
Ford Coupe
Hudson Supr
1921 Essex

This photo comes courtesy of [Boguslaw](#) on Energetic Forum.

...inspires me to resolve it via a derivative of [Tesla's Plasma Lamp](#) and similar to [Joseph Newman's device](#) in which a dielectric globe is filled with an electrified plasma of noble gases. The surface of this globe is electroplated with copper. A hollow copper tube conveys these gases from the spheres and through the interior of an iron core (devoid of transformer windings). This copper tube constricts the movement of excited gases, by comparison to the wider diameter of the copper spheres (also lined with a dielectric), relieving the tube's pressure (via the Venturi Effect) accelerating the movement of plasma and the inducement of magnetism in the iron core via the magnetic flux of electrified noble gases.

This iron core is *not electrically connected* to their motor load. Furthermore, this iron core is not *magnetically* coupled to their motor load. It merely needs to be in close proximity to their load, or any other nearby load, to receive the benefit of their power supply providing free energy to these loads.



Reactive Power is not Kinetic Energy and, thus, is not a Thermodynamically, Conservable Quantity

Reactive Power is Potential Energy and, thus, is not conservable under the auspices of thermodynamics. This design, above, requires a stimulating input far less than whatever is expected to power an EV in order to prevent the suppression of its electrical reaction towards infinite oblivion.

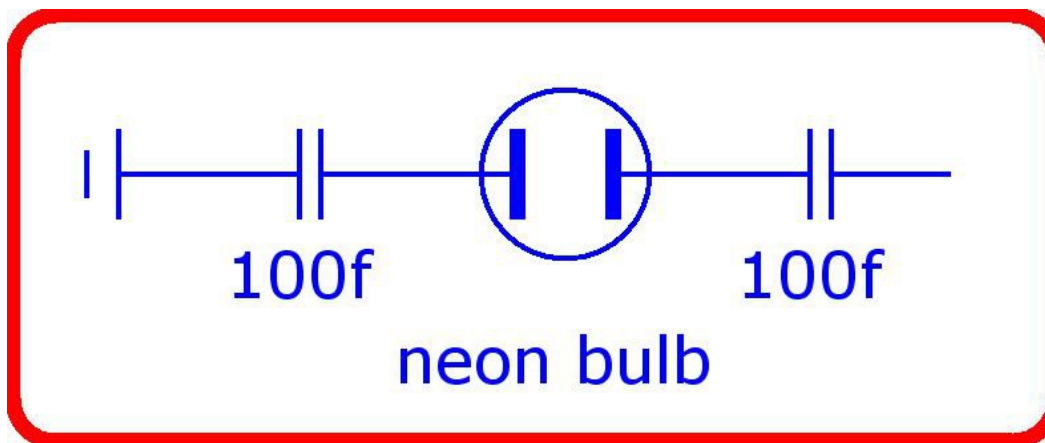
Thus, instead of an input of 345 volts expected to power a RAV4 EV from 2001 (delivered by the RAV4 EV's pack of two dozen, 12 volt, NiMH batteries), this circuit is stimulated by precharging two capacitors with a mere $1\mu\text{V}$, each, representing a pair of aerial inputs. This miniscule input is comparable to a meter-long whip antenna intended to power a crystal radio set from the 1920s.

The use of anything greater than mere microvolts would risk suppressing the reactivity of this design and demand a conventional approach towards satisfying the needs of modern electric vehicles which utilize brute force (of considerable voltage) to accomplish their task at a considerable expense of their batteries' capacity to store power.

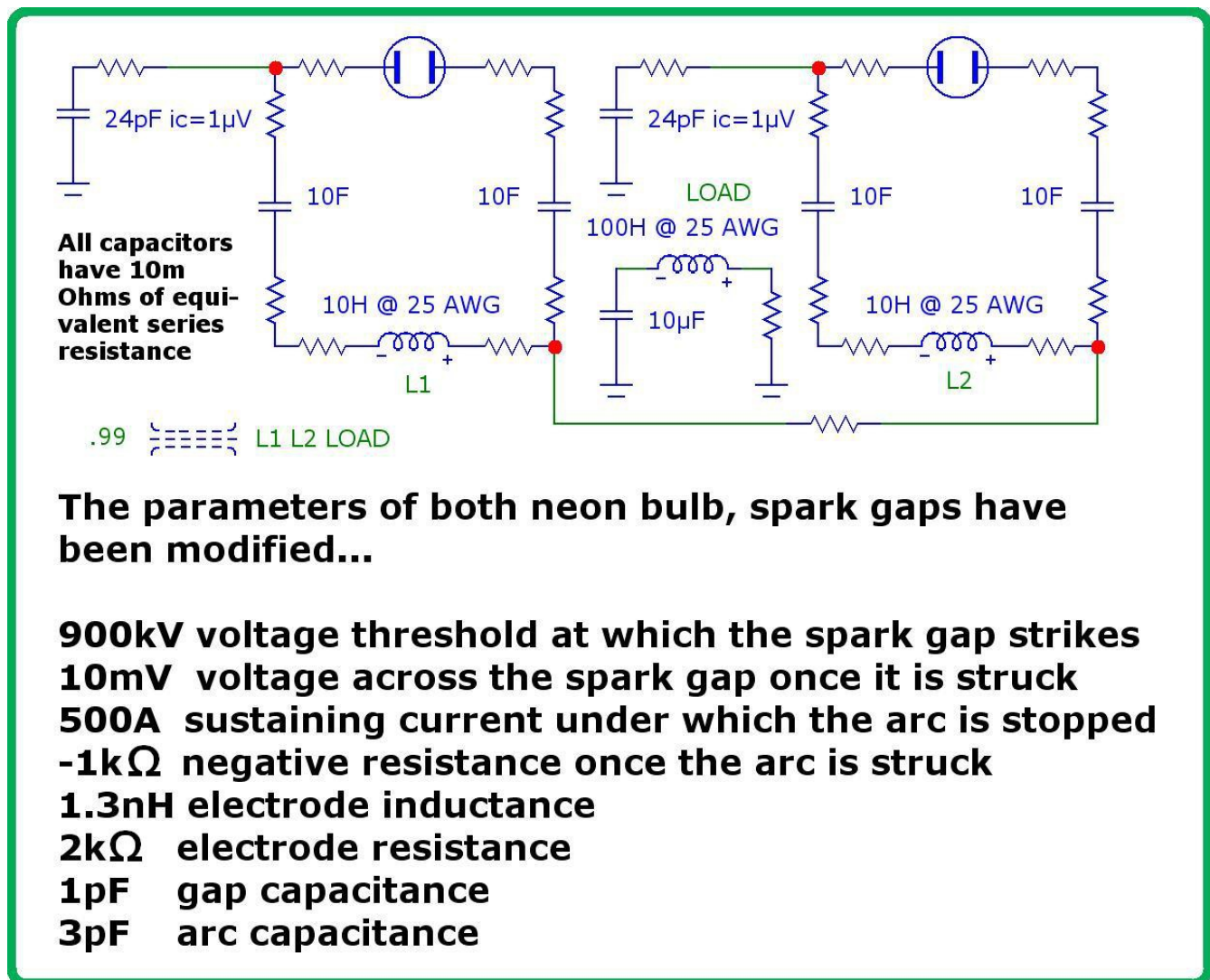
This design, above, sidesteps this conventional wisdom in favor of gambling that reactive power is sufficient enough to accommodate all of our needs for electricity using whatever energy is readily available within our immediate vicinity to facilitate the stimulation of reactive power.

And since *power factor correction* is well-known within the engineering community, reactive power should be everyone's first choice for conserving our limited resources.

To replicate this within a circuit, a capacitor/sparkGap/capacitor sandwich is grounded at one end...

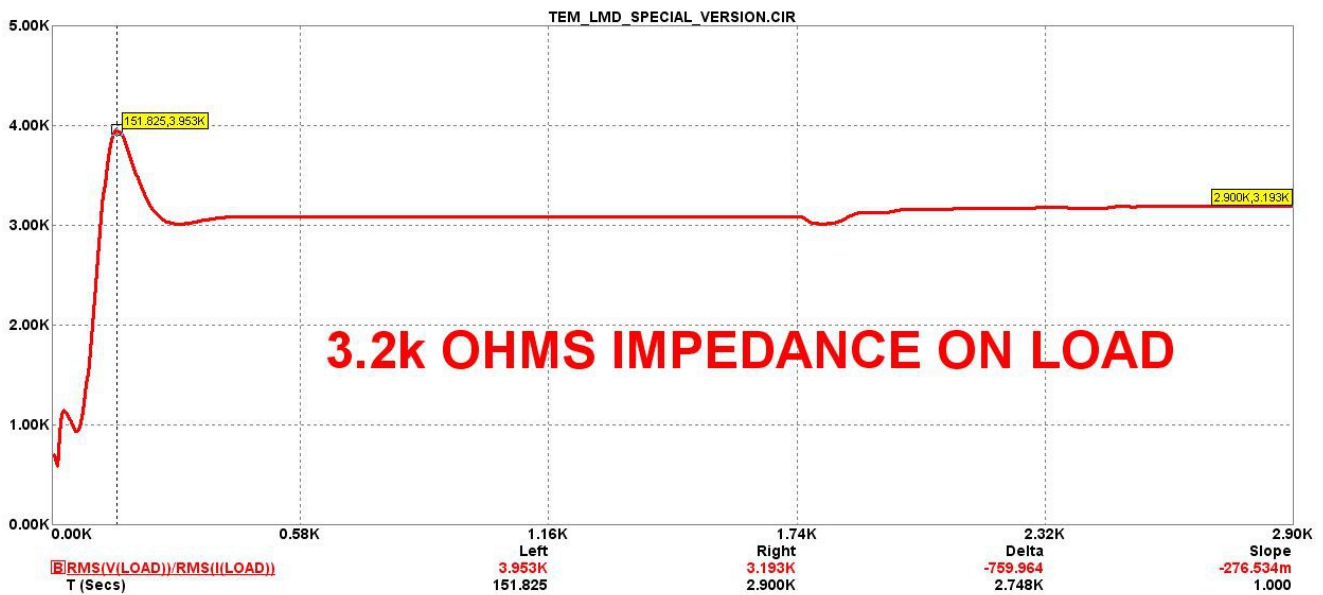


The capacitor, on the far left, immediately adjacent to ground is precharged with a microvolt. The other end of this sandwich wraps around a module analogous to a transmission line. The high voltage, neon bulb, spark gap replaces a coil which is one of the shortened lines of a pair of transmission lines. Two additional capacitors are added to separate these two conductors (of a coil and a spark gap), thus, representing the capacitance existing in the space between any generic pair of transmission lines. This [analog to a transmission line](#) comes courtesy of [L.V. Bewley](#) via [Eric Dollard](#).

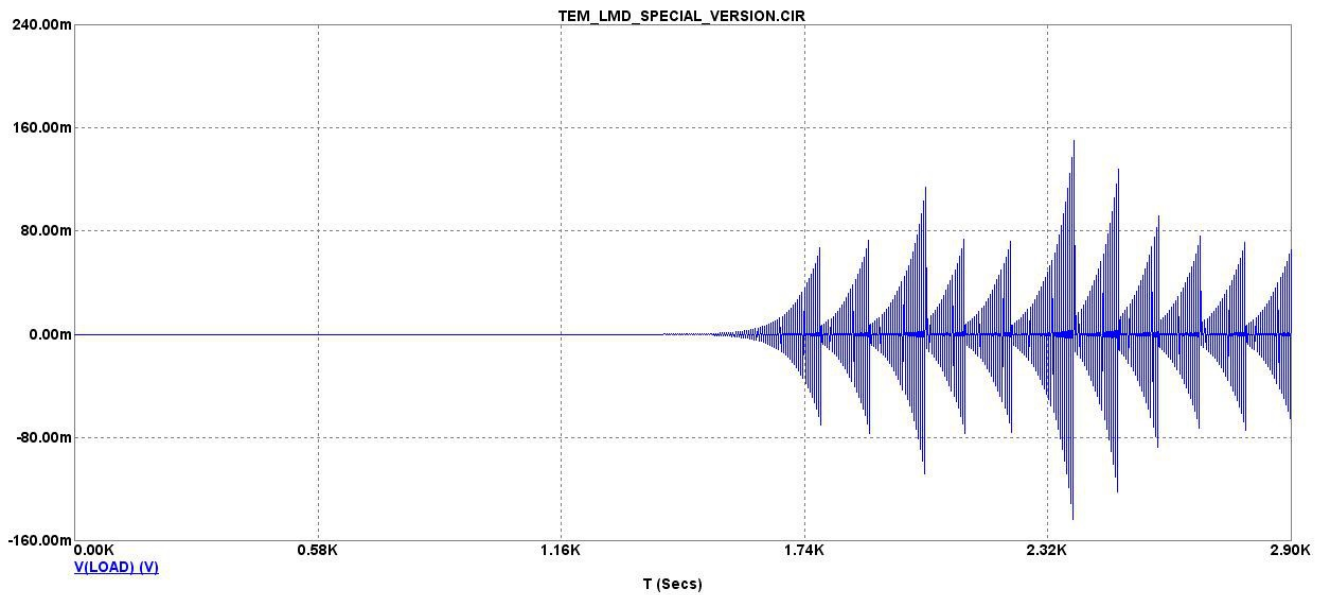


This analog constitutes one representational module of a transmission line. Its parameters are optimized for encouraging the buildup of voltage undergoing electrical reactance. A second module is both magnetically, and electrically, linked to the first module. And a third fragmentary module – of a mere coil, capacitor, and the low-level resistance of a solder joint – is grounded at both ends to facilitate the flow of current relieving the buildup of voltage accumulating elsewhere within this circuit.

After 2.9ks of simulator run-time (48min. 20Sec), 290 nanowatts RMS appears on the inductive load...

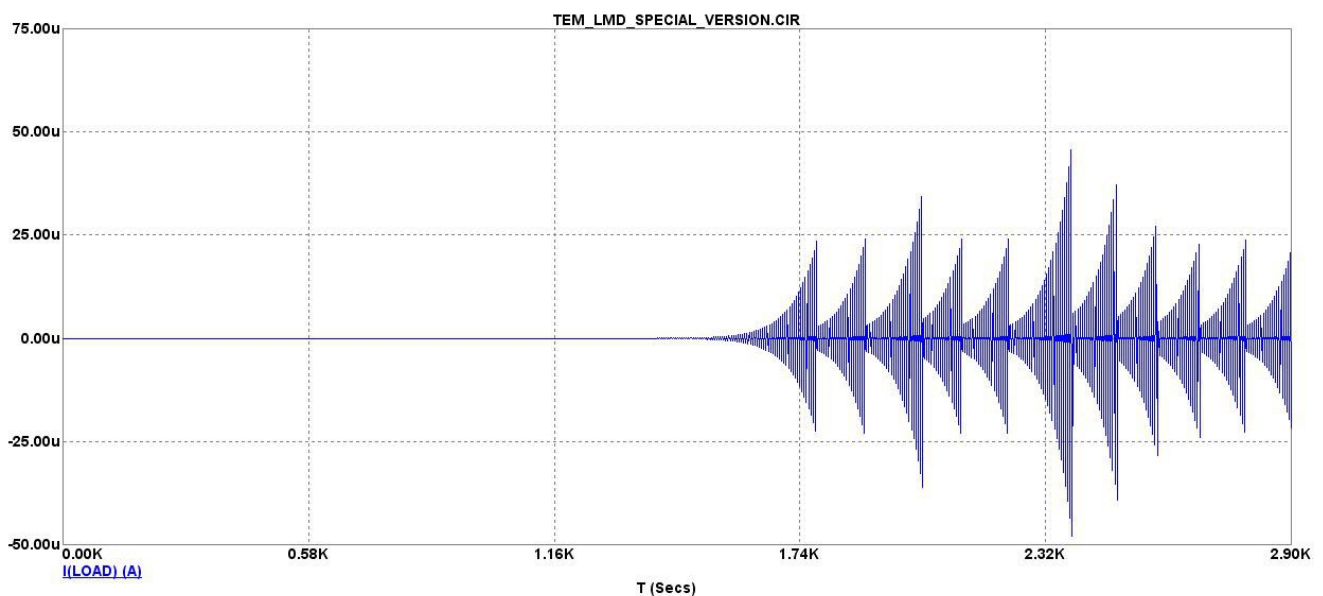


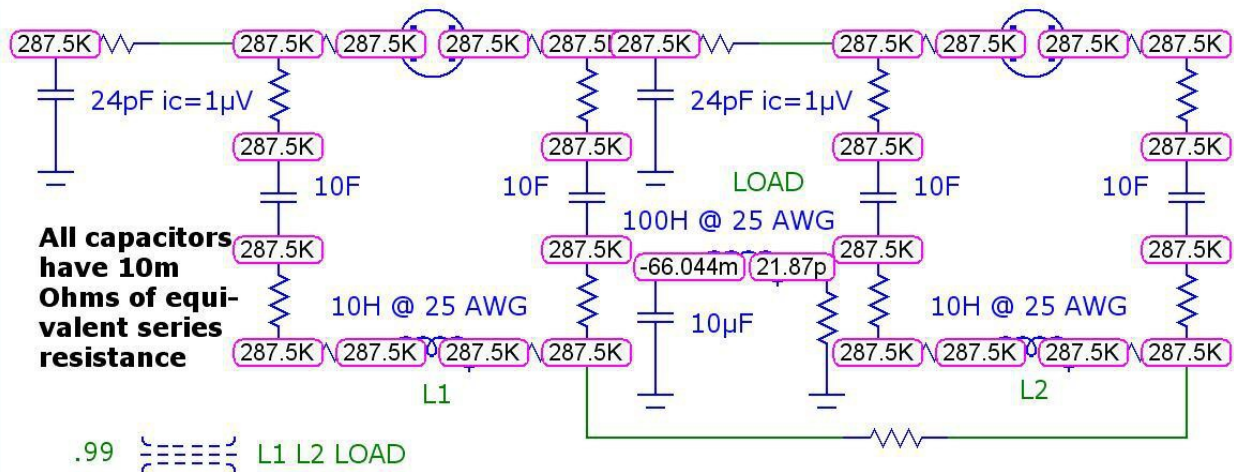
This circuit engages a self-regulating collapse of its periodic surge (after an initial warmup time of more than 1½ ks) to prevent self-induced oblivion...



This ability for a surging reaction to periodically collapse itself detracts from its ability to surge towards infinite oblivion and undermines its ability to access total power devoid of restrictions as we shall see towards the end of this document. In other words, it becomes harder to reach any target of energy desired if we totally rely upon the circuit to regulate itself while it is reacting to synthesize more power from a scant input. This is why my simulations, at this point in my discussion, are so meager and disappointing since my target is to power an electric car on 100kW, or thereabouts, after a few hundred milliseconds of warmup time. Waiting for slightly less than an hour for an electric car to ready itself for driving is not what I had in mind when I set out to achieve these goals!

But if some other way can be found to periodically collapse these surges, such as: the use of a mechanical relay, then the simulations at the end of this document give ample evidence of achieving any wattage desired within any reasonable time-frame.





The parameters of both neon bulb, spark gaps have been modified...

- 900kV voltage threshold at which the spark gap strikes**
- 10mV voltage across the spark gap once it is struck**
- 500A sustaining current under which the arc is stopped**
- 1kΩ negative resistance once the arc is struck**
- 1.3nH electrode inductance**
- 2kΩ electrode resistance**
- 1pF gap capacitance**
- 3pF arc capacitance**

This circuit has the profound effect of disturbing the reactive periodicity of other appliances, as well as disturbing the electric utility grid, if in close proximity to them. Anything within sufficient range of this circuit's location will be compensated with free energy transmitted via an electrostatic field surrounding this circuit. Any other circuit beyond the boundary of this electrostatic field will not receive any benefit from this circuit's power amplification. And any circuit at the periphery of this field will suffer a reactive disturbance without the benefit of receiving any of this circuit's power. This disturbance results from this circuit possessing a voltage and a frequency vastly elevated from that of conventional appliances and from the utility grid. Their lesser voltages and frequencies makes them susceptible to disruption – ***not theft!***

This is an important distinction in which C. Earl Ammann was wrongfully arrested on false charges of “stealing energy from the grid” when he arrived at the Patent Office, in Washington, D.C., with his EV conversion. This was shortly after he and his brother demonstrated their device in Denver, Colorado. The arrest [is mentioned here](#) along with a few more details surrounding these events.

He and his brother didn't steal anything unless the loss of an orderly convention of standards is considered an act of terrorism, but certainly not an act of theft. Quite the contrary... He and his brother were *supplying* downtown Denver with free energy, because their power supply was not physically connected to their motor load just as it was not physically connected to anything else, nearby!

The reason why...

...this circuit simulation is able to produce such an abundance of electricity from its raw, **proto-electrical forces** of: time, magnetism and dielectricity is due to the effect of grounding the third fragmentary module and linking it to the other two modules.

*Also, this circuit concept keeps its input of voltage to a very low value of one microvolt. Anything much greater than this would have suppressed the ability for the reactive electrical components of capacitors and inductors to synthesize electricity from these **proto-forces**.*

This is why we never see this phenomenon taking place within our conventional appliances except on rare occasion whenever reactive power breaks free of our conventional need to unnaturally regulate it. For, reactive power is, by its essential nature, a wild stallion which wants to run around free of restrictions and regulations involving boundaries of amplitude and periodicity and uniformity of waveform.

We accomplish this suppression of electrical reactance (within many of our appliances) by over-feeding our circuits their input of voltage on the presumption that we have to supply them with all of their electrical potential instead of encouraging them to “fend for themselves after giving them a tiny kick-start,” because we assume there is no alternative to thermodynamic dissipation.

The Cult of the Conservation of Kinetic Energy presupposes the concomitant Conservation of Potential Energy (as well as the Conservation of Kinetic Energy) due to sloppy thinking and sloth on our part for our failure to investigate what, within our tradition of knowledge, can substantiate these claims of “free energy” made by a populace who is largely unschooled in electrical engineering.

It is our task to insure the heritage of “freely available reactive power” never knows anyone to want for lack of energy.

This is what my circuit accomplishes: the encouragement of utilizing electrical reactivity to supply most of the energy needed by this circuit, per unit of time, stimulated by an insignificant input and fostering this electrical reactance to make up the difference (for its lack of input).

Thermodynamic dissipation effortlessly takes care of the downside of spending energy while the constant and wise investment, per unit time, of electrical reactance takes care of the upside of freely available reactive power from which power factor correction supplies its conversion into free energy.

So long as this electrical reactance keeps pace with thermodynamic dissipation, so long is an artificial condition maintained which balances the expenditure of energy with its accumulation.

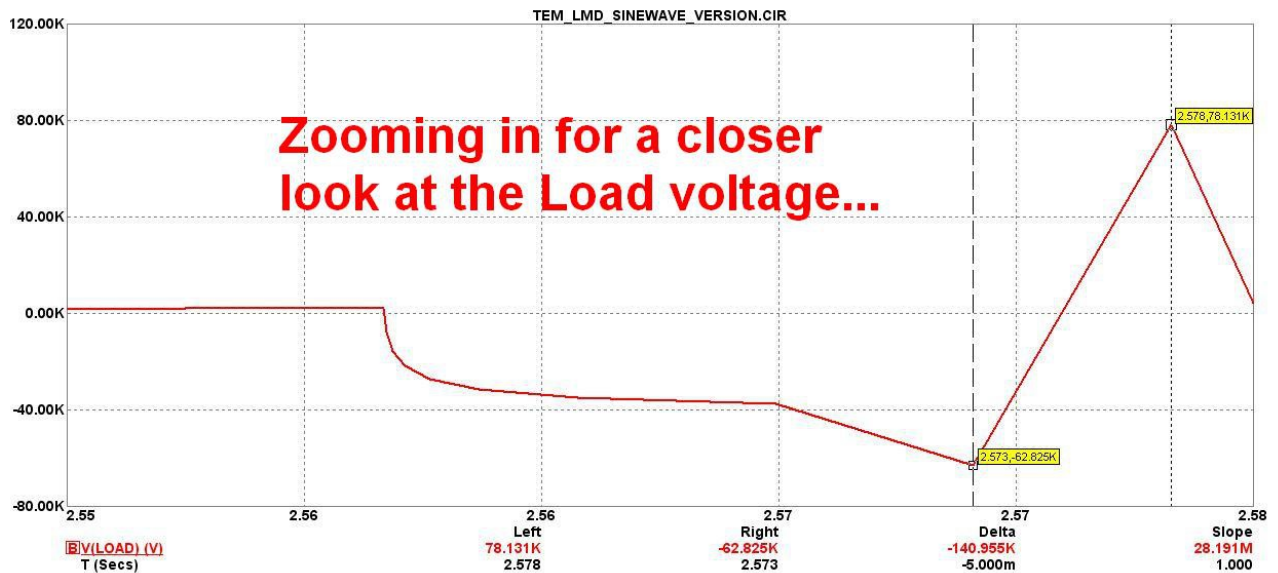
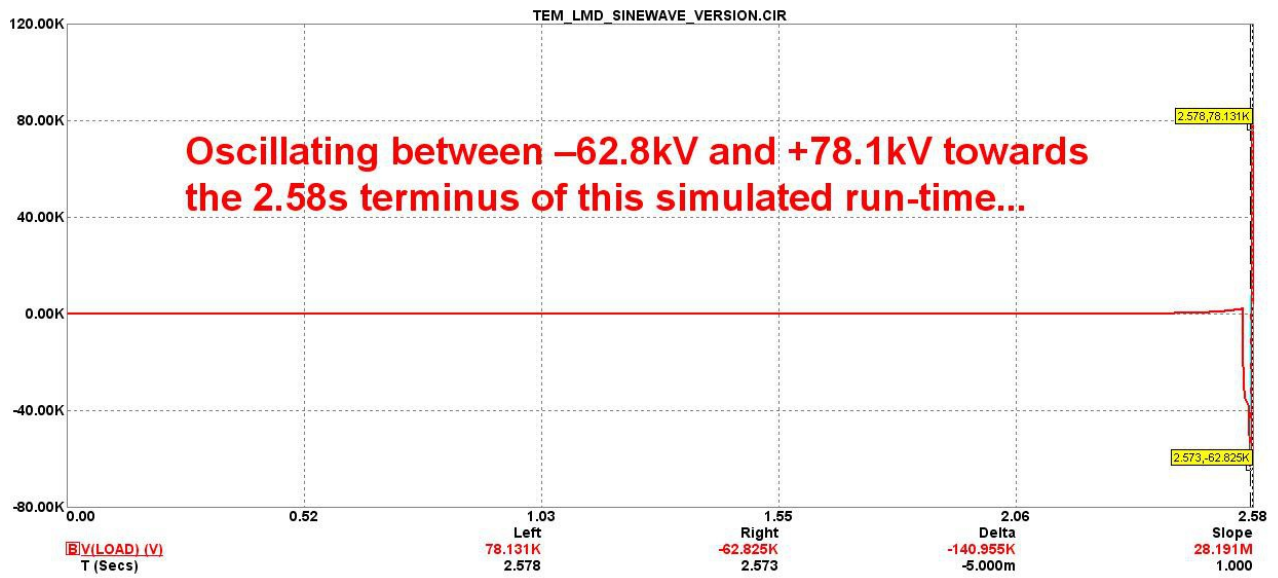
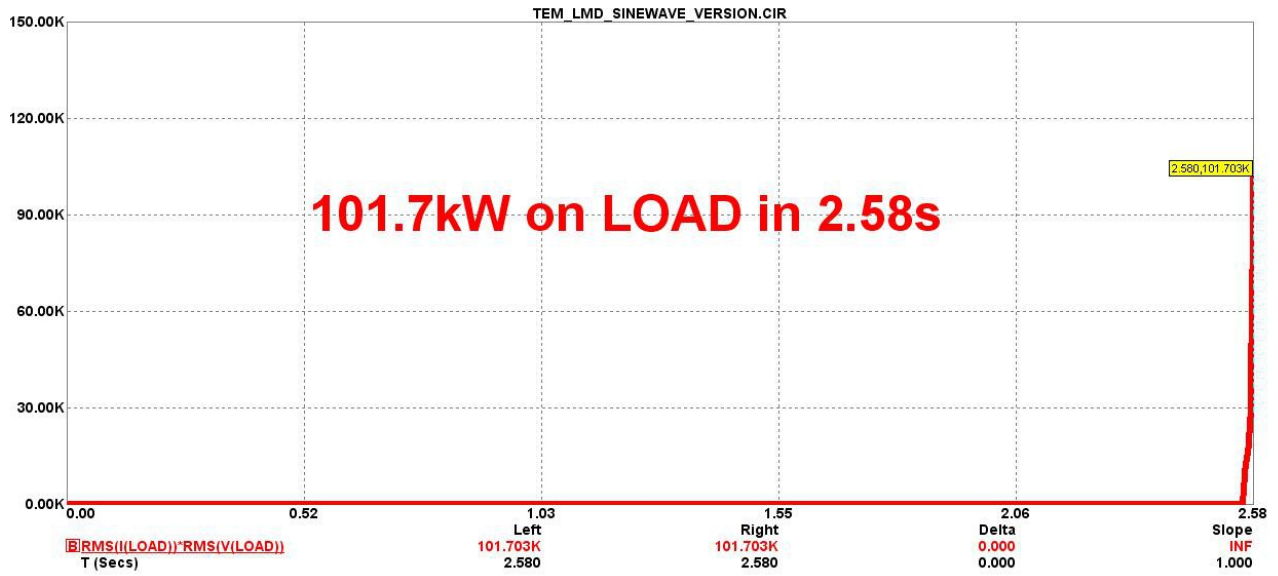
This is not perpetual motion since some amount of energy, no matter how small and insignificant it may be, is required to kick-start this process into motion. This smallness of input is, actually, very significant in being contrary to conventional standards of excellence.

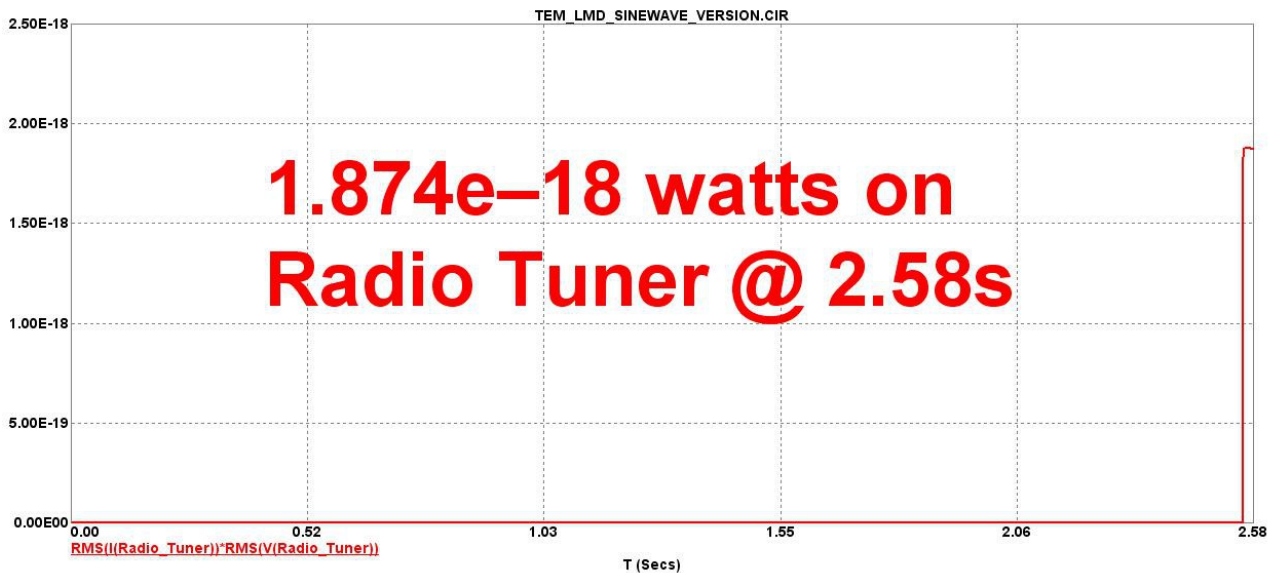
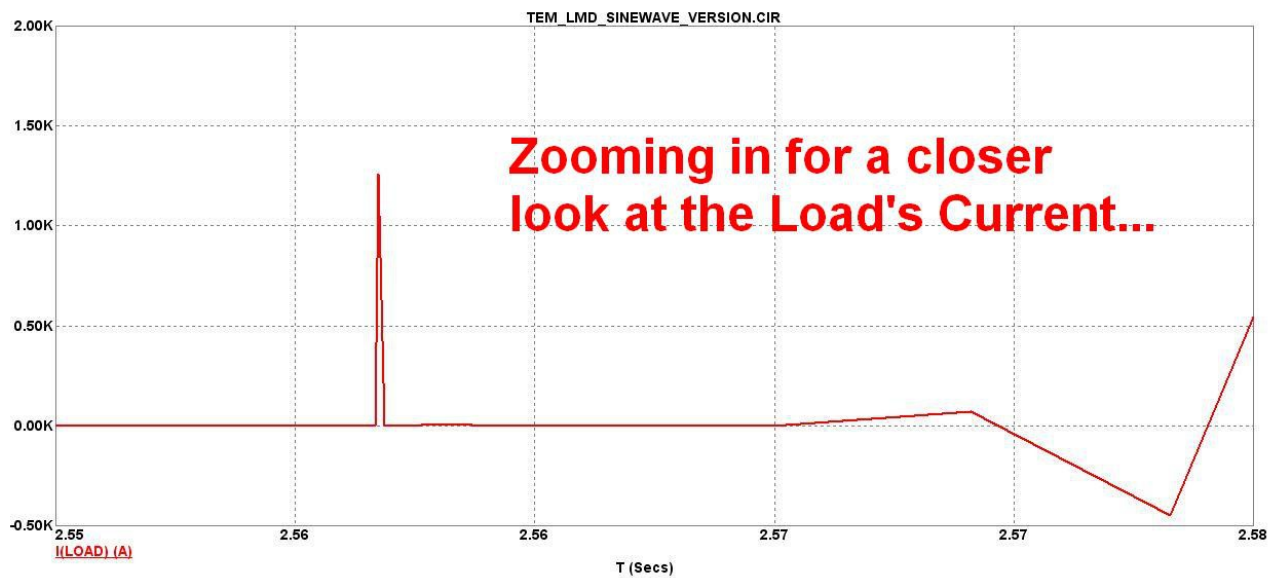
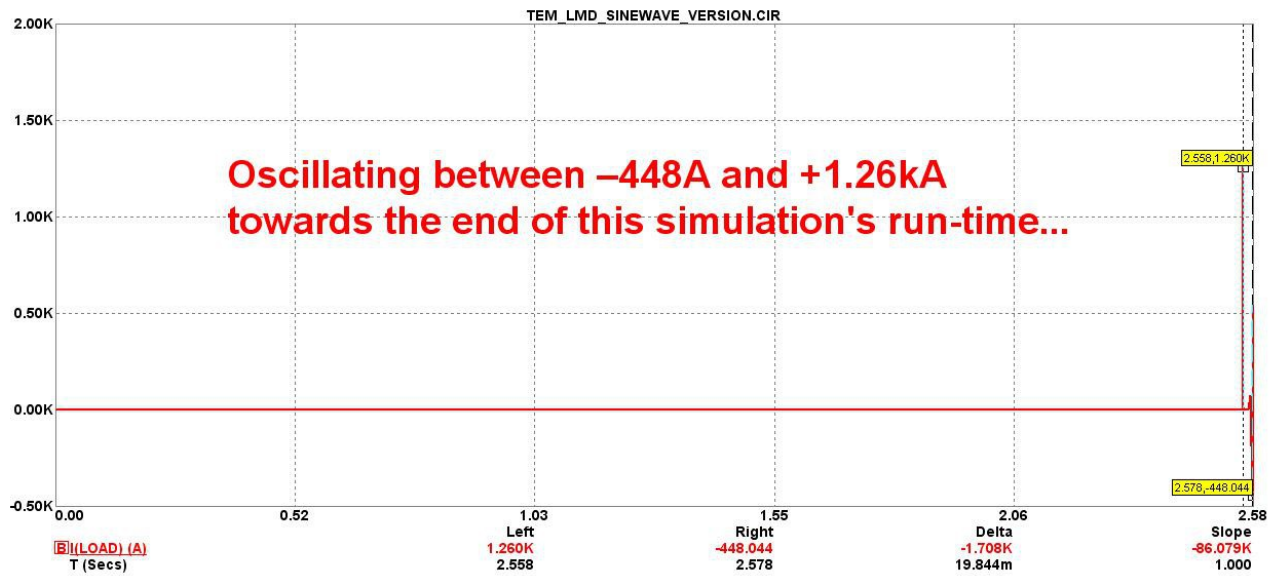
We need a new set of standards to carry all of humanity into an era free from poverty, hunger and crime.

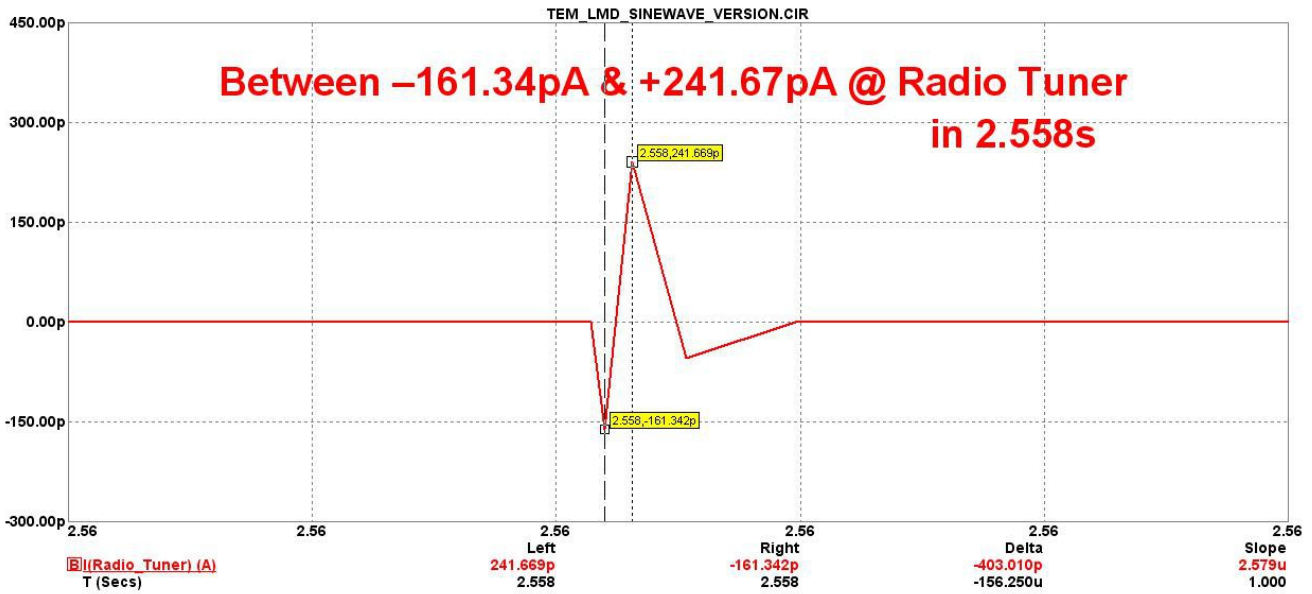
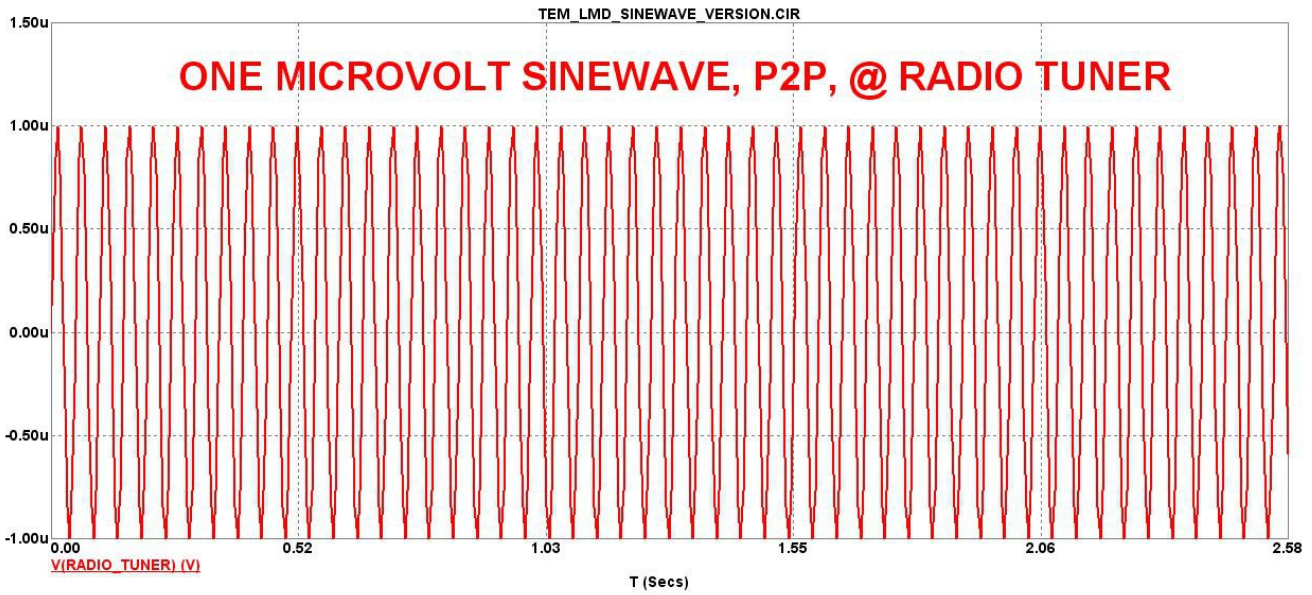
It is not enough to be so privileged as to have a job and, thus, the right to life.

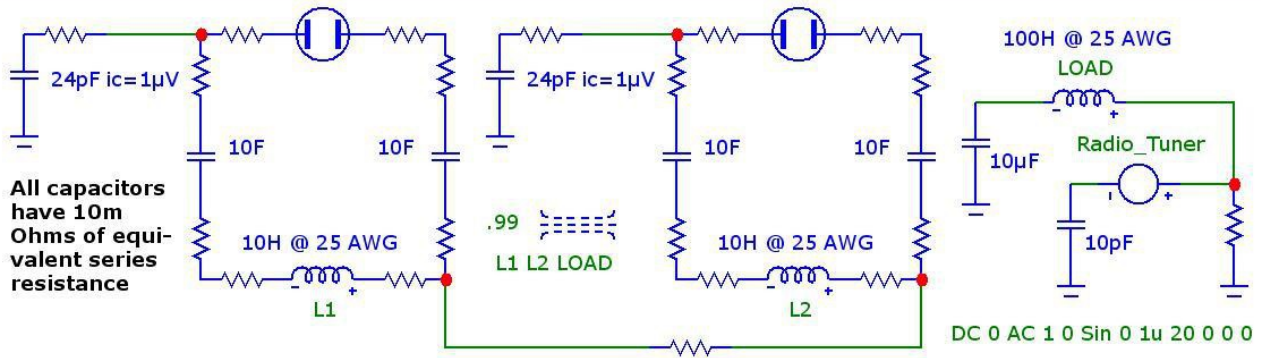
It is necessary to look out for our brethren for, “but for the grace of God, there go I.”

If we are hasty for power, and can't wait around for nearly an hour to achieve it, then the use of a sine wave input of $1\mu\text{V}$ from a radio tuner tuned to 20Hz can vastly reduce this circuit's warmup time...



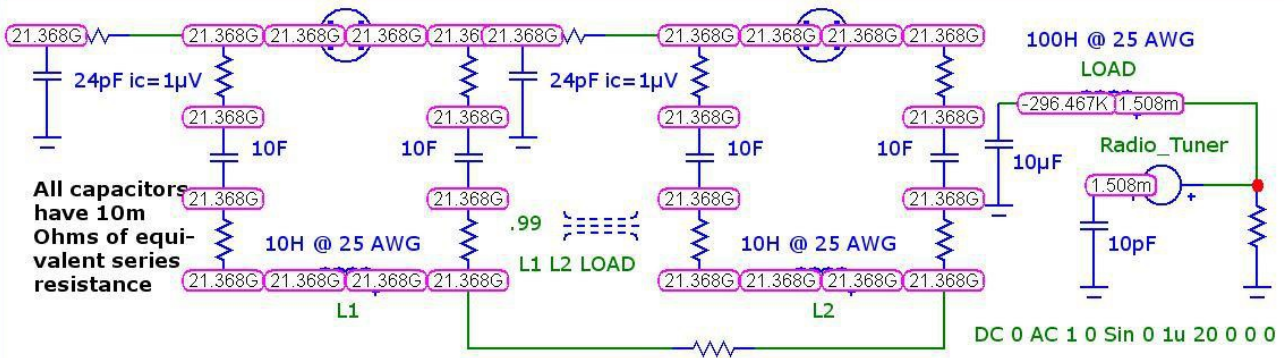






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Increasing frequency, within the context of electrical reactance, ...

... amounts to the compression of time. *And not in some fictitious sense of time dilation as proposed by some scientists, such as: Einstein... No. The relativity of physics does not replace the significance of electrical reactance. Electrical reactance explains the potentiality of "free energy" and has been doing so for at least a century.*

By increasing frequency, a kilowatt hour becomes a kilowatt second by increasing the rate of electrical reaction per unit of time, yet, still retains the same level of reactive energy. That's 3.6k times more potential energy per unit of time! That's the magnification of potential energy without violating anyone's precious law nor by inputting any more kinetic energy than what is already there. And all due to a mere alteration of one factor of potentially reactive energy, namely: the factor of time.

To the simulator, it makes no difference whether I increase the frequency of a sine wave input by a factor of ten, or lengthen the duration of simulation by a factor of ten. Either way, the result is the same increase of data points required by the simulator to plot its virtual oscilloscope tracings by a factor of ten. This demonstrates to me that *time* is an ingredient of electrical reactance worthy of manipulation if I want to indirectly affect its consequential amplitude of kinetic energy via the process of ignoring "The Conservation of Energy" while engaging in the electrical equivalence of a "quarterback end-run."



The [Venturi Effect](#) explains why do these simulations equate with the Ammann brothers' device?

It's because the thin tube *increases* wind speed (so to speak) by reducing the pressure within the narrow confines of the tube by comparison to the higher pressures within the adjoining spheres at either end of the tube. And the wind, in question, is the plasma inside the copper tube and its adjoining spheres. It's already excited and vibrating at a medium to high frequency. Add linear motion to these vibrations along the entire length of the copper tubing, and we have an intensification of the negative resistance already set into motion by the electrified noble gases plus the linear dimension of organizing this negative resistance along the entire length of the copper tubing to create a measurable rise of inductance at the tube.

It's not the same thing as whenever atoms of a noble gas become excited within a spherical object, such as a lamp, or a globe, which encourages a radial motion either towards the center of the globe or outwardly towards the globe's periphery. We're dealing, here (instead), with a linear geometry in which these charges will become organized into a tubular column of moving atoms of plasma as they oscillate back and forth along the length of the tube. This combination of reciprocating linear motion in addition to randomized excitement of the noble gases induces both a negative current (resistance) along the length of the tube along with an intense inductance across its cross-sectional circumference.

The Venturi Effect of a plasma explains it all...

The Copper Spheres are not of primary significance. They are of secondary importance providing a dipolar arrangement of oscillating, pressurized plasma within the copper tubing of the Ammann brothers' device. This speculation is suggested by my simulations as a possible solution to this mystery since low level capacitors, flanking either side of a neon bulb and acting as a spark gap in these simulations, will also tend to bounce magnetic flux back-and-forth between these pair of low level capacitors while traveling through the neon bulb. And placing this sandwich adjacent to ground helps isolate it from whatever circuit this sandwich is attached further enhancing its reciprocating behavior.

Because reactive impedance equates inductive reactance with inductance,

...and because reactive impedance equates capacitive reactance with capacitance, inductive and capacitive reactance becomes the new inductance and the new capacitance from which the new inductive and capacitive reactances arise spawning, yet again, the next round of inductance and capacitance in an endless cycle of enlargement, or shrinkage, of kinetic power provided that this process begins from the very moment a circuit is “TURNED ON” or else it will not initiate this self-fulfilling process nor nurture kinetic energy into an infinite amplitude of oblivious self-destruction to the physical circuit which hosts this process. Nor will it nurture kinetic energy into an infinitely small amplitude of constant shrinkage. These cyclic changes – all due to reactance – have a direct impact on the kinetic energy resident within these electrodynamic potentialities defined by inductance and capacitance. Potential energy is for free.

The magnetic and electric fields surrounding reactive components spawns inductive and capacitive reactance leading towards an alteration of these fields and directly modifies how the kinetic energy within these fields behaves-in-time giving us “pure resonance”, a phenomenon which causes a wave to grow or shrink in amplitude without the necessity of feeding this wave any additional kinetic energy nor require “thermodynamic leakage” of this kinetic energy to alter its amplitude.

I have a [professor at MIT](#) to thank for the [mathematics](#) which [supports this view](#) (of an oscillating surge) and the mathematics of [electrical reactance](#) to give it relevance...

**Electrical Reactance is a
self-fulfilling proposition...**

Capacitive reactance X_C

$$X_C = -\frac{1}{\omega C} = -\frac{1}{2\pi f C}$$

Inductive reactance X_L

$$X_L = \omega L = 2\pi f L$$

Reactance Equivalencies...

Capacitance = Capacitive Reactance

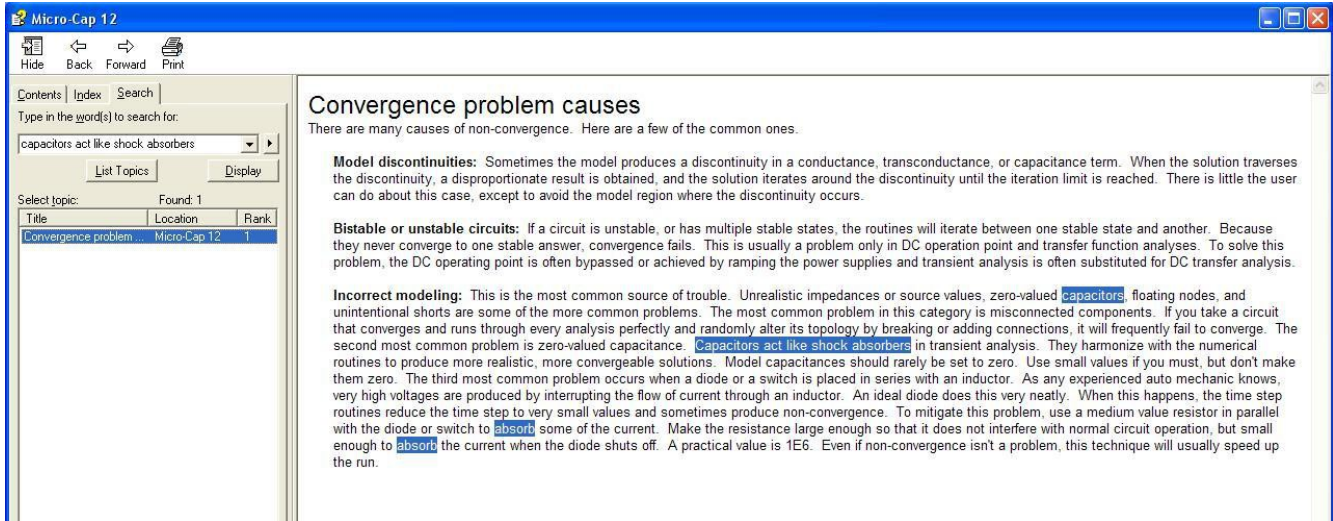
Inductance = Inductive Reactance

**These equivalencies are derived
from the following formula for
reactive impedance...**

$$X = X_L + X_C = \omega L - \frac{1}{\omega C}$$

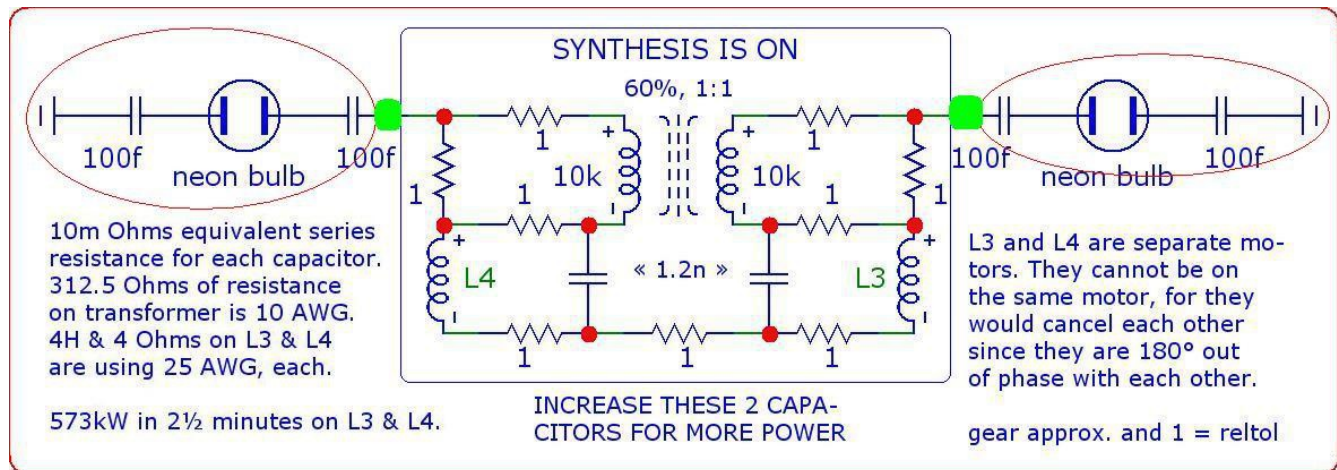
...despite the [commonplace viewpoint](#) that “damping is always present” for a spring-mass system and, thus, is not applicable to the negative resistance of a noble gas discharge tube. Nor is this commonplace viewpoint applicable to the simulation of this arrangement of copper plumbing and noble gases whenever the simulation of the neon bulb, discharge tube is bounded on either side by a pair of extremely low-level capacitors. This circuit is not similar to conventional models of spring-mass systems, because – in this situation – a light-weight spring (representing a low-level capacitor) is not very responsive (let alone reflective) especially if the weight of its associated mass is rather large.

This confusion is replicated within the help file associated with Micro-Cap electronic simulator,...



This is the case for a normal capacitor acting as a “shock absorber”. But low levels of capacitance do not always act as shock absorbers. Instead, low-level capacitance prefers to *accelerate reactance* and, thus, *provoke pure resonance*.

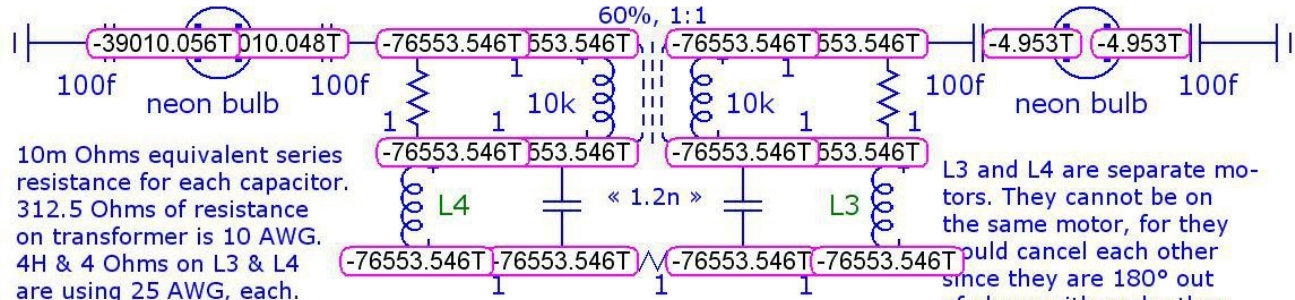
Another possibility is to interpret the photograph in the newspaper article, above, to speculate the two spheres were not connected with each other via a common tubing shared between them, and were not conveyed down into a drum into an iron core devoid of copper windings, but were -instead- carried downward into their drum, and each copper tubing electrically isolated from the other tubing, and each tubing electrically connected to two opposing locations on a transformer housed inside of that drum...



COPPER SPHERE COPPER TUBE DRUM COPPER TUBE COPPER SPHERE

EACH COPPER TUBING, LEADING FROM ITS ADJOINING COPPER SPHERE, IS ACTING AS AN ELECTRICAL CONNECTION. THE VENTURI EFFECT IS OCCURRING INSIDE EACH SPHERE IN BETWEEN THE 100 FEMTO FARAD CAPACITORS AND THROUGH EACH NEON BULB. THESE CAPS REPRESENT THE COPPER SHELL OF EACH SPHERE.

SYNTHESIS IS ON



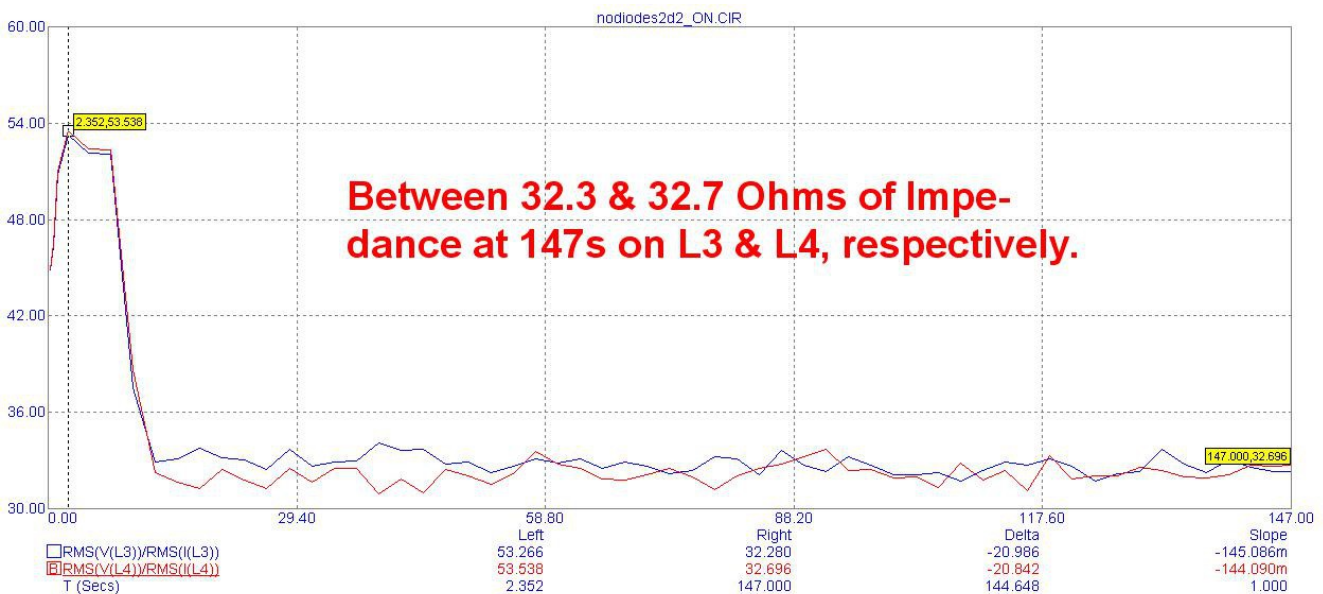
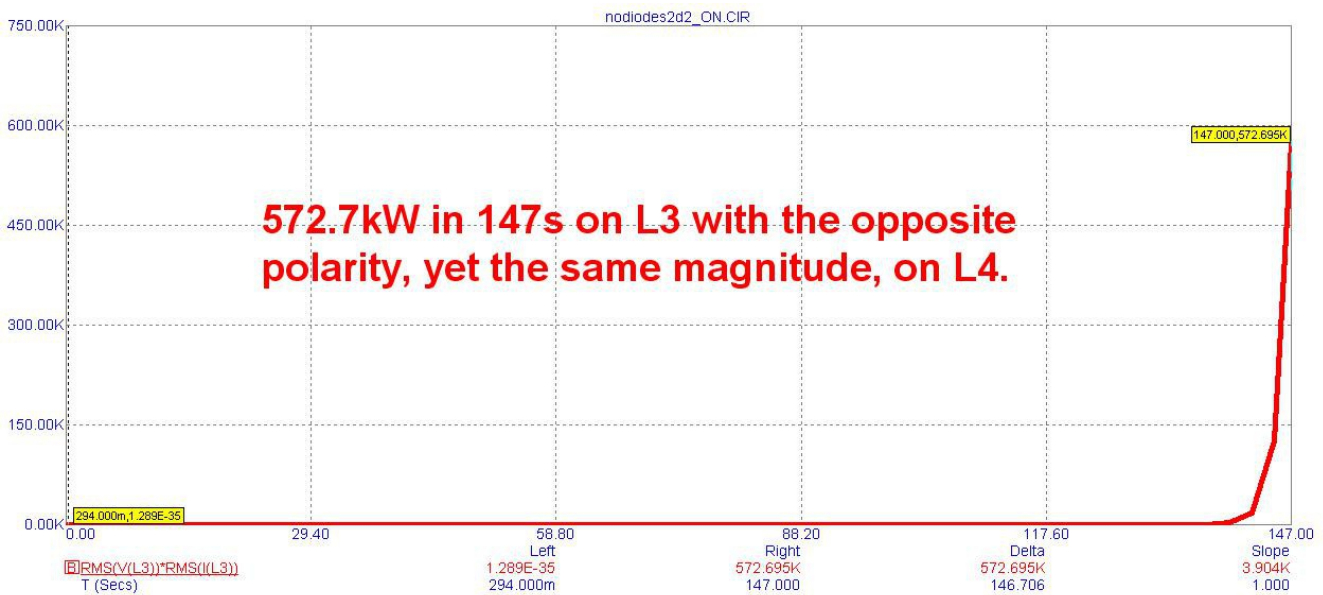
10m Ohms equivalent series resistance for each capacitor.
312.5 Ohms of resistance on transformer is 10 AWG.
4H & 4 Ohms on L3 & L4 are using 25 AWG, each.

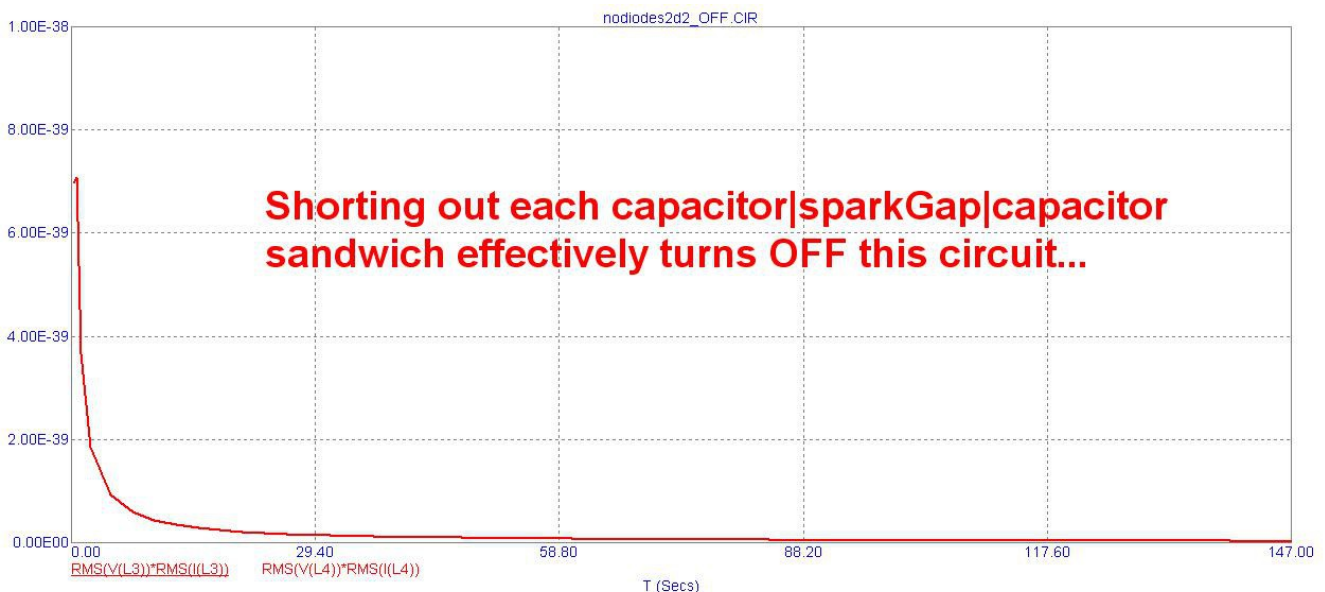
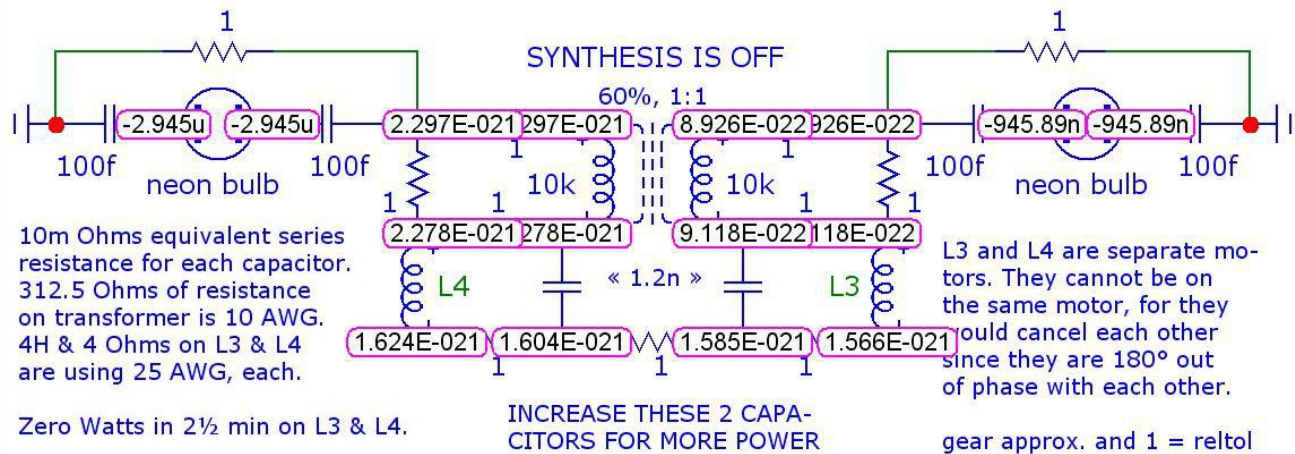
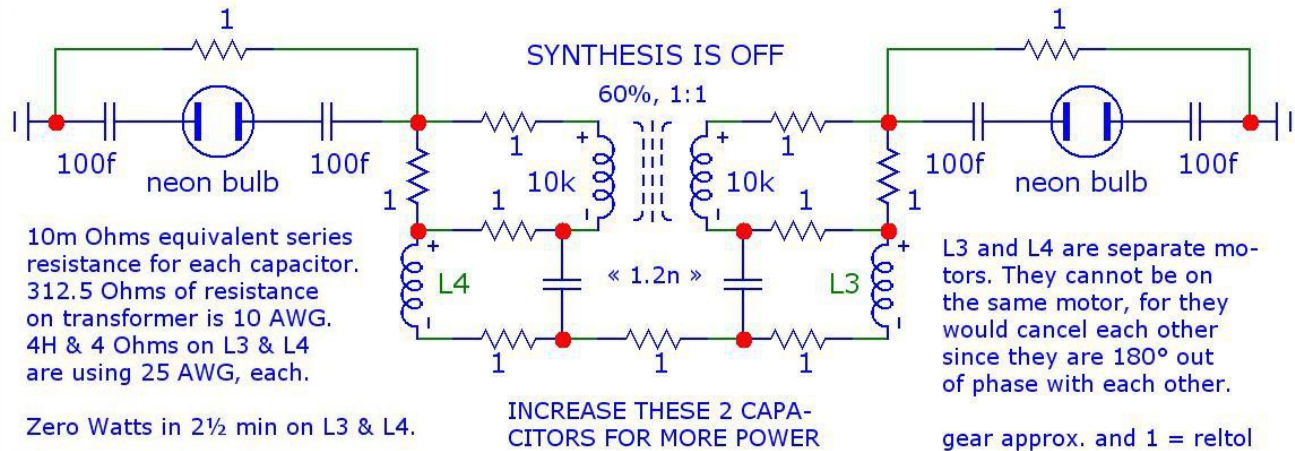
573kW in 2½ minutes on L3 & L4.

INCREASE THESE 2 CAPACITORS FOR MORE POWER

L3 and L4 are separate motors. They cannot be on the same motor, for they could cancel each other since they are 180° out of phase with each other.

gear approx. and 1 = reitoll





There are seemingly infinitely various ways of applying this simple concept of a capacitor|sparkGap|capacitor sandwich to various circuits which will make use of them in an overunity manner, ie. deriving a magnification of output from a miniscule input via electrical reactance.

It is also easy to see that this last simulation is capable of manual operation not requiring complicated electronics such as what exist in modern electric vehicles to control the motor's operation. Given the fact that such supportive circuitry did not exist 100 years ago, it seems highly unlikely that the Ammann brothers implemented their concept any other way than the following method...

It becomes obvious that their accelerator pedal in their EV conversion may not have operated as anything other than an ON/OFF switch engaging, and disengaging, an electrical short to suspend the reactive surges from time to time and, thus, manually impose a periodicity to those surges whose average output may have satisfied their motor's requirement for power.

Because of the nature of reactive power to surge, or diminish, at an exponential rate, an accelerator pedal becomes useless as a graduated throttle since reactive acceleration is already occurring when the car's accelerator pedal is engaged.

Thus, pumping the accelerator pedal ON and OFF would have been the simplest method of its operation (as far as I can tell).

This last circuit simulation satisfies this line of reasoning in that these surges are slow enough to be manually regulated by the driver.



BTW, the “mineral” mentioned by C. Earl Ammann in the newspaper article was probably alumina, aluminum oxide, whose crystalline equivalence is the category of minerals known as corundum whose various formations are: ruby and sapphire, etc.

If aluminum oxide is placed on the anode of an electrolytic cell containing either baking soda or borax, it becomes a diode. If placed on both opposing plates facing a dielectric, it becomes a capacitor.

I suggest they may have used diodes in their supporting circuitry since many of my various simulations (of this conceptual sandwich of caps+sparks+caps) have used the benefit of diodes to good effect.

To misappropriate the Conservation of Energy to electrical engineering is to misappropriate the nucleus of the atom to its valence electron shells.

“Mass/Energy IN equals mass/energy OUT” is appropriate whenever exploding atomic bombs. It is not appropriate to apply this expression to “free energy” circuits since the energy (in question) which must be conserved – in order to conserve mass – is the energy and mass of the nucleus of an atom. Electrons have no structural integrity to worry about conserving – *unless we want to blow them up!*

The valence electron shells of the atoms of copper contain all of the energy needed to empower coils of copper windings to rotate within an electric motor. Any excitation of these valence electrons of copper atoms must remain below the energy threshold for binding these atoms of copper together into a solid piece of wire, or risk losing the structural integrity of these windings and explode this wire into nano-fine particles of copper dust.

The over-reactance of capacitors and inductors can do this.