

## ***Tesla's Electric Car #1 - 01/09/98***

**This file was originally posted on the KeelyNet BBS on January 30, 1993 as TESLAFE1.ASC.**

**This file was inspired by a newspaper article in the local Dallas Morning News. It was in a column called "Texas Sketches" written by A.C. Greene. I called Mr. Green and Mr. Langkop who both courteously sent the additional source material. Both also expressed an interest in more Tesla information as well as Texas experimenters, we are sending them material in return. There is also a second file with my thoughts on the Tesla power box, that file is listed on KeelyNet as TESLAFE2.ASC.**

---

**from January 24th, Sunday - Dallas Morning News  
Texas Sketches column**

**The Electric Auto that almost triumphed  
Power Source of '31 car still a mystery  
by A.C. Greene**

**Not long ago, Texas Sketches told the story of Henry "Dad" Garrett and his son C.H.'s water-fueled automobile, which was successfully demonstrated in 1935 at White Rock Lake in Dallas.**

**Eugene Langkop of Dallas (a Packard lover, like so many of us) notes that the "wonder car" of the future may be a resurrection of the electric car. It uses no gasoline, no oil - just some grease fittings - has no radiator to fill or freeze, no carburetor problems, no muffler to replace and gives off no pollutants.**

**Famous former electrics include Columbia, Rauch & Lang and Detroit Electric.**

**Dallas had electric delivery trucks in the 1920s and 30s. Many electric delivery vehicles were used in big cities into the 1960s.**

**The problem with electrics was slow speed and short range.**

**Within the past decade two Richardson men, George Thiess and Jack Hooker, claimed to have used batteries operating on magnesium from seawater to increase the range of their electric automobile from 100 miles to 400 or 500 miles.**

**But it is a mystery car once demonstrated by Nikola Tesla, developer of alternating current, that might have made electrics triumphant.**

Supported by the Pierce-Arrow Co. and General Electric in 1931, he took the gasoline engine from a new Pierce-Arrow and replaced it with an 80-horsepower alternating-current electric motor with no external power source.

At a local radio shop he bought 12 vacuum tubes, some wires and assorted resistors, and assembled them in a circuit box 24 inches long, 12 inches wide and 6 inches high, with a pair of 3-inch rods sticking out. Getting into the car with the circuit box in the front seat beside him, he pushed the rods in, announced, "We now have power," and proceeded to test drive the car for a week, often at speeds of up to 90 mph.

As it was an alternating-current motor and there were no batteries involved, where did the power come from?

Popular responses included charges of "black magic," and the sensitive genius didn't like the skeptical comments of the press. He removed his mysterious box, returned to his laboratory in New York - and the secret of his power source died with him.

A.C. Greene is an author and Texas historian who lives in Salado.

---

The original article from which Mr. Greene gleaned the above info was from a Packard Newsletter. Mr. Gene Langkopf kindly sent us a copy of that article which now follows.

---

### **The Forgotten Art of Electric - Powered Automobiles by Arthur Abrom**

Electric powered automobiles were one of the earliest considerations and this mode of propulsion enjoyed a brief but short reign. The development of electricity as a workable source of power for mankind has been studded with great controversy.

Thomas A. Edison was the first to start to market systems (i.e. electric generators) of any commercial value. His research and developmental skills were utilized to market a "direct current" system of electricity. Ships were equipped with D.C. systems and municipalities began lighting their streets with this revolutionary D.C. electric system. (At that time) Edison was the sole source of electricity!

While in the process of commercializing electricity, Thomas Edison hired men who knew of the new scientific gift to the world and were capable of new applications for electricity. One such man was a foreigner named Nikola Tesla. This man, although not known to many of us today, was without a doubt the greatest scientific mind

**that has ever lived. His accomplishments dwarfed even Thomas Edison's! Whereas Mr. Edison was a great experimenter, Mr. Tesla was a great theoretician. Nikola Tesla became frustrated and very much annoyed at the procedures Edison followed.**

**Tesla would rather calculate the possibility of something working (i.e. mathematical investigation) than the hit and miss technique of constant experimentation. So in the heat of an argument, he quit one day and stormed out of Edison's laboratory in West Orange, New Jersey.**

**Working on his own, Tesla conceived and built the first working alternating current generator. He, and he alone, is responsible for all of the advantages we enjoy today because of A.C. electric power.**

**Angered by Edison, Tesla sold his new patents to George Westinghouse for 15 million dollars in the very early 1900's. Tesla became totally independent and proceeded to carry on his investigative research in his laboratory on 5th Avenue in New York City.**

**George Westinghouse began to market this new system of electric generators and was in competition with Edison. Westinghouse prevailed because of the greater superiority of the A.C. generators over the less efficient D.C. power supplies of Thomas Edison. Today, A.C. power is the only source of electricity the world uses. And, please remember, Nikola Tesla is the man who developed it.**

**Now specifically dealing with automobiles in the infant days of their development, electric propulsion was considered and used. An electric powered automobile possessed many advantages that the noisy, cantankerous, smoke-belching gasoline cars could not offer.**

**First and foremost is the absolute silence one experiences when riding in an electrically powered vehicle. There is not even a hint of noise. One simply turns a key and steps on the accelerator - the vehicle moves instantly! No cranking from the start, no crank to turn (this was before electric starters), no pumping of the accelerator, no spark control to advance and no throttle linkage to pre-set before starting. One simply turned the ignition switch to on!**

**Second, is a sense of power. If one wants to increase speed, you simply depress the accelerator further - there is never any hesitation. Releasing the accelerator causes the vehicle to slow down immediately - you are always in complete control. It is not difficult to understand why these vehicles were so very popular around the turn of the century and until 1912 or so.**

**The big disadvantage to these cars was their range and need for re-charging every single night. All of these electric vehicles used a series of batteries and a D.C. motor to move itself about. The batteries require recharging every night and the range of travel was restricted to about 100 miles. Understand that this restriction was not a**

**serious one in the early part of this century. Doctors began making house calls with electric cars (do you remember doctors making house calls?) because he no longer needed to tend to the horse at night time - just plug the car into an electric socket! No feeding, no rub-down and no mess to clean up!**

**Many of the large department stores in metropolitan areas began purchasing delivery trucks that were electrically powered. They were silent and emitted no pollutants. And, maintenance was a minimum on electrically powered vehicles. There were few mechanics and garages in operation in the early 1900's. So city life and travel appeared to be willing to embrace the electric automobile. Remember, these masterfully built vehicles all ran on D.C. current.**

**Two things happened to dampen the popularity of the electric automobile. One was the subconscious craving for speed that gripped all auto enthusiasts of this era. Each manufacturer was eager to show how far his car could travel (i.e. the transcontinental races) and what was its top speed!**

**Col. Vanderbilt constructed the first all concrete race track in Long Island and racing became the passion for the well-to-do. Newspapers constantly record new records of speed achieved by so-in-so. And, of course, the automobile manufacturers were quick to capitalize on the advertising effect of these new peaks of speed. Both of these events made the electrically powered vehicles appear to only belong to the "little old lady" down the street or the old retired gentleman who talked about the "good old days".**

**Electric vehicles could not reach speeds of 45 or 50 m.p.h. for this would have destroyed the batteries in moments. Bursts of speeds of 25 to 35 m.p.h. could be maintained for a moment or so. Normal driving speed-depending upon traffic conditions, was 15 to 20 m.p.h. by 1900 to 1910 standards, this was an acceptable speed limit to obtain from your electric vehicle.**

**Please note that none of the manufacturers of electric cars ever installed a D.C. generator. This would have put a small charge back into the batteries as the car moved about and would have thereby increased its operating range. This was considered by some to be approaching perpetual motion - and that, of course, was utterly impossible! Actually, D.C. generators would have worked and helped the electric car cause.**

**As mentioned earlier, Mr. Westinghouse's A.C. current generating equipment was being sold and installed about the country. The earlier D.C. equipment was being retired and disregarded. As a side note, Consolidated Edison Power Company of New York City still has one of Thomas Edison's D.C. generators installed in its 14th St. powerhouse - it still works! About this time, another giant corporation was formed and entered the A.C. generating equipment field - General Electric. This spelled the absolute end for Edison's D.C. power supply systems as a commercial means of generating and distributing electric power.**

**The electric automobile could not be adapted to accommodate and utilize a polyphase motor (i.e. A.C. power). Since they used batteries as a source of power, their extinction was sealed. No battery can put out an A.C. signal. True, a converter could be utilized (i.e. convert the D.C. signal from the battery to an A.C. signal), but the size of the equipment at this time was too large to fit in an automobile - even one with the generous dimensions of this era.**

**So, somewhere around 1915 or so, the electric automobile became a memory. True, United Parcel Service still utilizes several electric trucks in New York City today but the bulk of their fleet of vehicles utilizes gasoline or diesel fuel. For all intensive purposes, the electrically powered automobile is dead - they are considered dinosaurs of the past.**

**But, let us stop a moment and consider the advantages of utilizing electric power as a means of propelling vehicles. Maintenance is absolutely minimal for the only oil required is for the two bearings in the motor and the necessary grease fittings. There is no oil to change, no radiator to clean and fill, no transmission to foul up, no fuel pump, no water pump, no carburetion problems, no muffler to rot out or replace and no pollutants emitted into the atmosphere. It appears as though it might be the answer we have been searching for!**

**Therefore, the two problems facing us become top speed and range of driving - providing, of course, the A.C. and D.C. problems could be worked out. With today's technology this does not seem to be insurmountable. In fact, the entire problem has already been solved - in the past, the distant past and the not so distant! Stop! Re-read the last sentence again. Ponder it for a few moments before going on.**

**Several times earlier in this article, I mentioned the man, Nikola Tesla and stated that he was the greatest mind that ever lived. The U.S. Patent Office has 1,200 patents registered in the name of Nikola Tesla and it is estimated that he could have patented an additional 1,000 or so from memory!**

**But, back to our electric automobiles - in 1931, under the financing of Pierce-Arrow and George Westinghouse, a 1931 Pierce-Arrow was selected to be tested at the factory grounds in Buffalo, N.Y. The standard internal combustion engine was removed and an 80-H.P. 1800 r.p.m electric motor installed to the clutch and transmission. The A.C. motor measured 40 inches long and 30 inches in diameter and the power leads were left standing in the air - no external power source!**

**At the appointed time, Nikola Tesla arrived from New York City and inspected the Pierce-Arrow automobile. He then went to a local radio store and purchased a handful of tubes (12), wires and assorted resistors. A box measuring 24 inches long, 12 inches wide and 6 inches high was assembled housing the circuit. The box was placed on the front seat and had its wires connected to the air-cooled, brushless motor. Two rods 1/4" in diameter stuck out of the box about 3" in length.**

**Mr. Tesla got into the driver's seat, pushed the two rods in and stated, "We now have power". He put the car into gear and it moved forward! This vehicle, powered by an A.C. motor, was driven to speeds of 90 m.p.h. and performed better than any internal combustion engine of its day! One week was spent testing the vehicle. Several newspapers in Buffalo reported this test. When asked where the power came from, Tesla replied, "From the ethers all around us". Several people suggested that Tesla was mad and somehow in league with sinister forces of the universe. He became incensed, removed his mysterious box from the vehicle and returned to his laboratory in New York City. His secret died with him!**

**It is speculated that Nikola Tesla was able to somehow harness the earth's magnetic field that encompasses our planet. And, he somehow was able to draw tremendous amounts of power by cutting these lines of force or causing them to be multiplied together. The exact nature of his device remains a mystery but it did actually function by powering the 80 h.p. A.C. motor in the Pierce-Arrow at speeds up to 90 m.p.h. and no recharging was ever necessary!**

**In 1969, Joseph R. Zubris took his 1961 Mercury and pulled out the Detroit internal combustion engine. He then installed an electric motor as a source of power. His unique wiring system cuts the energy drain at starting to 75% of normal and doubles the electrical efficiency of the electric motor when it is operating! The U.S. Patent Office issued him a patent No. 3,809,978. Although he approached many concerns for marketing, no one really seemed to be interested. And, his unique system is still not on the market.**

**In the 1970's, an inventor used an Ev-Gray generator, which intensified battery current, the voltage being induced to the field coils by a simple programmer (sequencer). By allowing the motor to charge separate batteries as the device ran, phenomenally tiny currents were needed. The device was tested at the Crosby Research Institute of Beverly Hills, Ca., a 10-horsepower EMA motor ran for over a week (9 days) on four standard automobile batteries.**

**The inventors estimated that a 50-horsepower electric motor could traverse 300 miles at 50 m.p.h. before needing a re-charge. Dr. Keith E. Kenyon, the inventor of Van Nuys, California discovered a discrepancy in the normal and long accepted laws relating to electric motor magnets. Dr. Kenyon demonstrated his invention for many scientists and engineers in 1976 but their reaction was astounding. Although admitting Dr. Kenyon's device worked, they saw little or no practical application for it!**

**So the ultimate source for our electrically powered automobile would be to have an electric motor that required no outside source of power. Sounds impossible because it violates all scientific thought! But it has been invented and H.R. Johnson has been issued a patent No. 4,151,431 on April 24, 1979 on such a device!**

**This new design although originally suggested by Nikola Tesla in 1905, is a permanent magnet motor. Mr. Johnson has arranged a series of permanent magnets on the rotor and a corresponding series - with different spacing - on the stator. One simply has to move the stator into position and rotation of the rotor begins immediately.**

## **Howard Johnson Permanent Magnet Motor**

**His patent states,**

**"The invention is directed to the method of utilizing the unpaired electron spins in ferro magnetic and other materials as a source of magnetic fields for producing power without any electron flow as occurs in normal conductors and to permanent magnet motors for utilization of this method to produce a power source.**

**In the practice of this invention, the unpaired electron spins occurring within permanent magnets are utilized to produce a motive power source solely through the super-conducting characteristics of a permanent magnet and the magnetic flux created by the magnets are controlled and concentrated to orient the magnetic forces generated in such a manner to do useful continuous work such as the displacement of a rotor with respect to a stator.**

**The timing and orientation of magnetic forces at the rotor and stator components produced by permanent magnets to produce a motor is accomplished with the proper geometrical relationship of these components".**

**Now before you dismiss the idea of a magnetically run motor - a free energy source, consider the following :**

**Engineers of Hitachi Magnetics Corp. of California have stated that a motor run solely by magnets is feasible and logical but the politics of the matter make it impossible for them to pursue developing a magnet motor or any device that would compete with the energy cartels.**

**In a book entitled, "Keely and His Discoveries" by Clara B. Moore published in 1893, we find the following statements,**

**"The magnet that lifts a pound today if the load is gradually increased day by day will lift double that amount in time. Whence comes this energy? Keely teaches that it comes from sympathetic association with one of the currents of the polar stream and that its energy increases as long as the sympathetic flow lasts, which is through eternity".**

**Now consider some basic observations concerning magnets:**

- 1) Two permanent magnets can either attract or repel depending on the arrangement of the magnetic poles.
- 2) Two magnets repel further than they attract because of friction and inertia forces.
- 3) Most of our energy comes directly or indirectly from electromagnetic energy of the sun, e.g. photosynthesis and watercycle of ocean to water vapor to rain or snow to ocean.
- 4) Magnetic energy "travels" between poles at the speed of light.
- 5) Permanent magnets on both sides of an iron shield are attracted to the shield and only weakly to each other at close proximity to the shield.
- 6) Permanent magnets are ferrous metals and are attractive only. Attraction is an inverse square force.
- 7) Magnetic energy can be shielded.
- 8) The sliding or perpendicular force of a keeper is much less than the force in the direction of the field to remove the keeper.
- 9) Most of the magnetic energy is concentrated at the poles of the magnet.
- 10) A permanent magnet loses little strength unless dropped or heated. Heating misaligns the magnetic elements within the magnet.
- 11) If a weight lifted by a permanent magnet is slowly increased, the lifting power of the magnet can be increased until all the magnetic domains in the magnet are aligned in the same direction. This becomes the limit.
- 12) Using magnets to repel tends to weaken them as it causes more misalignment of the domains.
- 13) A magnetic material placed between two magnets will always be attracted to the stronger magnet.

So, our ultimate motor becomes a permanent magnet motor of proper size with speed being controlled through the automobile's transmission. And, here is the biggest plus, permanent magnets keep their strength for a minimum of 95 years! So here we have a fuel-less automobile that would last us our lifetime.

There is only one drawback to an automobile powered by a permanent magnet motor - if the vehicle gets involved in an accident, the shock of the crash could jar the magnets and cause them to lose power! But this seems to be a small price to pay for an automobile that could run all day at 60 m.p.h. - use no fuel - and never need a recharge!

Now the only question left to be answered is, "Where do you buy one?" or perhaps, "When will we be able to buy one?" At present there are several companies offering interim solutions. Some offer electric powered designs - but this is strictly batteries, while others offer a hybrid combination of batteries and small gasoline engines. All of these so-called "modern alternatives" suffer from the same lack of accessories we've become accustomed to.

They do not, or cannot offer power steering, brakes or windows or air- conditioning, etc. Since they are small aerodynamically shaped packages holding only two people, their appeal is distinctly limited.

When someone constructs an automobile run by a permanent magnet motor attached to the differential thus eliminating the transmission, the world will beat a path to his door - providing the energy cartel doesn't find him first!

In Richardson, Texas last year, two men - George Thiess and Jack Hooker have advanced the storage battery to a new level. Their new batteries will operate on magnesium made from seawater.

### [Thiess/Hooker Advanced Storage Battery](#)

The magnesium is used to charge the battery while in an electrolyte solution and the range of their auto is increased by replacing the magnesium rods every 400 to 500 miles. Their studies are being officially watched by the Department of Energy. Perhaps an all new era of electrically powered automobiles may be on its way to reality.

---

This subject is intensely interesting to many researchers so if you have any [suggestions or comments](#), we here at KeelyNet would greatly appreciate your sharing with us.

---

[TESLAFE2.HTM](#) - commentary

[TESLCAR.HTM](#) - another viewpoint

---

□ *Tesla's Electric Car #2 - 01/09/98*

This file was originally posted on the KeelyNet BBS on January 31, 1993 as TESLAFE2.ASC.

This file is a Sysop commentary on the Tesla Power Box as described in the original file [TESLAFE1.ASC](#) on KeelyNet.

These are my own thoughts on the Tesla Power Box, I welcome your constructive comments regarding this device.....Jerry W. Decker/KeelyNet

---

The following are the details as removed from the file TESLAFE1 :

"The standard internal combustion engine was removed and an 80-H.P. 1800 r.p.m electric motor installed to the clutch and transmission.

The A.C. motor measured 40 inches long and 30 inches in diameter and the power leads were left standing in the air - no external power source!

He then went to a local radio store and purchased a handful of tubes (12), wires and assorted resistors. A box measuring 24 inches long, 12 inches wide and 6 inches high was assembled housing the circuit.

The box was placed on the front seat and had its wires connected to the air-cooled, brushless motor. Two rods 1/4" in diameter stuck out of the box about 3" in length."

The mention of this experiment in a local paper kind of blew me away but it did give "some" detail of what was in this mysterious power box.

We know that T.H. Moray had probably the best known version of such a device. In his case he used a special "valve" which appeared to be basically a diode. Except this diode worked more like a Triac. That is, any electrical wave, both positive AND negative going currents, was picked up by an antenna and passed through this diode with minimal loss of energy. As far as we know, this valve was based on a composite substance with GERMANIUM as the host material.

From there it went through a tuned circuit based on vacuum tubes and capacitors to build and discharge the energy as demanded by the load.

The tuned circuits were resonant with one or more earth or cosmic frequencies and the vacuum tubes acted as harmonic constructive interference amplifiers of the input signals.

We will note that Moray's resonant circuits used CAPACITORS, COILS and RESISTORS. Experiments done during Moray's heyday showed an output up to 50,000 Watts of high frequency energy. It is believed that the energy was high frequency because 100 watt light bulbs burned cool to the touch.

One other CRITICAL POINT about Moray's converter was that it would ONLY energize RESISTIVE loads and NOT INDUCTIVE loads. This is because inductive loads imply coils of wire which are heated more so by HYSTERESIS (interfering electro-magnetic fields) rather than simple resistance from the flow of current through molecular/atomic patterns.

**This type of interfering field caused an energy backup and subsequent de-tuning of Moray's generator. Since it was essentially a TUNED device, it could not compensate for any frequency changes or distortions ONCE TUNED. As a result, any attempt to hook up an inductive load would cause the device to stop generating electrical energy. To restart it, all inductive loading must be removed, the device re-tuned and restarted.**

**Moray also used an unusual mode of operation for a vacuum tube in that he operated with a "cold cathode." This did not require a heated plate for the "thermionic emissions" deemed necessary to successful vacuum tube operation.**

**There is also mention of radioactive elements in the antenna circuit which leads one to think he might have been tuning into the continual radioactive decay processes of nature, rather than cosmic or earth energies.**

**Now to the Tesla Power Box**

**We will first of all note the use of an AC coil motor. This alone tells us that the Tesla device was superior and not so dependent on tuning as was Moray's machine which could only power RESISTIVE loads. All universal energy moves in WAVES and so is essentially for alternating current (AC). That is why Moray called his book "THE SEA OF ENERGY IN WHICH THE EARTH FLOATS". The entire universe is continually bathed in these AC energies and they cover the entire frequency spectrum.**

**What intrigues the hell out of me was how Tesla could use "off-the- shelf" vacuum tubes and other components, put them together in the correct configuration and make it work.**

**Another point we should note is the list of components :**

- **1) 12 Vacuum Tubes (70L7-GT rectifier beam power tubes)**
- **2) Wires**
- **3) Assorted Resistors**
- **4) 1/4" diameter rods 3" in length**

**NOTE, NO CAPACITORS! The wires could have been simply for connection or wound as coils. The 1/4" rods were either BUS BARS for power output taps OR more likely ANTENNAS! Resonant circuits can be constructed using several techniques. You can achieve the same effect from :**

- **1) Resistors AND capacitors**
- **2) Capacitors AND coils**
- **3) Coils AND resistors**

So, in the case of the Tesla Power Box, he either wound his own coils or simply used the wire to connect the resistors with the vacuum tubes. I am of the opinion that he used the wire **ONLY** for connection and **DID NOT USE COILS!** I also think he used a **DIODE** somewhere in the circuit in order to tap **ONLY** one polarity.

We have no specifications for the AC motor that Tesla used in the auto, so we have no idea if it was single or polyphase. In the case of a single phase motor, it only requires a single winding which projects a magnetic field that rotates according to the increase or decrease of the alternating current.

A polyphase (poly = two or more) motor uses multiple windings which are fed by phased input currents that alternate in such a manner as to reinforce each other. In the case of a 3 phase motor, the currents are phased 120 degrees apart. This gives much greater torque to the motor but requires 3 times the current because it uses 3 times the input energy.

Since the box powered an AC (coil) motor, it is probable it was **TUNED** to one or more frequencies, most likely polyphased frequencies.

So, if the 3" long rods were in fact **ANTENNAS**, we can calculate their frequency by using the following :

(I cannot express Lambda here so we will use w for wavelength)

w = wavelength  
v = velocity of propagation  
f = signal frequency

a short example : w = v / f = wavelength in feet  
w = 984,000,000/1,500,000 = 656 feet  
f = 984,000,000/656 = 1,500,000 or 1.5 MHZ

3 inches \* 4 = 1 foot  
984,000,000/1 = 984,000,000  
984,000,000/4 = 246,000,000 or 246 MHZ

This would indicate the 3" rods (if they were truly 3" in length and functioning as antennas) would resonate at 246 MHZ.

Because of the parts list description, I am of the opinion that it was a **DUAL** circuit. That is, 6 vacuum tubes and one 1/4" diameter 3" rod along with assorted resistors were to pick up and "pump" **ONLY** the positive going signals, while the other 6 vacuum tubes, rod and resistors did the same for the negative going signals. Such a scheme could either use **PARALLEL** or **SERIAL** connections of the vacuum tubes. Since current conduction is proportional to surface area, one would think that a parallel arrangement of the 70L7-GT rectifier beam power tubes with all **INPUTS** connected to one antenna source and all **OUTPUTS** connected to a common

terminal attached to the load, would provide for the **MAXIMUM** current flow from incoming energy waves.

The nature of these "energy waves" is the question here. Are they cosmic rays, electrostatic, Schumann peaks, magnetic force, something "other" or Aether flow into the neutral centers of mass as per Keely.

Vacuum tube construction takes several forms. Of these, the simplest is two plates separated by a grid wire. When the bottom plate is heated, thermally induced ions (thermionic emissions) are emitted by the bottom plate. The grid can be biased by the application of voltage to increase, decrease or halt the flow of these ions to the upper plate.

Other forms include more plates with more grids to allow better control of the ion flow. By proper biasing, vacuum tubes can be operated as switches, modulators or amplifiers among other uses.

Vacuum tubes operate primarily with high voltages that control the ion flows. Modern transistors are equivalent to vacuum tubes except that they operate using **CURRENT** instead of voltage. Transistors equate to Vacuum tubes by the following comparisons :

	Vacuum Tube	Transistor	Polarity
Operates from	Voltage	Current	
	lower plate	emitter	negative - cathode
	grid	base	neutral
	upper plate	collector	positive - anode

In the case of the Tesla Power Box, the vacuum tube appears to function as a "pump", collecting incoming current in the form of ion intensification. Once this "compressed" ion field reaches a certain density, the pump allows it to be released into the next stage of the circuit, be it the actual load or another vacuum tube.

So if the circuit is 6 vacuum tubes in parallel, all fed from a common antenna, outputting to a common load terminal, then the common antenna input would feed all vacuum tubes with the same wave. This would give the greatest **CURRENT** accumulation because of the **EXPANDED SURFACE AREA** of the paralleled tubes.

Note, these vacuum tubes most likely operate in the "cold cathode" mode since the heaters of the vacuum tubes were not fed by any outside voltage to provide the heat for the more orthodox therionic emission.

**If the vacuum tubes are hooked in series, then one "pump" would feed another "pump" to get successively higher densities of electrons. This would give higher VOLTAGES because of increased PRESSURE.**

**Keep in mind that electricity is much like air or water. We can think of voltage as pounds per square inch (PSI) and current as cubic feet per minute (CFM). That is PSI is pressure, CFM is flow.**

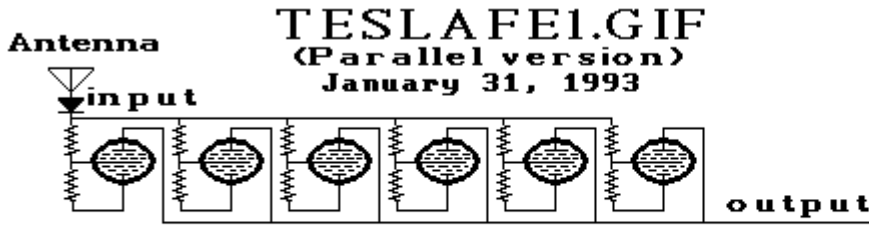
**Another analog is comparing a river to electricity. In such a comparison, the speed of the river is the VOLTAGE or pressure while the width of the river is the CURRENT or rate of flow.**

**Such a comparison shows WHY current requires THE GREATEST SURFACE AREA for the maximum flow. Fuses function on just this principle, when the current flows over the surface of the fuse, it creates heat. If too much current flows, it creates too much heat causing the fuse to melt and separate. The more surface area the fuse, the greater the amount of current can flow, another reason to not place a penny in a fuse socket.**

**So we have two antennas (1/4" diameter, 3" long rods), two sets of 6 vacuum tubes connected together by wire and assorted resistors. As the waves of energy are collected by the 3" rods, positive on one, negative on another, the energy builds up in the form of increased ions in each of the paralleled vacuum tubes. As in Moray's generator, the circuit will feed whatever load is attached as long as it does not EXCEED the current carrying capacity of the circuit components. What we have is an energy pumping system.**

**I made a drawing of the box with some idea of the circuit. My electronics knowledge is on IC's and transistors with almost nothing in regard to vacuum tubes so there won't be much technical concept of the circuit per se. Perhaps after some study, either I or someone else will come up with some testable or useable circuits.**

---

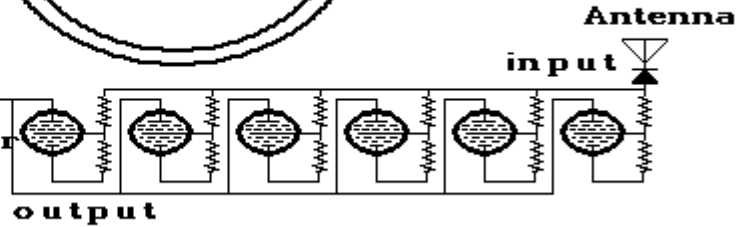


KeelyNet BBS  
PO BOX 1031  
Mesquite, TX 75149  
(214) 324-3501

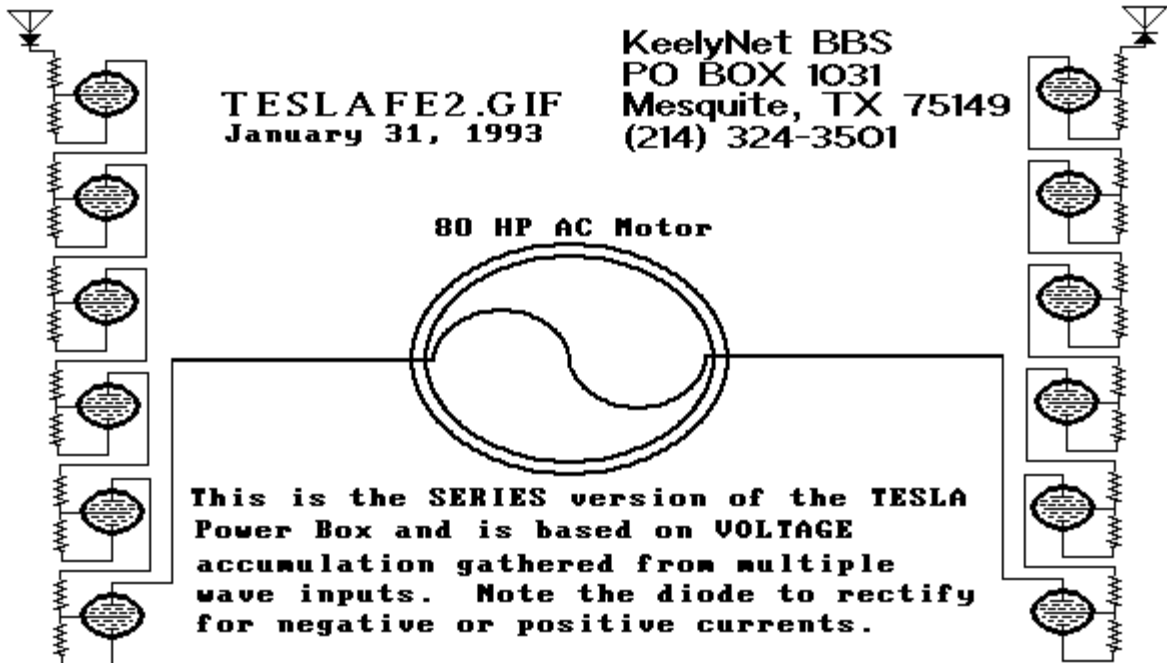
This is a speculative concept based on the KeelyNet text file TESLA FE2.ASC. The antenna are 3" in length and estimated to oscillate at 246 MHZ. The vacuum tubes function with "cold cathodes" i.e. no heater. Wide spectrum input provides all the necessary energy.



Note the addition to the antennas of diodes to rectify the incoming multiwave energy.



The Parallel Version



KeelyNet BBS  
PO BOX 1031  
Mesquite, TX 75149  
(214) 324-3501

The Serial Version

---

**[TESLAFE1.HTM](#) - original articles**

**[TESLCAR.HTM](#) - another viewpoint**

---

**□ Tesla's Electric Car - another version**

---

**Subject : Tesla's Electric Car**

**Date : Mon, 07 Apr 1997 02:15:31 GMT**

**This is an excerpt from the book, "Secrets of Cold War Technology - Project HAARP and Beyond", by Gerry Vassilatos. - ISBN 0-945685-20-3**

**For more information please email, write or call: [info@borderlands.com](mailto:info@borderlands.com) or click on the [Borderlands website](#).**

**Borderland Sciences Research Foundation**

**Post Office Box 220**

**Bayside, California**

**95524-0220 U.S.A.**

**Phone: (707) 825-7733 / FAX: (707) 825-7779**

---

**Tesla's Electric Car - from page 91**

**Tesla had already considered the condition of charged particles, each representing a tightly constricted whorl of aether. The force necessarily exerted at close distances by such aetheric constrictions was incalculably large. Aetheric ponderance maintained particulate stability.**

**Crystalline lattices were therefore places within which one could expect to find unexpected voltages. Indeed, the high voltages inherent in certain metallic lattices, intra-atomic field energies, are enormous. The close Coulomb gradient between atomic centers are electrostatic potentials reaching humanly unattainable levels.**

**By comparison, the voltages which Tesla once succeeded in releasing were quite insignificant. In these balanced lattices, Tesla sought the voltages needed to initiate directed aetheric streams in matter.**

**Once such a flow began, one could simply tap the stream for power.**

**In certain materials, these ether streams might automatically produce the contaminating electrons, a source of energy for existing appliances. One could theoretically then "tailor" the materials needed to produce unexpected aetheric power with or without the attendant detrimental particles.**

**Tesla did mention the latent aetheric power of charged forces, the explosive potentials of bound Ether, and the aetheric power inherent in matter.**

**By these studies, Tesla sought replacement for the 100,000,000 volt initiating pulses which natural law required for the implementation of space Ether. Tesla had long been forced to abandon those gigantic means by other, less natural laws.**

**Thereafter, Tesla shifted his attentions from the appreciation of the gigantic to an appreciation of the miniature. He sought a means for proliferating an immense number of small and compact aether power receivers.**

**With one such device, Tesla succeeded in obtaining power to drive an electric car. But for the exceptional account which follows, we would have little information on this last period in Tesla's productive life, one which very apparently did not cease its prolific streams of creativity to his last breath.**

**The information comes through an unlikely source, one rarely mentioned by Tesla biographers. It chanced that an aeronautical engineer, Derek Ahlers, met with one of Tesla's nephews then living in New York. Theirs was an acquaintance lasting some 10 years, consisting largely of anecdotal commentaries on Dr. Tesla. Mr. Savo provided an enormous fund of knowledge concerning many episodes in Tesla's last years.**

**Himself an Austrian military man and a trained aviator, Mr. Savo was extremely open about certain long-cherished incidents in which his uncle's genius was consistency made manifest. Mr. Savo reported that in 1931, he participated in an experiment involving aetheric power. Unexpectedly, almost inappropriately, he was asked to accompany his uncle on a long train ride to Buffalo.**

**A few times in this journey, Mr. Savo asked the nature of their journey. Dr. Tesla remained unwilling to disclose any information, speaking rather directly to this issue. Taken into a small garage, Dr. Tesla walked directly to a Pierce Arrow, opened the hood and began making a few adjustments. In place of the engine, there was an AC motor.**

**This measured a little more than 3 feet long, and a little more than 2 feet in diameter. From it trailed two very thick cables which connected with the dashboard. In addition, there was an ordinary 12 volt storage battery. The motor was rated at 80 horsepower.**

**Maximum rotor speed was stated to be 30 turns per second. A 6 foot antenna rod was fitted into the rear section of the car.**

**Dr. Tesla stepped into the passenger side and began making adjustments on a "power receiver" which had been built directly into the dashboard.**

**The receiver, no larger than a short-wave radio of the day, used 12 special tubes which Dr. Tesla brought with him in a boxlike case.**

**The device had been prefitted into the dashboard, no larger than a short-wave receiver. Mr. Savo told Mr. Ahler that Dr. Tesla built the receiver in his hotel room, a device 2 feet in length, nearly 1 foot wide, a 1/2 foot high.**

**These curiously constructed tubes having been properly installed in their sockets, Dr. Tesla pushed in 2 contact rods and informed Peter that power was now available to drive.**

**Several additional meters read values which Dr. Tesla would not explain. Not sound was heard. Dr. Tesla handed Mr. Savo the ignition key and told him to start the engine, which he promptly did. Yet hearing nothing, the accelerator was applied, and the car instantly moved. Tesla's nephew drove this vehicle without other fuel for an undetermined long interval.**

**Mr. Savo drove a distance of 50 miles through the city and out to the surrounding countryside. The car was tested to speeds of 90 mph, with the speedometer rated to 120.**

**After a time, and with increasing distance from the city itself, Dr. Tesla felt free enough to speak. Having now become sufficiently impressed with the performance of both his device and the automobile.**

**Dr. Tesla informed his nephew that the device could not only supply the needs of the car forever, but could also supply the needs of a household - with power to spare. When originally asked how the device worked, Tesla was initially adamant and refused to speak.**

**Many who have read this "apocryphal account" have stated it to be the result of an "energy broadcast". This misinterpretation has simply caused further confusions concerning this stage of Tesla's work. He had very obviously succeeded in performing, with this small and compact device, what he had learned in Colorado and Shoreham.**

**As soon as they were on the country roads, clear of the more congested areas, Tesla began to lecture on the subject. Of the motive source he referred to "a mysterious radiation which comes out of the aether". The small device very obviously and effectively appropriated this energy.**

Tesla also spoke very glowingly of this providence, saying of the energy itself that "it is available in limitless quantities".

Dr. Tesla stated that although "he did not know where it came from, mankind should be very grateful for its presence".

The two remained in Buffalo for 8 days, rigorously testing the car in the city and countryside. Dr. Tesla also told Mr. Savo that the device would soon be used to drive boats, planes, trains, and other automobiles. Once, just before leaving the city limits, they stopped at a streetlight and a bystander joyfully commented concerning their lack of exhaust fumes.

Mr. Savo spoke up whimsically, saying that they had "no engine". They left Buffalo and traveled to a predetermined location which Dr. Tesla knew, an old farmhouse barn some 20 miles from Buffalo. Dr. Tesla and Mr. Savo left the car in this barn, took the 12 tubes and the ignition key, and departed.

Later on, Mr. Savo heard a rumor that a secretary had spoken candidly about both the receiver and the test run, being promptly fired for the security breach. About a month after the incident, Mr. Savo received a call from a man who identified himself as Lee De Forest, who asked how he enjoyed the car.

Mr. Savo expressed his joy over the mysterious affair, and Mr. de Forest declared Tesla the greatest living scientist in the world. Later, Mr. Savo asked his uncle whether or not the power receiver was being used in other applications.

He was informed that Dr. Tesla had been negotiating with a major shipbuilding company to build a boat with a similarly outfitted engine. Asked additional questions, Dr. Tesla became annoyed. Highly concerned and personally strained over the security of this design, it seems obvious that Tesla was performing these tests in a desperate degree of secrecy for good reasons.

Tesla had already been the victim of several manipulations, deadly actions entirely sourced in a single financial house. For this reason, secrecy and care had become his only recent excess.

---

**[TESLAFE1.HTM](#) - original articles**

**[TESLAFE2.HTM](#) - commentary**

---

## □ Tesla's car: free energy

David ( *no email* )

Tue, 26 Jan 1999 15:06:19 -0600

- **Messages sorted by:** [\[ date \]](#) [\[ thread \]](#) [\[ subject \]](#) [\[ author \]](#)
- **Previous message:** [Tim van den Hoff: "Re: Osiris' Grave found, or so it is claimed"](#)
- **Next message:** [Euejin Jeong: "Boson Abstract?"](#)

This is a multi-part message in MIME format.

-----\_NextPart\_000\_0024\_01BE493D.6DAADEE0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

Tesla found that the energy peaks at 12 Hz, 500 Khz and their = harmonics. That is why I mentioned 12 Hz. I had once thought that Tesla = used the vacuum tubes because he was using aether, but after looking at = some of his other writings and experiments with this electricity, it = seems as though he built the box to increase the current of the = electricity. I'm sure that this is possible and had I a better = understanding of vacuum tube technology I would try to explain this in = more detail. The reason I believe that his box was in fact built to = amplify the current of the electricity is because Tesla had already = conducted similar experiments as Jerry Gallimore had and had the same = trouble that Jerry Gallimore had with a weak current. It is therefore = only logical to conclude that Tesla used this same atmospheric = electricity. This is not only indicated and supported by Tesla's notes = and diagrams, but his methods resemble the later experiments of others = like Jerry Gallimore to such a degree that it is silly to conclude that = they were not using the same kind of electricity and obtaining it from = the same source. All Tesla needed after tuning in the peak voltage = frequency was to increase, or amplify the current by some means. That is = why I believe that Tesla built the converter box not to convert or draw = power from the aether, but to amplify the current of the electricity = that he was receiving from the atmosphere. =20

-----\_NextPart\_000\_0024\_01BE493D.6DAADEE0

Content-Type: text/html;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "W3C//DTD W3 HTML//EN">

Tesla found that the energy peaks at 12 Hz, 500 Khz and their harmonics. That is why I mentioned 12 Hz. I had once thought that Tesla used the vacuum tubes because he was using aether, but after looking at some of his other writings and experiments with this electricity, it seems as though he built the box to increase the current of the electricity. I'm sure that this is possible and had I a better understanding of vacuum tube technology I would try to explain this in more detail. The reason I believe that his box was in fact built to amplify the current of the electricity is because Tesla had already conducted similar experiments as Jerry Gallimore had and had the same trouble that Jerry Gallimore had with a weak current. It is therefore only logical to conclude that Tesla used this same atmospheric electricity. This is not only indicated and supported by Tesla's notes and diagrams, but his methods resemble the later experiments of others like Jerry Gallimore to such a degree that it is silly to conclude that they were not using the same kind of electricity and obtaining it from the same source. All Tesla needed after tuning in the peak voltage frequency was to increase, or amplify the current by some means. That is why I believe that Tesla built the converter box not to convert or draw power from the aether, but to amplify the current of the electricity that he was receiving from the atmosphere.

-----\_NextPart\_000\_0024\_01BE493D.6DAADEE0--

- **Previous message:** [Tim van den Hoff: "Re: Osiris' Grave found, or so it is claimed"](#)
- **Next message:** [Euejin Jeong: "Boson Abstract?"](#)

## High Voltage Accumulation (was Re: Time Travel again)

Jerry W. Decker ( *no email* )

Mon, 25 Jan 1999 23:27:22 -0600

- **Messages sorted by:** [\[ date \] \[ thread \] \[ subject \] \[ author \]](#)
- **Previous message:** [mbgupta@julian.uwo.ca: "Re: Plans for a Brain Tuner?"](#)
- **Next message:** [Kenneth Carrigan: "Re: High Voltage Accumulation \(was Re: Time Travel again\)"](#)
- **Next in thread:** [Kenneth Carrigan: "Re: High Voltage Accumulation \(was Re: Time Travel again\)"](#)
- **Maybe reply:** [Kenneth Carrigan: "Re: High Voltage Accumulation \(was Re: Time Travel again\)"](#)

Hi David et al!

Thanks for the additional information about what method you are using. Is it an aerial tap which I understand can accumulate high voltages but little current, though it will give a decent crackle every so often.

You wrote;

- > *Fair enough, I have made part of the device that Nikola Tesla used*
- > *to run his car. I have made the wave guide/ antenna. Tesla used a*

> box filled with electrical components to increase the current of  
> the electricity from the wave guide. However, many applications  
> can be run by this electricity by simply transforming it in to a  
> lower voltage with higher current.  
> Jerry Gallimore had much to say about this electricity in his third  
> &quot;Handbook of Unusual Energies'. The problem is that air is a terrible  
> conductor of electricity, so even though it produces in excess of one  
> thousand volts of electricity the current is too small to run most  
> machinery. This energy is terribly easy to attract, but there is a  
> problem in that the current is so small.  
> Jerry Gallimore used it to power a 4,000 volt motor at about 100 RPM.  
> Tesla's first antenna was a simple sheet of copper that he left out  
> in the sun. This gave him similar results, except that he did not use  
> a radio active collector like Jerry Gallimore did later. Jerry  
> Gallimore suggested that a stronger current could be produced by  
> making a different kind of antenna. Nikola Tesla used the same kind  
> of antenna (&quot; candle stick') that Jerry used except that he had  
> increased the current with a mess of electronic parts in a huge box.  
> The motor that he used in his car was not very efficient, and if I  
> can figure out how they rewound that 1 horse power motor at  
> <http://www.ucsofa.com/videos.htm> to run on a 9 volt battery, I  
> should have little trouble in making one and power a car with it, or  
> in generating house hold electricity by connecting it to a generator.  
> I hope that this clarifies some of what I said and I will keep you  
> informed of any progress that is made (although it is being made very  
> slowly). Thank you all for your helpful suggestions for transforming  
> this energy into a higher current form. I am of course trying to  
> improve the designs that Tesla and Gallimore used.  
>  
> Best Regards, - David

What puzzled me was the 12cps..is that due to some oscillator or  
periodic spark gap?? I can see 1000 volts from an aerial tap, and have  
heard reports of up to 3000 volts.

A friend told me he knew a lady (here we go with weirdness) who once  
lived in Sao Paulo, Brazil in a high rise apartment owned by her father.  
The family lived in the penthouse on the top and did not pay any  
electric bills. She told my friend that every few days, if it had not  
rained, her father would tell her or one of her siblings to go down to  
the ground level and water the cable.

Seems the father had a large antenna on the top of the penthouse and a  
long, well insulated wire that ran down the side of the building and  
deep into the ground.

Apparently they were accumulating their power between the aerial high voltage and the deep earth ground, with sufficient success to power their dwelling.

When the ground became too dry, the conduction wasn't as high as it should be so with water added to the ground, it would restore full power. I'd imagine salt the ground and that would help too...

I always thought the story quite interesting as there are numerous reports of thick copper buss bars vaporizing in an instant when connected to long insulated wires run down the side of mountains and connecting to a grounded earth wire.

Don Smith in Spring, Texas, though he's a nice guy and makes some radically high power claims that don't pan out in reality, does have an intriguing chart that he showed at the 1994 Tesla conference.

It was a topographical altitude chart from the USGS and showed all the mapped elevations for a given area. Low lying levels were red and as the elevation increased, the colors changed according to the spectrum so that violet was at the highest areas.

I thought this was great way to map potential power tapping sites, that is having an antenna on top of the highest point, with a high voltage insulated cable running down from the highest point to the lowest and connecting BETWEEN A LOAD to a very deep ground spike.

There is no error in the basic idea and the power could well charge a battery network or huge capacitors which could be used to supply useful loads at no cost beyond the original installation and maintenance.

The Prentice patent uses a similar principle with an insulated cable spread over one mile, and secured on one end with a deep ground spike connected through a load to the cable which is kick started on the other end by a high voltage generator...once power was flowing in the wire, the generator line was quickly switched to another deep ground spike...the idea and claim being that earth currents would now be sucked in to sustain the load by the 'circuit'. Here is the Prentice information;

<http://www.keelynet.com/energy/prentice.htm>

You referred to a 4,000 volt motor...Professor Jefimenko is probably the best known modern expert on electrostatic motors, some with fairly high torque and/or speeds. I don't have a copy of the book but it is available and gives construction details for various motors. Benjamin

Franklin also experimented with electrostatic motors and I'll bet Lindsay Books might have something with those kind of experiments, not to mention back issues of Scientific American.

I don't recall the Tesla car experiment having a true aerial though there was a copper rod or something of that nature...the files we have are posted at;

<http://www.keelynet.com/energy/teslafe1.htm>  
<http://www.keelynet.com/energy/teslafe2.htm>  
<http://www.keelynet.com/energy/teslcar.htm>

Well, that's enough for now...glad to hear you are doing experiments that seem to be generating something...I wouldn't have a problem with an antenna on my house that pulled in power for the house. After all, Moray did it with very long wire antennas stretched outside his house, Hubbard had a tuned device, Hendershott had a tuned device, Perrigo used a criss cross of wire IN HIS HOUSE to generate power and of course, Marinus' favorite - Chauncey Britten with his bent tube...lots of precedent and where there is smoke, there is usually more smoke...&ltg&gt;..

-- Jerry Wayne Decker / jdecker@keelynet.com  
<http://keelynet.com> / "From an Art to a Science" Voice :  
(214) 324-8741 / FAX : (214) 324-3501 KeelyNet - PO BOX 870716 -  
Mesquite - Republic of Texas - 75187

- **Previous message:** [mbgupta@julian.uwo.ca](mailto:mbgupta@julian.uwo.ca): "Re: Plans for a Brain Tuner?"
- **Next message:** [Kenneth Carrigan: "Re: High Voltage Accumulation \(was Re: Time Travel again\)"](#)
- **Next in thread:** [Kenneth Carrigan: "Re: High Voltage Accumulation \(was Re: Time Travel again\)"](#)
- **Maybe reply:** [Kenneth Carrigan: "Re: High Voltage Accumulation \(was Re: Time Travel again\)"](#)