```
#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@
 $%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#%$&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#
 %&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$
 &@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%
 @#$%&                                                                 @#$%&
 #$%&@              The New Tesla Electromagnetics and                 #$%&@
 $%&@#             The Secrets of Free Electrical Energy               $%&@#
 %&@#$                                                                 %&@#$
 &@#$%                 (Part 1)  by T. E. Bearden                       &@#$%
 @#$%&                                                                 @#$%&
 #$%&@   Retyped Without Permission, 7/13/86, by (_>Shadow Hawk 1<_)   #$%&@
 $%&@#                                                                 $%&@#
 %&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$
 &@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%
 @#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&
 #$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@#$%&@
```

Comments on the New Tesla Electromagnetics

A:Discrepancies in Present EM Theory

There are at least twenty-two major discrepancies presently existing in conventional electromagnetics theory. This paper presends a summary of those flaws, and is a further commentary on my discussion of scalar longitudinal waves in a previous paper, "Solutions to Tesla's Secrets and the Soviet Tesla Weapons," Tesla Book Company, 1981 and 1982.

I particularly wish to express my deep appreciation to two of my friends and colleagues who at this time, I believe, wish to remain anonymous. One of the two is an experimental genius who can produce items that do not work by orthodox theory. The second is a master of materials science and electromagnetics theory. I thank them both for their exceptional contributions and stimuli regarding potential shortcoming in present electromagnetics theory, and their forbearance with the many discussions we have held on this and related subjects.

It goes without saying that any etrors in this paper are strictly my own, and not the fault of either of my distinguished colleagues.

(1) In present electromagnetics theory, charge and charged mass are falsely made identical. Actually, on a charged particle, the "charge" is the flux of virtual particles on the "bare particle" of observable mass. The charged part-

icle is thus a "system" of true massless charge coupled to a bare chargeless mass. The observable "mass" is static, three-dimensional and totally spatial. "Charge" is dynamic, four-dimensional or more, virtual and spatiotemporal. Further, the charge and observable mass can be de-coupled, contrary to present theory. Decoupled charge -- that is, the absence of mass -- is simply what we presently refer to as "Vacuum." Vacuum, spacetime, and massless charge are all identical. Rigorously, we should utilize any of these three as an "ether," as suggested for vacuum by Einstein himself (see Max Born, Einstiein's Theory of Relativity, Revised Edition, Dover Publications, New York, 1965, p. 224). And all three of them are identically anenergy -- not energy, but more fundamental components of energy.

(2) Electrostatic potential is regarded as a purely 3-dimensional spatial stress. Instead, it is the intensity of a many-dimensional (at least four-dimensional) virtual flux and a stress on all four dimensions of spacetime. This is easily seen, once one recognizes that spacetime is identically masless charged. (It is not "filled" with charge; rather, it is charge!) Just as, in a gas under pressure, the accumulation of additional gas further stresses the gas, the accumulation of charge (spacetime) stresses charge (spacetime). Further, if freed from its attachment to mass, charge can flow exclusively in time, exclusively in space, or in any combination of the two. Tesla waves -- which are scalar waves in pure massless charge flux itself -- thus can exhibit extraordinary characteristics that ordinary vector waves do not possess. And Tesla waves have extra dimensional degrees of freedom in which to move, as compared to vector waves. Indeed, one way to visualize a tesla scalar wave is to regard it as a pure oscillation of time itself.

(3) Voltage and potential are often confused in the electrostatic case, or at least thought of as "composed of the same thing." For that reason, voltage is regarded as "potential drop." This also is not true. Rigorously, the potential is the intensity of the virtual particle flux at a single point -- whether or not there is any mass at the point -- and both the pressure and the point itself are spatiotemporal (4-dimensional) and not spatial (3-dimensional) as presently assumed. Voltage represents the spatial intersection of the difference in potential between two seperated spatial points, and always implies at least a miniscule flow of mass current (that is what makes it spatial!). "Voltage" is spatial and depends upon the presence of observable mass flow, while scalar electrostatic potential is spatiotemporal and depends upon the absence of observable mass flow. The two are not even of the same dimensionality.

(4) The charge of vacuum spacetime is assumed to be zero, when in fact it is a very high value. Vacuum has no mass, but it has great massless charge and virtual particle charge flux. For proof that a charged vacuum is the seat of something in motion, see G. M. Graham and D. G. Lahoz, "Observation of static electromagnetic angular momentum in vacuo," Nature, Vol. 285, 15 May 1980, pp. 154-155. In fact, vacuum IS charge, identically, and it is also spacetime, and at least four-dimensional.

(5) Contrary to its present usage, zero is dimensional and relative in its context. A three-dimensional spatial hole, for example, exists in time. If we model time as a dimension, then the spatial hole has one dimension in 4-space. So a spatial absence is a spatiotemporal presence. In the vacuum 4-space, a spatial nothing is still a something. The "virtual" concept and mathematical concept of a derivative are simply two present ways of unconsciously addressing this fundamental problem of the dimensional relativity of zero.

(6) The concepts of "space" and "time" imply that spacetime (vacuum) has been seperated into two parts. We can only think of a space as "continuing to exist in time." To separate vacuum spacetime into two pieces, an operation is continually required. The operator that accomplishes this splitting operation is the photon interaction, the interaction of vector electromagnetic energy or waves with mass. I have already strongly pointed out this effect and presented a "raindrop model" or first-order physical change itself in my book, The Excalibur Briefing, Strawberry Hill Press, San Francisco, 1980, pp. 128-130.

(7) "Vector magnetic potential" is assumed to be always an aspect of (and connected to) the magnetic field. In fact it is a separate, fundamental field of nature and it can be entirely disconnected from the magnetic field. See Richard P. Feynman et al, The Feynman Lectures on Physics, Addison-Wesley Publishing Co., New York, 1964, Vol. II, pp. 15-8 to 15-14. Curiously, this fact has been proven for years, yet it has been almost completely ignored in the West. The "(triangle)x" operator, when applied to the A-field, makes B-field. If the (triangle)x operator is not applied, the "freed" A-field possesses much-expanded characteristics from those presently allowed in the "bound" theory. Specifically, it becomes a scalar or "shadow vector" field; it is not a normal vector field.

(8) The speed of light in vacuum is assumed to be a fundamental constant of nature. Instead it is a function of the intensity of the massless charge flux (that is, of the magnitude of the electrostatic potential) of the vacuum in which it moves. (Indeed, since vacuum and masless charge are one and the same, one may say that the speed of light is a function of the intensity of the spatiotemporal vacuum!). The higher the flux intensity (charge) of the vacuum, the faster the speed of light in it. This is an observed fact and already shown by hardcore measurements. For example, distinct differences actually exist in the speed of light in vacuo, when measured on the surface of the earth as compared to measurements in space away from planetary masses. In a vacuum on the surface of the earth, light moves significantly faster. For a discussion and the statistics, see B. N. Belyaev, "On Random Fluctuations of the Velocity of Light in Vacuum," Soviet Physics Journal, No. 11, Nov. 1980, pp. 37-42 (original in Russian, translation by Plenum Publishing Corporation.) The Russians have used this knowledge for over two decades in their strategic psychotronics (energetics) program; yet hardly a single U.S. scientist is aware of the measured variation of c in vacuo. In fact, most Western scientists simply cannot believe it when it is pointed out to them!

(9) Energy is considered fundamental and equivalent to work. In fact, energy arises from vector processes, and it can be disassembled into more fundamental (anenergy) scalar components, since the vectors can. These scalar components individually can be moved to a distant location without expending work, since one is not moving force vectors. There the scalar components can be joined and reassembled into vectors to provide "free energy" appearing at a distance, with no loss in between the initial and distant points. For proof that a vector field can be replaced by (and considered to be composed of) two scalar fields, see E. T. Whittaker, Proceedings of the London Mathematical Society, Volume 1, 1903, p. 367. By extension, any vector wave can be replaced by two coupled scalar waves.

(10) The classical Poynting vector predicts no longitudinal wave of energy from a time-varying, electrically charged source. In fact, an exact solution of the problem does allow this longitudinal wave. See T. D. Keech and J. F. Corum, "A New Derivation for the Field of a Time-Varying Charge in Einsteins Theory," International Journal of Theoretical Physics, Vol. 20, No. 1, 1981, pp. 63-68 for the proof.

(11) The present concepts of vector and scalar are severely limited, and do not permit the explicit consideration of the internal, finer-grained structures of a vector or a scalar. That is, a fundamental problem exists with the basic assumptions in the vector mathematics itself. The "space" of a vector field, for example, does not have inter-nested sublevels (subspaces) containing finer "shadow vectors" or "virtual vectors." Yet particle physics has already discovered that electrical reality is built that way. Thus one should actually use a "hypernumber" theory after the manner of Charles Muses. A scalar is filled with (and composed of) nested levels of other "spaces" containing vectors, where these sum to "zero" in the ordinary observable frame without an observable vector resultant. In Muses' mathematics, for example, zero has real roots. Real physical devices can be -- and have been -- constructed in accordance with Muses' theory. For an introduction to Muses' profound hypernumberss approach, see Charles Muses' forward to Jerome Rothstein, Communication, Ogranization and Science, The Falcon's Wing Press, Indian Hills, Colorado, 1958. See also Charles Muses', "Applied Hypernumbers: Computational Convepts," Applied Mathematics and Computation, Vol. 3, 1976. See also Charles Muses' "Hypernumbers II", Aoplied Mathematics and Computation, Janurary 1978.

(12) With the expanded Tesla electromagnetics, a new conservation of energy law is required. Let us recapitulate for a moment. The oldest law called for the conservation of mass. The present law calls for the conservation of "mass and energy", but not each separately. If mass is regarded as simply another aspect of energy, then the present law calls for the conservation of energy. However, this assumes that energy is a basic, fundamental concept. Since the energy concept is tied to work and the movement of vector forces, it implicitly assumes "vector movement2 to be a "most fundamental" and irreducible concept. But as we pointed out, Whittaker showed that vectors can always be further

broken down into more fundamental coupled scalar components. Further, Tesla discovered that these "coupled components" of "energy" can be individually separated, transmitted, processed, rejoined, etc. This directly implies that energy per se need not be conserved. The new law therefore calls for the conservation of anenergy, the components of energy. These components may be coupled into energy, and the energy may be further compacted into mass. It is the sum total of the (anenergy) components -- coupled and uncoupled -- that is conserved, not the matter or the energy per se. Further, this conservation of anenergy is not spatial; rather it is spatiotemporal in a spacetime of at least four or more dimensions.

(13) Relativity is presently regarded as a theory or statement about fundamental physical reality. In fact, it is only a statement about FIRST ORDER reality -- the reality that emerges from the vector interaction of electromagnetic energy with matter. When we break down the vectors into scalars (shadow vectors or hypervectors), we immediatly enter a vastly different, far more fundamental reality. In this reality superluminal velocity, multiple universes, travel back and forth in time, higher dimensions, variation of all "fundamental constants" of nature, materialization and dematerialization, and violation of the "conservation of energy" are all involved. Even our present Aristotlean logic -- fitted to the photon interaction by vector light as the fundamental observation mechanism -- is incapable of describing or modeling this more fundamental reality. Using scalar waves and scalar interactions as much subtler, far less limited observation/detection mechanisms, we must have a new "superrelativity" to describe the expanded electromagnetic reality uncovered by Nikola Tesla.

(14) "Charge" is assumed to be quantized, in addition to always occuring with -- and locked to -- mass. Indeed, charge is not necessarily quantized, just as it is not necessarily locked to mass. Ehrenhaft discovered and reported fractional charges for years, in the 30's and 40's, and was ignored. See P.A.M. Dirac, "Development of the Physicist's Conception of Nature", Sumposium on the Development of the Physicist's Conception of Nature, ed. Jagdish Merha, D. Reidel, Boston, 1973, pp. 12-14 for a presentation of some of Ehrenhaft's results. Within the last few years Stanford University researchers have also positively demonstrated the existence of "fractional charge." For a layman's description of their work, see "A Spector Haunting Physics," Science News, Vol. 119, January 31, 1981, pp. 68-69. Indeed, Dirac in his referenced article points out that Millikan himself -- in his original oildrop experiments -- reported one measurement of fractional charge, but discounted it as probably due to error.

(15) Presently, things are always regarded as traveling through normal space. Thus we use or model only the most elementary type of motion -- that performed by vector electromagnetic energy. We do not allow for things to "travel inside the vector flow itself." Yet, actually, there is a second, more subtle flow inside the first, and a third, even more subtle flow inside the second, and so on. We may operate inside, onto, into, and out of energy itself -- and any

anenergy component of energy. There are hypervectors and hyperscalars unlimited , within the ordinary vectors and scalars we already know. Further, these "interlan flows" can be engineered and utilized, allowing physical reality itself to be directly engineered, almost without limits.

(16) We always assume everything exists in time. Actually, nothing presently measured exists in time, because the physicical detection/measurement process of our present instruments destroys time, ripping it off and tossing it away -- and thereby "collapsing the wave function." Present scientific methodology thus is seriously flawed. It does not yield fundamental (spacetime) truth, but only a partial (spatial) truth. This in turn leads to great scientific oversights. For example. mass does not exist in time, but mass x time (masstime) does. A fundamental constant does not exist in time, but "constant x time" does. Energy does not exist in time, but energy x time (action) does. Even space itself does not exist in time -- spacetime does. We are almost always one dimension short in every observable we model. Yet we persist in thinking spatially, and we have developed instruments that detect and measure spatially only. Such instruments can never measure and detect the phenomenology of the nested substrata of time. By using scalar technology, however, less limited instruments can indeed be constructed -- and they have been. With such new instruments, the phenomenology of the new electromagnetics can be explored and an engineering technology developed.

(17) We do not recognize the connection between nested levels of virtual state (particle physics) and orthogonally rotated frames (hyperspaces). Actually, the two are identical, as I showed in the appendix to my book, The Excalibur Briefing, Strawberry Hills Press, San Francisco, 1980, pp. 233-235. A virtual particle in the laborotory frame is an observable particle in a hyperspatial frame rotated more than one orthogonal turn away. This of course implies that the hyperspatial velocity of all virtual particles is greater than the speed of light. The particle physicist is already deeply involved in hyperspaces and hyperspatial charge fluxes without realizing it. In other words , he is using tachyons (particles that move faster than light) without realizing it.

(18) Presently quantum mechanics rigorously states that time is not an observable, and therefore it cannot be measured or detected. According to this assumption, one must always infer time from spatial measurements, because all detections and measurements are spatial. With this assumption, our scientists prejudice themselves against looking for finer, subquantal measurement methodologies and instrumentation. Actually this present limitation is the result of the type of electromagnetics we presently know, where all instruments (the "measurers") have been interacted with by vector electromagnetic energy (light). Every mass that has temperature (and all masses do!) is continually absorbing and emitting photons, and in the process they are continually connecting to time and disconnecting from time. If time is continually being carried away from the detector itself by its emitted photons, then the detector cannot hold and "detect" that which it has just lost. With Tesla

electromagnetics, however, the fundamental limitation of our present instruments need not apply. With finer instruments, we can show there are an infinite number of levels to "time", and it is only the "quantum level time" which is continually being lost by vector light (photon) interaction. By using subquantal scalar waves, instruments can move to deeper levels of time -- in which case the upper levels of time ARE measureable and detectable, in contradistinction to present assumptions.

(19) In the present physics, time is modeled as, and considered to be, a continuous dimension such as length. This is only a gross approximation. Indeed , time is not like a continuous "dimension," but more like a series of "stiches," each of which is individually made and then ripped out before the next stitch appears. "Vector light" photons interact one at a time, and it is this interaction with mass that creates quantum change itself. The absorbtion of a photon -- which is energy x time -- by a spatial mass converts it to masstime: the time was added by the photon. The emission of a photon tears away the time, leaving behind again a spatial mass. It is not accidental, then, that time flows at the speed of light, for it is light which contains and carries time. It is also not accidental that the photon IS the individual quantum. Since all our instruments presently are continually absorbing and emitting photons, they are all "quantized," and they accordingly "quantize" their detections. This is true because all detection is totally internal to the detector, and the instruments only detect only their own internal changes. Since these detections are on a totally granular quantized background, the detections themselves are quantized. The Minkowski model is fundamentally erroneous in its modeling of time, and for that reason relativity and quantum mechanics continue to resist all attempts to successfully combine them, quantum field theory notwithstanding.

(20) Presently, gravitational field and electrical field are considered mutually exclusive. Actually this is also untrue. In 1974, for example, Santilli proved that electrical field and gravitational fiend indeed are not mutually exclusive. In that case one is left with two possibilities: (a) they are totally the same thing, or (b) they are partially the same thing. For the proof, see R. M. Santilli, "Partons and Gravitation: Some Puzzling Questions," Annals of Physics, Vol. 83, No. 1, March 1974. With the new Tesla electromagnetics, pure scalar waves in time itself can be produced electrically , and electrostatics (when the charge has been seperated from the mass) becomes a "magic" tool capable of directly affecting anything that exists in time -- including the gravitational field. Antigravity and the intertial drive are immediate and direct consequences of the new electromagnetics.

(21) Presently, mind is considered metaphysical, not a part of physics, and not affected by physical means. Literally, the prevailing belief of Western scientists is that man is a mechanical robot -- even though relativity depends entirely upon the idea of the idea of the "observer." Western science today thus has essentially become dogmatic, and in this respect borders on a religion. Since this "religion," so to speak, is now fairly well entrenched in its power

in the state, Western science is turning itself into an oligarchy. But mind occupies time, and when we measure and affect time, we can directly measure and affect mind itself. In the new electromagnetics, then, Man regains his dignity and his humanity by restoring the reality of mind and thought to science. In my book, The Excalibur Briefing, I have already pointed out the reality of mind and a simplified way in which it can be modeled to the first order. With scalar wave instruments, the reality of mind and thought can be measured in the laboratory, and parapsychology becomes a working, engineering, scientific discipline.

(22) Multiple valued basic dimensional functions are either not permitted or severely discouraged in the present theory. For one thing, integrals of multiple valued derivative functions have the annoying habit of "blowing up" and yielding erroneous answers, or none at all. And we certainly do not allow multiple types of time! This leads to the absurdity of the present interpretation of relativity, which permits only a single observer (and a single observation) at a time. So if one believes as "absurd" a thing as the fact that more than one person can observe an apple at the same time, the present physics fails. However, the acceptance of such a simple proposition as multiple simultaneous observation leads to a physics so bizarre and incredible that most Western physicists have been unable to tolerate it, much less examine its consequences. In the physics that emerges from multiple simultaneous observation, all possibilities are real and physical. There are an infinite number of worlds, orthogonal to one another, and each world is continually splitting into additional such "worlds" at a stupendous rate. Nonetheless, this physics was worked out by Everett for his doctoral thesis in 1956, and the thesis was published in 1957. (See Hugh Everett, III, The Many-Worlds Interpretation of Quantum Mechanics: A Fundamental Exposition, with papers by J. A. Wheeler, B. S. DeWitt, L. N. Cooper and D. Van Vechten, and N. Graham; eds. Bryce S. Dewitt and Neill Graham, Princeton Series in Physics, Princeton University Press, 1973.) Even though it is bizarre, Everett's physics is entirely consistent with the present experimental basis of physics. The present electromagnetic theory is constructed for only a single "rodl" or universe -- or "level." The expanded theory, on the other hand, contains multiply nested levels of virtual state charge -- and these levels are identically the same as orthogonal universes, or "hyperframes." Multiple kinds -- and values -- of time also exist. The new concept differs from Everett's, however, in that the orthogonal universes intercommunicate in the virtual state. That is, an observable in one universe is always a virtual quantity in each of the other universes. Thus one can have multi-level "continuities" and "discontinuities" simultaneously, without logical conflict. It is precisely these levels of charge -- these levels of scalar vacuum -- that lace together the discontinuous quanta generated by the interaction of vector light with mass.

However, to understand the new electromagnetic reality, one requires a new, expanded logic which contains the old Aristotlean logic as a subset. I have already pointed out the new logic in my paper, "A Conditional Criterion for Identity, Leading to a Fourth Law of Logic," 1979, available from the National

Technical Information Center, AD-A071032.

Even as logic is extended, quantum mechanics, quantum electrodynamics, and relativity are drastically changed by the Tesla electromagnetics, as I pointed out in my paper, "Solutions to Tesla's Secrets and the Soviet Tesla Weapons," Tesla Book Company, 1580 Magnolia, Millbrae, CA, 94030, 1980.

The present electromagnetics is just a special case of a much more fundamental electromagnetics discovered by Nikola Tesla, just as Newtonian physics is a special case of the relativistic physics. But in the new electromagnetics case, the differences between the old and the new are far more drastic and profound.

Additional References

1. Boren, Dr. Lawence Milton, "Discovery of the Fundamental Magnetic Charge (Arising from the new Conservation of Magnetic Energy)," 1981/1982 (private communication). Dr. Boren has a cogent argument that the positron is the fundamental unit of magnetic charge. His theory thus assigns fundamentally different natures to positive charge and
negative charge. In support of Dr. Boren, one should point out that the "positive" end of circuits can simply be "less negative" than the "negative" end. In other words, the circuit works simply from higher accumulation of negative charges (the "negative" end) to a lesser accumulation of negative charges (the "positive" end). Nowhere needthere be positive charges (protons, positrons, etc.) to make the circuit work. Dr. Borens theory, though dramatic at first encounter, nonetheless bears close and meticulous examination -- particularly since he has been able to gather experimental data which support his theory and disagree with present theory.

2. Eagle, Albert, "An Alternative Explanation of Relativity Phenomena," philosophical Magazine and Journal of Science, No. 191, December 1939, pp. 694 -701.

3. Ehrenaft, Felix and Wasser, Emanuel, "Determination of the Size and Weight of Single Submicroscopic Spheres of the Order of Magnitude r = 4 x 10(-5) cm. to 5 x 10(-6) cm., as well as the Production of Real Images of Submicroscopic Particles by means of Ultraviolet Light," Phil. Mag. and Jour. of Sci., Vol. II (Seventh Series), No. 7, July 1926, pp. 30-51.

4. Ehrenhaft, Felix and Wasser, Emanuel, "New Evidence of the Existance of Charges smaller than the Electron - (a) The Micromagnet; (b) The Law of Resistance; (c) The computation of errors of the Method," Phil. Mag. and Jour. of Sci., Vol. V (Seventh Series), No. 28, February 1928, pp. 225-241.

5. See also Ehrenhaft's last paper dealing with the electronic charge, in Philosophy of Science, Vol. 8, 1941, p. 403.

6. McGregor, Donald Rait, The Inertia of the Vacuum: A New Foundation for Theoretical Physics, Exposition Press, Smithtown, NY, First Edition, 1981, pp. 15-20.

7. Ignat'ev, Yu. G. and Balakin, A. B., "Nonliner Gravitational Waves in Plasma," Soviet Physics Journal, Vol. 24, No. 7, July 1981, (U.S. Translation, Consultants Bureau, NY, JAnurary 1982), pp. 593-597.

8. Yater, Joseph C., "Relation of the second law of thermodynamics to the power conversion of energy fluctuations," Phys. Review A, Vol. 20, no. 4, October 1979, pp. 1614-1618.

9. DeSantis, Romano M. et al, "On the Analysis of Feedback Systems With a Multipower Open Loop Chain," October 1973, available through the Defense Technical Information Center (AD 773188).

10. Graneau, Peter, "Electromagnetic Jet-Propulsion in the Direction of current flow," Nature, Vol. 295, 28 Janurary 1982, pp. 311-312

11. "Gravity and acceleration aren't always equivalent," New Scientist, 17 September 1981, p. 723.

12. Gonyaev, V. V., "Experimental Determination of the Free-Fall Acceleration of a Relativistic Charged Particle. II. A Cylindrical Solenoid in a Time-Independent Field of Inertial Forces," Izvestiya VUZ, Fizika, No. 7, 1979, pp. 28-32. English Translation: Soviet Physics Journal, No. 7, 1979, pp. 829-833. If one understands the new, expanded electromagnetics, this Soviet paper indicates a means of generating antigravity and pure inertial fields.

13. R. Schaffranke, "The Development of Post-Relativistic Concepts in Physics and Advanced Technology Abroad," Energy Unlimited, No. 12, Winter 1981, pp. 15-20.

14. F. K. Preikschat, A Critical look at the theory of Relativity, Library of Congress Catalogue No. 77-670044. Extensive compilation of measurements of the speed of light. Clearly shows the speed of light is not constant but changes, sometimes even daily.

B: The Secret of Electrical Free Energy

Present electromagnetic theory is only a special case of the much more fundamental electromagnetic theory discovered by Nikola Tesla at the turn of the century.

Pure vacuum is pure charge flux, without mass. The vacuum has a very high electrical potential -- something on the order of 200 million volts, with respect to a hypothetical zero charge.

Thus in an ordinary electrical circuit, each point of the "ground" -- which has the same potential as the vacuum -- actually has a non-zero absolute potential. This circuit ground has a value of zero only with respect to something else which has the same absolute electrical potential.

Voltage, which is always associated with a flow of electrical "mass" current (even if only a miniscule flow), is, by definition, a difference dropped in potential when a charge mass moves between two spatially seperated points. What we have termed "electrical current" only flows where there is a suitable conducting medium between things which have a difference in absolute potential. Furthermore, between any two points in any material, there is considered to be a finite resistance -- if we apply a voltage ahd have a mass current flowing between the two points! Rigorously, to have one of the three is to have them all. To lose one is to lose all three. Immediately we see a major error in present theory: One can have a "difference in scalar potential" between two points without having a "voltage drop" between them. Specifically, if no mass current flows between them, no resistance exists between them, and no voltage drop exists between them.

In the same fashion, one can have a "scalar wave" through the vacuum without a voltage wave. In that case, the wave has no E-field and no H-field. The only reason one has an E field around a statically charged object is because the charged electrons accumulated on the object are actually in violent motion. It is this motion of the charged masses that produces E-field -- as well as H-field whenever that entire E-field ensemble moves through laborotory space.

Now let us reason together the "approximate" manner utilized in present electromagnetic theory. For example, let us examine a bird sitting on a high tension line.

The bird sits on the high tension line without a flow of mass electricity, because there is no significant difference in potential drop between the bird and the line. Specifically, between the birds two feet -- each in contact with a different portion of the line -- there exists no potential difference. This is true even though, with respect to the vacuum, each foot is at a potential that would be "100,000 volts higher," were a mass current flowing. And it is true even though the absolute potential of each foot may be some 200.1 million "volts," were a mass current flowing.

Now an interesting thing happens to the bird when he flies through the air to light upon the high tension wire. As he flies towards the wire, he is flying through the massless electrostatic potential field of the wire, for that field extends an infinite distance away from the wire. The electrostatic potential field -- pure 0-field -- is actually the spatiotemporal intensity of the massless charge at a point. In other words, as the bird flies to the wire, he flies into an increasing "massless charge" potential, building up to 100,000 "volts" higher than the earth. However, very little (if any) "mass flow" potential difference

is experienced upon his body in approaching the wire, and so essientially no "charged mass currents" are induced in his body. Thus the little flier safely navigates into the teeth of a very high electrostatic potential, lights upon the wire, and is not "fried" in the process. When he lights on the wire, his body has reached the electrostatic potential that each foot's contact point has. Again, there is no mass current flow. But his body is immersed in an increased flux of massless charge -- which is what the electrostatic potential represents. And each "virtual particle" flow in that charge represents a "massless (scalar)" electrical current.

The point is, one can have any amount of massless charge flow -- "scalar" current -- without any mechanical work being done in the system. All electrical work in a circuit is done against the physical mass of the charged masses that flow. Rigorously, force is defined as the time rate of charge of momentum. Even in the relativistic case where F = ma + v(dm/dt), change of momentum requires mass movement. No mechanical work, and hence no energy, is expended by massless charge flow.

That is why the vacuum massless charge -- which is composed of a very high flux of massless "particles" -- normally does no work on our systems, and expends none of its very high "potential energy." It is exactly the same as the bird which flew into an increasing scalar field as it approached the high tension wire -- no work was done upon the bird by the increasing scalar flux currents encountered by its body.

By existing "in the vacuum," so to speak, we (the whole earth) are as birds sitting on a high tension line! Until we create a significant differece in potential, via our present electromagnetic circuits, no current can flow -- anywhere. Even if we produce potential differences, we must have a conductor and charged masses to flow, if we with to produce mechanical work. Presently our electromagnetic theory allows us to create a difference in potential within different parts of a circuit, but only by moving and shifting charged mass. We therefore have to do work on this electrical mass in moving it around, and we only get back the work we have put into the circuit. In other words, presently all wee do is "pump" electrical mass.

Now notice what would happen to the bird on the line if we substantially "pulsed" the potential on the line. Suppose we "pulsed" it such that the bird's physical system -- considered as a circuit containing a capicitance, a resistance, an inductance, and many free electrons -- became resonant to the pulsing frequency. In that case the "bird system" would resonate, and a great deal of electrical mass would surge back and forth in the body of the bird. In the birds body, voltage would exist, charged mass current would flow, work would be done, and the bird would be electrocuted.

Also, note that, without mass movement, electromagnetic vector fields are not produced (and a portion of the difficulty lies with the actual vector mechanics itself). Scalar (nonvector) waves continually penetrate the "space" where

there is no mass movement. This means there can exist a "delta-0" without a voltage or an E-field. The present theory does not allow this, because it always uses "q" (charge) to be charged mass. Briefly, without belaboring the point, let us just say that is the mechanical spin of the individual charged particle -- such as the electron -- which "entangles" or "knits together" or "couples" independent scalar waves into vector waves. A vector wave is simply two coupled scalar waves. The entire force field concept -- such as the E-field and the B-field -- is operationally Defined in terms of the force exhibited on a test particle, or test mass. Rigorusly, an E-field does not exist as a force field in a vacuum, but as two coupled scalar 0-fields "tumbling about each other." When these two coupled, tumbling fields meet a spinning electron, e.g., the force emerges on the electron mass. In short, movement of a rotating mass changes delta-0 to "voltage", creating the V/I/R triad.

By "accululating charged mass particles" -- such as electrons -- one certainly can increase the value of 0, which represents the charge intensity or "scalar electrostatic potential." However, that is not the only way to increase it. Resonance and rotation of charged mass can also be appropriately employed to vary the vacuum charge potential 0, under proper circumstances.

By the correct application of rotary principles and Tesla electromagnetic theory, it is possible to oscillate -- and change the vacuum potential itself, in one part of an electrical system. Thus by correct procedures a part of a system can be electrically altered so that the absolute value of its "ground" (vacuum) potential differs significantly from the normal vacuum-ground potential of the remainder of the circuit. In other words, we shift the vacuum-ground potential of the part of the circuit by oscillating the massless vacuum charge itself, and in doing so we gain a substantial, oscillatory electrical difference between that part of the circuit and the normal ground potential of the rest of the system. Then we connect the two parts of the system by means of a conductor containing a load in the middle.

In every conductor, a large number of "free electrons" are available. If we oscillate the actual vacuum charge itself, unlimited additional free electrons also become availabe from the Dirac Sea, since partial "unstripping" of the negative energy wells (each containing an electron) occurs. This "unstripping" of the potential of the well is due to vacuum potential oscillation, which oscillates time as well as space. To a negative energy well (positive time), the oscillation of its "time stream" increases the well's negative potential during one half-cycle and decreases its potential for the other half-cycle. Thus during half the oscillatory cycle, negative energy electrons may be lifted from the Dirac Sea if the oscillation is sufficiently intense.

Therefore we obtain an attendant voltage and flow of mass current through the load. This voltage and current, by the way, are essentially limitless, and are free for the asking, assuming the proper "vacuum oscillation" is initiated

and maintained so that electrons are continually being lifted from the Dirac sea by the time oscillations, and fed into the circuit.

Standard electromagnetic theory assumes that the vacuum potential is zero. It does not recognize the existence of massless charge, separated from charged mass. Therefore, orthodox scientists have never looked for a way to engineer the vacuum, because they have not realized it is composed of pure massless charge. Electrical physics has almost hopelessly confused charge and charged mass, thereby eliminating scalar longitudinal electrostatic waves. Expressed in the bird/high tension line analogy, the present electromagnetic theory restricts us to walking along the high tension line, laboriously carrying small batteries and power units, unaware of the limitless, surging power beneath our very feet.

Electromagnetically, we have been rather like one of the five blind men who touched an elephant. We have only touched one small portion of the electromagnetism "elephant," yet we thought we had grasped the entire beast.
