



New Energy News

Monthly Newsletter of the Institute for New Energy

VOLUME 4, NUMBER 12

ISSN 1075-0045

APRIL 1997

Web Page: www.padrak.com/ine/

E-mail: ine@padrak.com

CETI FILES OBJECTION TO THE ISSUANCE OF PONS-FLEISCHMANN PATENTS IN EUROPE.

Hal Fox, Editor of *NEN* has written a blistering editorial condemning this strange action by Clean Energy Technologies, Inc. (owners of the Patterson Power Cell™). Fox sent the editorial to James Reding, President of CETI for comments prior to publishing. No written response had been received by press time. The editorial will be printed in the next issue of *NEN* with or without CETI's comments.

THE MOTORS THAT KEEP US ALIVE

Harold Aspden

On the day (March 24th 1997) I was concluding the final pages of my latest Energy Science Report No. 10, "Cyclotron Resonance in Human Body Cells," the London newspaper, *The Times*, published an item on page 15 headed "Wheel Power: The Circle of Life."

It was reported, by reference to "the current *Nature* journal" [summary follows], that each of our body cells houses a tiny motor - "the smallest motor in creation - an enzyme that rotates to do its work and is only five millionths of a millimeter across." "The enzyme consists of seven components - a central axle, and six sub-units wrapped around it to form a collar." "The inner component is free to spin inside the collar." "What is stunning is that it is the very first time rotation has been demonstrated in an enzyme." As the motor turns "the molecules of ATP are produced like sausages from a machine." "Biochemists know how quickly this reaction goes, so it is possible to work out how fast the motors should spin - 20 revolutions per second."

Although this is hardly New Energy Technology, it touches upon something reported earlier in the pages of *New Energy News* and seems worthy of further comment. Energy from the food we eat is converted by the enzyme, ATP synthase, into chemical energy in the form of ATP. Well, we must now wonder how chemical energy manages to set something rotating. In contributing to our internal body heat it would keep any "loose" ions in the ATP molecules active in their random thermal motion. It then needs no more than the ever-present geomagnetic field to perform, as it should according to the Larmor formula, as used in cyclotron theory. The ions are deflected into a reacting orbit and the beauty of all this is that the rotation around those orbits occurs at an angular speed which is the same whatever the speed of those ions. To get 20 revolutions per second in the Earth's field, which approximates 0.5 gauss, those ions need a mass of 39 amu, which identifies potassium.

Subscribe to the Journal of New Energy

This journal is dedicated to advancing the cause of new-energy research and development by the rapid printing of peer-reviewed articles by professionals in the new-energy field.

The *JNE* is abstracted by four abstracting agencies including the world-wide delivery of monthly abstracts on CD-ROM by *Chemical Abstracts*.

Some of the latest and most important articles published lately by *JNE* are Shoulders' high-density charge clusters, plasma-injected transmutation, nuclear transmutations in cold fusion cells, the **Rowe Effect**, and the Neal-Gleeson Process for the amelioration of radioactivity.

As the only peer-reviewed journal focusing solely on new energy research and development, *JNE* is a must for those who are active in the search for cutting-edge energy discoveries. The journal is published and airmailed quarterly to subscribers for only \$150 per year. Individual issues \$45.

Published by Fusion Information Center, Inc. Edited by Hal Fox with the assistance of an editorial board of peer-reviewers.

The motor speed observed by the Japanese researchers who discovered this phenomenon was lower than this 20 rev/s owing to a drag effect imposed by the technique of measurement. We know, however, that the actual speed of a basic d.c. motor is lower under load than it is under no load conditions, so my guess is that these motors in our bodies are trying to run faster than 20 rev/s. 32 rev/s in a 0.5 gauss field would identify magnesium (mass 24 amu).

I then note that on pp. 17-18 of *New Energy News*, September 1995, Lindley refers to the "stacking" of molecules of ATP around an Mg ion as suggested in the 1970s by Solomon Goldfein who said of biological ATP, that it "met the criteria for a microscopic cyclotron."

ENZYME CYCLOTRON

H. Noji, R. Yasuda, M. Yoshida & K. Kinoshita Jr. (Tokyo Inst. Technology), "Direct Observation of the Rotation of F1-ATPase" (Letter to *Nature*), *Nature*, vol 386, 20 Mar. 1997, p 299 (1997)

This following summary of the paper is available on *Nature's* website < www.nature.com > :

Cells employ a variety of linear motors, such as myosin, kinesin and RNA polymerase, which move along and exert force on a filamentous structure. But only one rotary motor has been investigated in detail, the bacterial flagellum (a complex of about 100 protein molecules). The authors now show that a single molecule of F1-ATPase acts as a rotary motor, the smallest known, by direct observation of its motion. A central rotor of radius ~1nm, formed by its gamma-subunit, turns in a stator barrel of radius ~5nm formed by three alpha- and three beta-subunits. F1-ATPase, together with the membrane-embedded proton-conducting unit F₀, forms the H⁺-ATP synthase that reversibly couples transmembrane proton flow to ATP synthesis/hydrolysis in respiring and photosynthetic cells. It has been suggested that the gamma-subunit of F1-ATPase rotates within the alphabeta-hexamer, a conjecture supported by structural, biochemical, and spectroscopic studies. They attached a fluorescent actin filament to the gamma-subunit as a marker, which enabled us to observe this motion directly. In the presence of ATP, the filament rotated for more than 100 revolutions in an anticlockwise direction when viewed from the 'membrane' side. The rotary torque produced reached more than 40pNm¹ under high load.

Editorial

SO YOU WANT TO BE INVOLVED IN NEW ENERGY?

By Hal Fox

Only a few times in a lifetime do we get an opportunity to become involved in fundamentally new technologies. Perhaps only once in a lifetime, if ever, do we get the opportunity to be involved in a new technology which is destined to penetrate a five-trillion-dollar-per-year market. That is why we are often asked, "How do I invest?," or "How can I get involved in new energy?"

There is an old story about the man who came to the Italian master teacher and said, "I want to learn. Tell me how I can learn." The master took this budding student to the beach, walked with him out into the water and then proceeded to hold the student's head under water. When the master, finally, let the student up for air, the master said, "What did you want most?" "I wanted to breathe!," gasped the student. "When you want knowledge as much as you wanted breath," said the master, "you will be ready to learn."

Too many persons want the easy road, the handout, or the sure investment that will make them rich **without the commensurate work that is often the key to success.**

Many there are who are thrilled with the thoughts that, at last, we may have the answer to clean, abundant, inexpensive, **but not free**, energy. A few of these write letters to the editor and tell them to keep up the good work. A few address some of the energy issues and write papers. Fewer still do some experiments, or try to do some experiments, often with inadequate preparation, and questionable results. A handful have actually set up corporations or partnerships to prepare to distribute or manufacture new energy devices. [See the list of such companies under the **Commercial Column** at the end of this newsletter.]

What would you do if you could go back in time and witness the Wright brothers flying their first plane? Where would you invest? What kind of a company would you establish? Where would you get the information that you need? How would you cash in on one of the greatest growth industries of the century? What would you do if you could visit with those few who built the first personal computer (the forerunner of the Apple computer) in the garage of one of their homes? If

you are serious about getting involved, what can you learn from history?

In a recent interview on talk radio, the author of Trends - 2000 stated (somewhat incorrectly) that free energy, of some sort, would be a technology that would make tremendous differences in our lives. He is right in that new-energy technologies will make tremendous differences. He is wrong to call it **free energy**. Nothing that has to be designed, manufactured, and marketed will be **free**. Perhaps the best we can hope for is energy that costs one-fourth to one-third of our current energy. The technology is here. Some of the fundamental studies have been made. Other surprising discoveries will be made.

Science is undergoing a **paradigm shift**. Some of the old beliefs, such as the belief that it is not possible to promote nuclear reactions with low energy, will be abandoned in the face of new experimental **and theoretical** findings. The paradigm shift (model change) will not occur without some resistance. Just as the automobile companies have been reluctant to produce and market electric automobiles, so too will many companies be loath to make the necessary changes to adapt to new energy technologies. Will there be a concerted effort to suppress this new technology? Probably, but it won't be successful.

Over 200 laboratories have replicated some aspects of the Pons-Fleischmann discovery of cold fusion. These laboratories exist in thirty countries ranging from Japan to Egypt. Except for a class of so-called scientists who were fearful of having their research dollars curtailed and have been active as lobbyists against cold fusion, there has been no attempts at suppression of this new technology. Almost to a person, all opponents to cold fusion have stated, in some way, that they would like it to be a true discovery. Unstated was the thought, "Just don't take away my (our) funds!"

What can you do to help promote new energy? First, **support those valiant few who are striving to provide the world with the latest information about new-energy devices, systems, and discoveries**. *New Energy News*, Gene Mallove's *Infinite Energy*, Mitchell Swartz's *Cold Fusion Times*, Wayne Green's *Cold Fusion* are the predominant newsletters or news magazines that are providing information. There is one peer-reviewed journal, *Journal of New Energy*, a quarterly publication. There are other publications that are energy related. See the list at the end of each issue of *New Energy News*.

Here are some other things that you can do to get prepared or to help promote new energy technologies:

Get information about new-energy discoveries near you and report such to some of the information centers, such as to the editors of these newsletters and journals. Remember that for every hundred

claims to a new-energy discovery, less than one will prove to be practical. Be wary of those who claim suppression, who must have one million dollars or more **up front** before they will reveal their secrets. These are seldom the attitudes of real inventors. Do not pay cash for unproved **secrets**. Ask if the inventor has prepared and submitted patent application(s). If not, counsel the inventor to protect his/her ideas.

If you have investment funds or can organize a group who can collectively put up \$100,000, then start a mutual fund to invest in new-energy devices. A mutual fund can only provide up to a maximum (if my information is correct) of 5% of the shares in any one company. Therefore, we will need several such mutual funds to help finance these new technologies.

Write letters to the editor, letters to your state science advisor, letters to senators and congressmen. Be courteous in the letters and specify sources, especially sources of peer-reviewed technical information.

Get a few friends together and make a donation of a subscription of some of the newsletters and journals to your local library, college, or high schools. It will be the younger generation who will grow up and help develop, market, and install these new technologies.

If you have money to invest, diversify your investment in a variety of new-energy endeavors. But first **be informed** so that you can make more informed decisions about where to invest. As new energy devices become a commercial reality, there will be ten or more scams for every honest product.

Most of the editors of the newsletters and journals are donating much of their time and effort to provide the world with important and accurate information on new-energy devices. **Support their work!** They need your help. If you believe that good things come to those who do good, you may find that your contribution will help you and will help others.

We welcome each and every one of you to the rank of supporters of the new-energy world.

Deng's philosophy about theory:
"It doesn't matter what color the cat is, so long as it catches mice"

Fusion Briefings

ENERGY MEASUREMENT POSITIVE

J. Dufour, J. Foos, J.P. Millot, X. Dufour (Shell Research/CNAM Lab. des Sci. Nucl., Paris), "Interaction of Palladium/Hydrogen and Palladium/Deuterium to Measure the Excess Energy per Atom for each Isotope," *Fusion Tech.*, vol 31, no 2, Mar 1997, pp 198-2097 refs, 9 figs, 2 tables.

AUTHORS' ABSTRACT

A search for the products of fusion reactions that could be triggered by sparking in hydrogen isotopes produced a negative result with no signatures above background being found. Very significant excess energy production in both hydrogen/palladium and deuterium/palladium systems is reported. The conditions of occurrence for this excess energy production are discussed, and the formation of a tightly bound state of the hydrogen (deuterium) atom is put forward to explain the results.

AUTHORS' CONCLUSION

From these results, we conclude that a very promising reaction occurs in metallic-hydride-forming metals when loaded with hydrogen isotopes and submitted to high transient electric currents. We think that explaining the phenomenon by a rearrangement of the bounding between the proton and the electron, due to the confinement of the metal lattice, is more plausible (although not known) than invoking highly improbable fusion reactions. We intend to put more effort into understanding this reaction.

ENERGY & Fe IN GOLD ELECTRODES

Tadayoshi Ohmori, Tadahiko Mizuno, Yoshinobu Nodasaka (Hokkaido Univ., Japan), Michio Enyo (Hakodate Nat. Coll. of Technol., Japan), Hideki Minagawa (Hokkaido Nat. Indust. Res. Inst., Japan), "Transmutation in the Electrolysis of Light Water – Excess Energy and Iron Production in a Gold Electrode," *Fusion Tech.*, vol 31, no 2, Mar. 1997, pp 210-218, 8 refs, 11 figs, 3 tables.

AUTHORS' ABSTRACT

The identification of some reaction products possibly produced during the generation of excess energy is attempted. Electrolysis is performed for 7 days with a constant current intensity of 1 A. The electrolytes used are Na₂SO₄, K₂SO₄, K₂CO₄, and KOH. After the

electrolysis, the elements in the electrode near the surface are analyzed by Auger electron spectroscopy and electron probe microanalysis. In every case, a notable amount of iron atoms in the range of 1.0×10^{16} to 1.8×10^{17} atom/cm² (true area) are detected together with the generation of a certain amount of excess energy evolution. The isotopic abundance of iron atoms, which are 6.5, 77.5, and 14.5% for ⁵⁴Fe, ⁵⁶Fe, and ⁵⁷Fe, respectively, are obviously different from the natural isotopic abundance, and are measured at the top surface of a gold electrode by secondary ion mass spectrometry. The content of ⁵⁷Fe tends to increase up to 25% in the more inner layers of the electrode.

CALIBRATION FOR FUSION

S. Pons, M. Fleischmann (Ctr. Sci., IMRA Europe SA, Valbonne, France), "Calibration of the Pd-D₂O System: Effects of Procedure and Positive Feedback," *J. Chim. Phys. Phys.-Chim. Biol.*, vol 93, no 4 (1996), pp 711-730 (in French). *Chem. Abs.*, vol 124 (1996)

AUTHORS' ABSTRACT

The authors' outline some of the considerations which have prompted their research on anomalously fast nuclear reactions of D⁺ compressed electrochemically into Pd (and Pd alloy) host lattices. The most surprising result has been that the generation of high levels of excess enthalpy is not accompanied by the expected levels of tritium and neutron generation. Some of the major steps in the development of this particular aspect are outlined; it has been found that excess heat production is dependent on the protocol of the experiments mainly because of "positive feedback." A rationale for such "positive feedback" is presented which also explains oscillations in the system properties. The authors illustrate the progressive development of the investigation leading to the achievement of specific rates of excess enthalpy production of 4 kW cm⁻³ at temperatures up to 100° (i.e. of low-grade heat).

PHUSONS IN NUCLEAR REACTIONS

Mitchell R. Swartz (JET Energy Technol., Massachusetts), "Phusons in Nuclear Reactions in Solids," *Fusion Tech.*, vol 31, no 2, Mar. 1997, pp 228-236, 56 ref, 2 figs, 3 tables.

AUTHOR'S ABSTRACT

An explanation is given for the anomalous branching ratio in solids based on Boson-cooperative removal of the ⁴He* energy prior to decay by two-body fission. Facilitated by isospin restrictions that limit conventional

pathways, the excess heat is driven by the reconfiguration to the more tightly bound ${}^4\text{He}$ ground state. A temperature rise occurs as well-mixed acoustical and optical phonons are unable to carry off all the local momentum and excess energy of the reactions. Four-vector analysis indicates conservation of energy, which suggests the use of a fusion quantum of energy delivered to the lattice's phonon cloud: a phuson. Special relativistic considerations indicate that the phonon cloud subtends ~450 to 800 unit cells and can couple with de-excitation times >0.1 fs. Thus, commensurate levels of neutrons and gammas are not required because of unique isospin and energy restrictions that facilitate the alternate Bose-cooperative pathway leading from the excited state.

CATHODIC POLARIZATION

J.P. Vigier (Univ. Paris VI, France), "On Cathodically Polarized Pd/D Systems," *Phys. Lett. A*, vol 221, nos 1-2 (1996), pp 138-140. *Chem. Abs.*, vol 125 (1996)

AUTHOR'S ABSTRACT

Excess energy in "cold fusion" with hydrogen and deuterium can be interpreted in terms of magnetic interactions. The corresponding new "tight" Bohr orbits explain new properties associated with this energy production.

MORE PATENTS FROM CHEM. ABS

Patent: JP 08075882 A2; Generation of thermal energy by cold nuclear fusion; Yoshiaki Arata, Getsuko Cho (Japan); issued 22 Mar 1996; appl. 6 Sept. 1994, 8 pp. *Chem. Abs.*, vol 124 (1996).

Abstract: Ultrafine Pd powder is put in a stainless steel vacuum vessel, then the vessel is filled with D_2 gas with pressure, the vessel is cooled with a cryostat to liquefy the D_2 , the liquid D_2 is absorbed by the Pd until the Pd is saturated with the liquid D_2 , then the temperature of the vessel is raised to a proper temperature to produce thermal energy based on cold nuclear fusion. Cold fusion can be carried out in a short time.

Patent: HU 71652 A2; Method for producing excess energy and neutron radiation in the mixture of the light atoms solved in current-carrying material immersed in electrolyte and/or of the isotopes of said Atoms, respectively in the interfacial double layer of the electrolyte; Laszlo Daruhazi, Oedoen Pinter (Hungary); issued 29 Jan 1996; appl 10 Sept 1993, 18 pp. *Chem. Abs.*, vol 124 (1996).

Abstract: A claim is made for **cold fusion** of light atoms in the interfacial double layer of an electrolyte. The electrodes are placed at minimum 10 mm and immersed in the electrolyte.

Patent: WO 9606434 A1; Hydride condensation process; Richard A. Day, Kenneth A. Rubinson (Univ. Cincinnati); issued 29 Feb 1996; appl. 18 Aug 1995, 27 pp. *Chem. Abs.*, vol 124 (1996)

Abstract: A process is described for the generation of energy and the conversion of D into T. The above effects are achieved when a deuteride source is maintained so as to form an interface in the presence of a positive polarized metal. Thus, LiD was added to molten Al and heated to 650° with a thermocouple. In 20 minutes the cell potential rose from 0 to 1.105 V. At 650° the ionization meter indicated evolution of T.

Scintillation of the noncondensing gases by conversion to water gave a T yield of 8 nCi, and an additional 28.1 nCi was found by reaction of the remaining cold solid. An electrical potential may also be used to drive the reaction.

Patent: JP 08166478 A2; High occlusion of hydrogen in a hydrogen-occluding metal; Novuro Goto, Takehiko Ito, Yasuhiro Iwamura (Mitsubishi Heavy Ind. Ltd., Japan); issued 25 Jun 1996; appl. 15 Dec. 1994, 4 pp. *Chem. Abs.*, vol 125 (1996)

Abstract: A H-occluding metal (such as Pd or its alloy) is used as a cathode in the electrolysis of light or heavy water to occlude light or heavy hydrogen in the cathode, followed by electroplating a metal (such as Cu) on the cathode. The diffusion of light or heavy hydrogen from the inside of a metal to the outside is prevented.

Patent: JP 07318672 A2; Electrolysis-type low-temperature nuclear fusion reactors; Yoshito Tanaka (Japan); issued 8 Dec. 1995; appl. 26 March 1992, 3 pp. (Japan) *Chem. Abs.*, vol

Abstract: In a water electrolytic cell, a hydrogen-absorbing metal such as Pd or Ti is used as a cathode, permanent magnets or electromagnets are arranged inside or outside the electrolytic cell so the lines of magnetic force can pass through the cathode. A small quantity of light water is added to the heavy water or only light water is used for electrolysis. Excess heat can be continuously generated.

COLD FUSION BIBLIOGRAPHY

Just updated and revised, the most complete bibliography of New Energy research papers and articles [predominantly cold fusion] is available again from the Fusion Information Center on disk [PC]. Containing over 2500 references. This list traces the progress of cold fusion research since its beginning in 1989 through the abstracts and articles published in *Fusion Facts*, the world's first cold fusion newsletter/magazine. Copies are \$15, postage and handling incl., from the Fusion Information Center. Ask for **WordPerfect** (specify version) or **ASCII** formats.

Space Energy

DEMONSTRATION OF CASIMIR FORCE

S.K. Lamoreaux, "Demonstration of the Casimir Force in the 0.6 to 6 μm Range," *Physical Review Letters*, vol 78, no 1, 6 Jan 1997, pp 5-8, 4 figs, 15 refs.

AUTHOR'S ABSTRACT

The vacuum stress between closely spaced conducting surfaces, due to the modification of the zero-point fluctuations (ZPF) of the electromagnetic field, has been conclusively demonstrated. The measurement employed an electromechanical system based on a torsion pendulum. Agreement with theory at the level of 5% is obtained.

EDITOR'S COMMENTS

Call it ZPE, ZPF, or aether, we welcome any experimental evidence that provides a better understanding of the nature of space and, even more welcome, experiments or ideas of how to tap the almost infinite energy of space. The measurement of the Casimir force, as done in this experiment, between a metal plate and a metal sphere, is quite dramatic as the spacing is smaller than 1 micrometer. However, it has taken very sensitive measuring equipment to produce the results. The magnitude of the force is on the order of 100 microdynes. The plate was an optical flat and the sphere was a spherical lens both of which were coated with a thin layer of copper. The size of the plate used was 2.54 cm. (one inch) in diameter and the spherical lens was 4 cm in diameter. The closest spacing achieved was about 0.6 micrometers.

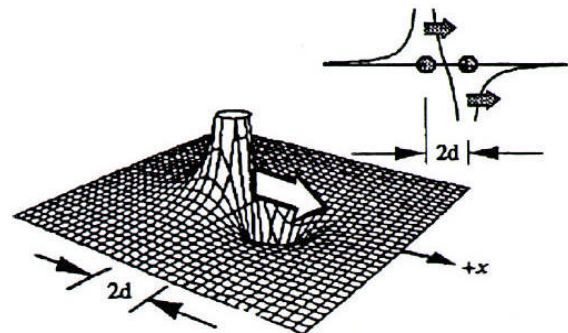
NASA PREPARING FOR THE FUTURE

Courtesy of Marc G. Millis
NASA Lewis Research Center

Marc G. Millis, "Breakthrough Propulsion Physics Research Program," NASA Technical Memorandum 107381, prepared for the Space Technology and Applications International Forum, Jan. 1997.

AUTHOR'S ABSTRACT

In 1996, a team of government, university and industry researchers proposed a program to seek the ultimate breakthroughs in space transportation: propulsion that requires no propellant mass, propulsion that can approach and, if possible, circumvent light speed, and breakthrough methods of energy production to power such devices. This Breakthrough Propulsion Physics program, managed by Lewis Research Center, is one part of a comprehensive, long range Advanced Space Transportation Plan managed by Marshall Space Flight Center. Because the breakthrough goals are beyond existing science, a main emphasis of this program is to establish metrics and ground rules to produce near-term credible progress toward these incredible possibilities. An introduction to the emerging scientific possibilities from which such



Hypothetical Diametric Drive

solutions can be sought is also presented.

Marc G. Millis. "The Challenge to Create the Space Drive," NASA Tech. Mem. # 107289, prepared for the Interstellar Flight Symposium, May 1996.

AUTHOR'S ABSTRACT

To travel to our neighboring stars as practically as envisioned by science fiction, breakthroughs in science are required. One of these breakthroughs is to discover

a self-contained means of propulsion that requires no propellant. To chart a path toward such a discovery, seven hypothetical space drives are presented to illustrate the specific unsolved challenges and associated research objectives toward this ambition. One research objective is to discover a means to asymmetrically interact with the electromagnetic fluctuations of the vacuum.

Another is to develop a physics that describes inertia, gravity, or the properties of spacetime as a function of electromagnetics that leads to using electromagnetic technology for inducing propulsive forces. Another is to determine if negative mass exists or if its properties can be synthesized. An alternative approach that covers the possibility that negative mass might not exist is to develop a formalism of Mach's Principle or reformulate aether concepts to lay a foundation for addressing reaction forces and conservation of momentum with space drives.

[We have written Marc Millis and suggested that the high-density charge cluster technology could provide power and that torsion fields might provide communication at superluminal speeds. -Ed.]

EINSTEIN'S MASS DILATION AS AETHER DRAG

Chuck Bennett

Objects approaching the speed of light undergo mass increase according to Einstein's relativistic mass dilation equation. Has anyone ever wondered where the extra mass comes from?

In 1905, Einstein derived the formula for mass energy equivalence as an afterthought to his publication on special relativity, "On the Electrodynamics of Moving Bodies" [1,2]. Special relativity is based on two principles that are "only apparently irreconcilable." One, that the speed of light is measured the same in all reference frames of platforms moving relative to each other; and two, the fundamental laws of physics must be upheld. It is a common misconception that the fundamental laws are altered, but they are not. It is the measurement parameters that undergo changes in order to facilitate Einstein's two seemingly dichotomous postulates. Time, forward dimension, and mass change according to the Lorentz formulas.

Einstein reasoned that if the law of conservation of energy is to be preserved, then an increase in mass is manifested as excess energy [2]. But what about the conservation of mass? The answer to this question in relation to the postulate of a new quantized aether follows.

Einstein reasoned that rest mass, m_0 , must have energy, m_0c^2 , and we later found out that this was true from the initial discovery of isotopic mass change in beta decay all the way to modern mass energy changes in fission and fusion. More recently, we have seen the discovery of low temperature fusion and transmutation with subtle mass-energy release within

the lattices and electrolytes of new hydrogen energy systems.

In a previous article [3], a sea of particles on the order of a million times lighter than the electron is proposed as a "quantized aether" in which aether drag is re-introduced as a plausible explanation for the Michelson and Morley null result. All subatomic and atomic particles are comprised of these small particles and the particles create the aether. Particles do not pass through an aether medium and the aether medium is not separate from particles. In other words, particles and the aether are one entity.

Thus, in conclusion, the postulate emerges that actual mass transfer is responsible for the relativistic mass change. Objects at near luminal speed literally scoop up additional mass from quantized aether. The law of conservation of mass is upheld. The fundamental particle introduced in reference [3] is the element for a quantized aether and acts as an agent for mass transfer in relativistic mass changes. In addition, the conservation of particulate angular momentum holds for the smallest particle of the aether. This particle can be taken to be the infinitesimal limit as the fundamental element of the aether approaches zero. These premises establish the seed of vortical motion for the quantized aether.

References:

1. A. Einstein, "On the Electrodynamics of Moving Bodies," *Annalen Derphysic*, vol 17, no 5, 26 Sept. 1905, pp. 891-921.
2. A. Einstein, "Does the Inertia of a Body Depend Upon its Energy?" *Annalen Derphysic*, vol 18, no 3, 21 Nov. 1905, pp. 639-641.
3. C. Bennett, "A Quantized Aether," *New Energy News*, vol 4, no 7, Nov. 1996, p. 7

GRAVITATION SHIELDING POSSIBLE

E.E. Podkletnov (Moscow Chem. Scientific. Ctr.), "Weak Gravitation Shielding Properties of Composite Bulk $YBa_2Cu_3O_{7-x}$ Superconductor Below 70°K under E.M. Field," Univ. Cincinnati Engineering, report # MSU-chem 95, abstract cond-mat/9701074; 19 pages, 12 refs, 7 figs, 1 table.

AUTHOR'S ABSTRACT

A high-temperature $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ bulk ceramic superconductor with composite structure has revealed weak shielding properties against gravitational force in the state of levitation at temperature below 70 K. A toroidal disk was prepared using conventional ceramic technology in combination with melt-texture growth. Two solenoids were placed around the disk in order to initiate the current inside it and also to provide rotation about its central axis. Samples placed over the rotating disk demonstrated a weight loss of 0.3 to 0.5%. When the rotation speed was slowly reduced by changing the current in the solenoids, the shielding effect became considerably higher and reached 1.9 to 2.1 % at maximum.

[For a copy of this paper, send \$5 (copying, s & h), with request to Fusion Information Center.]

EASY EXPERIMENT

MAGNETIC/GRAVITY FIELD MONITORING

Bill Ramsay *

Six years ago there were widespread tales about this planet's encounter with an odd sector of space resulting in some startling effects. An article reprint in *Nexus*, "The Photon Belt Story," (February 1991), of an earlier one by Shirley Kemp helped spread this tale and seemed to spawn others.

At least one of these, ELECTROMAGNETIC NULL ZONES, told of a four- to five-day period when ALL electrical devices and systems would fail, only to operate again thereafter. There was a prediction this would occur, coincidentally, on or around July 25, 1992; a date targeted for a planet wide HARMONIC CONVERGENCE in the midst of some special planetary alignments. A colleague and I had been observing and recording, using unconventional techniques, some rather odd magnetic / gravity field fluctuations for several months. One which both of us recorded, using slightly different techniques, seemed to show a partial collapse for about an hour. Just in case, my wife and I laid in some extra provisions to see us through!

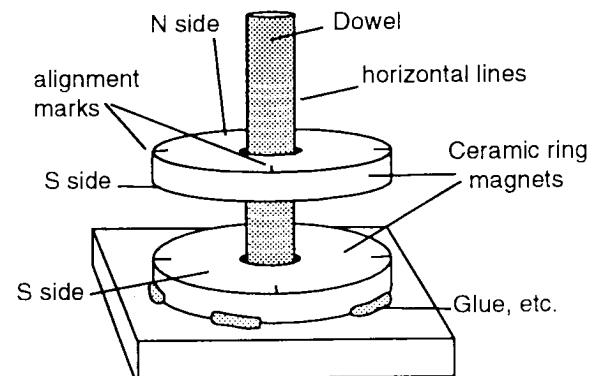
The 25th came, the special alignments were there (I recorded 17 hours of their strongest influences!) and the HARMONIC CONVERGENCE was celebrated by groups from small to large all around the planet. The predicted electrical failures were notable by their absence.

Several of us who were involved in "subtle energy" research and experimentation, whilst pondering the possibility of some such event as a null zone encounter, stumbled upon a simple and inexpensive

way anyone could at least have some forewarning. A way that didn't require technical expertise or expensive instruments.

There are scientific theories which put magnetism (the "electro" variety) as the cause of gravity and others which put it the other way round. Most admit the two are intertwined and often cannot be separated by their actions. The monitoring device described here is responsive to either leaving the distinction to the distinguished scientists to settle.

The approach is simple. All that's required is a pair of ceramic ring magnets and a way of fixing these, one solidly with the other vertically above it and free to float as it will when the magnetic poles facing each other are the same. To hold these in position, a wooden spindle (pencil or dowel) is fitted into a hole in a wooden base. Some sticky stuff, commonly sold as "Fun Tak Memo Tak" and other names with "Tak" in them, is used to hold in place and position the bottom magnet so that the top one floats somewhat evenly. I cut shallow notches an eighth inch apart into the round pencils I use with a nail file. These marks are used to initially align the top floating magnet and see what changes in spacings may follow as the magnetic/gravity field varies over time. It does. Sometimes the width of a notch or more.



It will be observed also that the top magnet will rotate and change its attitude. Sometimes it floats quite crookedly. I don't know what subtle changes are being mirrored but do follow it closely trying to figure it out. I haven't yet, but maybe you will!

I have several of these devices around the house and one which uses two pairs of magnets on spindles about four inches apart. One has the North poles facing and the other the South. Contrary to common opinion these poles are not just identical opposites of one another. By observing both pairs, I've seen changes which effect only one.

Since air movements may affect the positioning of the floating top magnet, I put clear plastic tumblers (inverted) over each set. I use some of the sticky stuff to hold these in place at the base. I also apply several coats of clear nail polish to the magnets to seal them so the iron in them doesn't rust. I also put a red nail polish stripe on the top magnet to see how it's twisting. To make the whole thing look good, I put several coats of clear varnish on the base.

So, there you have it. A fully functional magnetic/gravity field monitor in kit form needing only your efforts to put together.

A few final notes. Which pole is which on the flat faces of the magnets can be determined with a magnetic compass. A cheap one will do. I get my magnets at Radio Shack stores and the rest of the materials at WalMarts. Suitable ring magnets are sold all around to stick notes on refrigerators. Take your wooden pencil or dowel with you when shopping to make sure the center hole is the right size. I locate my devices at eye level on shelves fixed solidly to walls.

If you can, persuade some friends to get involved as well, so changes which may vary from location to location may be compared. Should there be some event like a null zone encounter, the top magnet will certainly come much closer to the other. Perhaps even touching it. Unusual variances of a lesser sort may signal an approach to some such event.

[Readers: This is so simple to accomplish, please try it and report any unusual results to *NEN*. -Ed.]

* Bill Ramsay is an independent subtle energy researcher and experimenter credited with several original discoveries. One of these is the planetary alignment scanning method mentioned in this article. He may be contacted by mail at 133 Asa Hall Road, Iva, S.C. 29655 (USA) and by phone at 864-296-3200.

HELP WANTED

THE NATURE OF THE AETHER

Hal Fox, Editor *NEN*

A century ago nearly all scientists believed in an energetic aether. The famous Michelson-Morley experiment was incorrectly interpreted and most scientists during the 1900s changed to believe that there is no aether. Michelson and Gale showed in the later 1920s that there was evidence for an aether but their experiment did not get into the science mainstream. **The big question now is: What scientific evidence do we have that there is an energetic aether?**

We would like to compile a list of experiments that show there is an aether, zero-point-energy, zero-point fluctuations, energetic space-time continuum, or whatever label you care to use. **Please mail or fax us your suggestions as to what should be included.**

Here are some examples:

The **Rowe Effect** - where hydrogen is produced by explosions [1].

The **Aspden Effect** - where rotational inertia is stored by rotating magnets (maybe by all rotating mass) [2]. The production of **Torsion Fields** [3].

The **Casimir Force** [4].

Sonoluminescence [5].

The **Shoulders Effect** where high-density charge clusters appear to maintain their energy even while emitting energy [6].

REFERENCES

[1] Paul E. Rowe, "Hydrogen Gas From Vacuum, parts I & II," *J. of New Energy*, vol 1, no 2, Summer 1996, pp 108-115, 19 refs. **Dubbed the "Rowe Effect"**.

[2] Harold Aspden, "Discovery of **Virtual Inertia**," *New Energy News*, vol 2, no 10, Feb 1995, pp 1-2. See also Hal Fox, "The Aspden Effect," pp 2-3.

[3] A.E. Akimov & G.I. Shipov, "Torsion Fields and their Experimental Manifestation," Proc. of the Internat. Scientific Conf. on New Ideas in Natural Sciences (St. Petersburg, Russia, 1966), compiled by Anatoly P. Smirnov and Alexander V. Frolov, c1996..

[4] Julian Schwinger, "Casimir light: The source," *Proc. Natl. Acad. Sci. USA*, vol 90, pp 2105-6, March 1993, Physics.

[5] R. Hiller & S. Putterman, "Observations of Isotope Effects in Sonoluminescence," *Phys. Rev. Letters*, vol 75, no 19, 6 Nov 1995, pp 3549-51.

[6] Kenneth R. Shoulders, "Energy Conversion Using High Charge Density," U.S. Patent 5,018,180, issued May 21, 1991. See also: Kenneth R. Shoulders, EV, A Tale of Discovery, c1987, published and available from the author, P.O. Box 243, Bodega, CA 94922-0243.

Miscellaneous

GAO REPORTS ON DOE

There is a group in Congress that wants to eliminate DOE. Senator Rod Grams, Republican from Minnesota,

is a leader of that group. His big complaint is that DOE has not met its stated mission of developing a national energy policy. Part of the current effort to eliminate DOE may have been the result of the recent report from the General Accounting Office (GAO).

According to the GAO, 80 projects designated as DOE major system acquisitions between 1980 and 1996 have the following history: 15 were completed, most with cost overruns. Three of the completed projects have not been implemented. Thirty-one projects were terminated before completion. Expenditures for these projects exceeded ten billion dollars.

Canceled projects included the following: Compact Ignition Tokamak - \$107.1 million; Elmo Bumpy Torus Proof-of-Principle - \$28.1 million; Fusion Materials Irradiation Test Facility - \$105.9 million; Tokamak Physics Experiment - \$73.7 million.

The remaining 34 projects have had many cost overruns. The Tokamak Fusion Test Reactor was completed a year and one-half late. The original cost of \$390.6 million reached \$497.5 million - a cost increase of over \$100 million. All of this and no national energy policy.

[If the DOE were listed on the stock exchange we expect that it would have been removed from trading and forced into involuntary bankruptcy. -Ed.]

Source: *FUSION POWER REPORT*, January 1997.

THE CENTENARIAN ELECTRON

Lee Siegel (staff writer), "100 Years of the Electron," *Salt Lake Tribune*, 20 March 1997, pp B-1, 2.

SUMMARY

The world has become pretty dependent on the little old electron. Or at least, since 1897, the world knows that it is. Prior to 1897, the atom was the smallest particle thought to exist. In the mid-1800's the research that led to the discovery of the electron began with experiments with glass vacuum tubes which could be made to glow by applying electricity to their electrodes: electric cathode rays. This research by Julius Plucker and other German Physicists soon found that a magnetic field could bend these rays, so the rays must be particles. Plucker's former student, Johann Hittorf found that the rays had some properties of waves. The debate raged for years, with most English physicists advocating the particle theory, while the Germans were partial to waves.

During the 1880s and up to 1897, some evidence had been found that cathode rays were particles much smaller than atoms, but since the establishment physics dictated that the atom was the smallest piece of matter, such evidence was usually distrusted or explained away. (Sound familiar yet?) On April 30, 1897, English physicist Joseph John Thomson announced his experiments that showed convincingly

that the electron particles really existed. Even Thomson was originally very skeptical.

To celebrate this upcoming centennial, the American Physicist's Society, at their national meeting in Kansas City, MO, held a session about "100 Years of Electrons," organized by Bill Evenson, Professor of Physics at Brigham Young University.

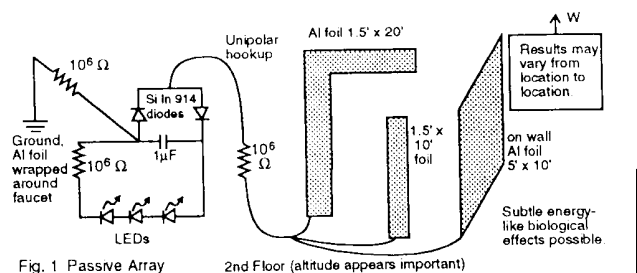
The rest of the article lists the multitude of things that we have discovered because of our knowledge of electrons: everything from the Big Bang (if you believe in it) to high-temperature superconductivity, from basic chemistry to computers, faxes and television (including the transistor, which was discovered 50 years ago). Evanson himself is a researcher in solid-state physics, and among other things, is analyzing how imperfections change the properties of solids, such as zirconium oxide, one form of which is the gemstone cubic zirconia.

VORTEX GUIDED BY CONTINUOUS CONDUCTIVE PATH BY A PINNING MECHANISM?

Samuel P. Faile

An extension of the passive coil and autonomous coil systems has involved much larger structure for more power using unipolar hookups to aluminum foil. There was enough power (perhaps 42 milliwatts) to operate three Radio Shack Jumbo Super Bright Red LED in series to get a moderate output that could be easily observed across the room. Experiments were tried to see if the current from the foil to the copper leads to the rectifying circuit were carrying conventional currents or not.

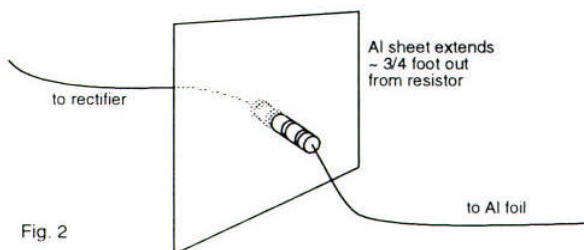
Capacitors such as 0.01 mF in the AC line from the ground and the foil, **did not decrease** the LED output. As expected, a capacitor in series with the LEDs in the rectified portion of the circuit stopped the light output. It appears the AC outside the rectifying circuit is of high frequency and couples well across the capacitors.



Shown is the circuit with 1-megohm resistors inserted. The schematic diagram is of a system (Fig. 1) with three 1-megohm resistors: in the line from the aluminum foil, in the line from the ground, and one in series with the LEDs in the rectified portion of the circuit. All of these resistors had no obvious effect on the LED light output. The resistors used were Radio Shack catalog item 271-1134 rated at $\frac{1}{2}$ watt and 1-megohm. The Jumbo Super Bright LED (5000 mcd light output, 1.82 V, 20 MA) has a Radio Shack # 276-086A. Insulated lamp cord wire was used to connect the aluminum foil and ground to the rectifying circuit. Additional aluminum consisting of rolled up aluminum balls and aluminum foil covered boxes were placed in contact with the aluminum strips.

In earlier work on the arrays, Mr. Nicholas Reiter had found large ohmage resistors could be added to the ground wire with no effect. The recent work has established that resistors placed around a rectifying circuit and inside, do not decrease the LED light output. Even for autonomous circuits where the ground is replaced by a lot of laid out aluminum foil in another room, the insertion of the million ohm resistors (and many other types) has no noticeable effect on the LED output.

It appears the effect cannot be due to extremely high voltage since a break in the circuit of a mm or so stops the output in 2-7 seconds, indicating arcing involving thousands of volts is not present in any practical sense.



Since the current could be of very high frequency, an experiment could indicate if some sort of surface EM wave was hopping across the resistors. An aluminum collar or sheet, perpendicular to the middle of the resistor, was tested as shown in Fig. 2. If there was an ordinary electromagnetic surface wave at say 10^{12} Hertz, it would be stopped by the heavy duty aluminum foil, but there was no indication of this. The LED output was as good as ever.

Light absorbing conductors, even a piece of oxidized slag that could be at $10^9 \Omega$, still lets the current pass when inserted in the line. Transparent insulating quartz in contrast, when placed in the line, blocks the current.

The current will pass through batteries, motors and opaque ceramic magnets but can be stopped by diodes which is not surprising since the diodes are used in the rectifying circuit. It appears the passive

and autonomous circuits contain exotic currents that can pass through resistors over 1-megohm.

Unconventional activity could be at work. Such as a scalar wave that is continuously unfolding its components to provide EM activity and folding these components back to provide enough longitudinal or scalar nature to penetrate or go through resistors and wide aluminum foil collars. This near-soliton activity finally interacts with the environment to yield some of its energy when it encounters semiconducting diodes. As long as there is a metal or even a poor conducting metal with the $\frac{1}{2}$ spin Fermi level electrons, the vortex activity is maintained and the exotic current continues. Much of the vortex could be in the air, an aether vortex that propagates as long as there is the Fermi level continuity in the circuit, a sort of long pinning site.

The aether vortex structures could be sensitive to spin, a property recently gives prominence in *NEN* by Alexander Frolov, who supplied an article by Akimov and Shipov on Torsion Fields. A continuous conductive band along a circuit could allow for an exotic aether current to act like distances and resistances were not dissipating factors; similar to soliton activity or even massless current activity.

In any event, a circuit has been disclosed that should allow others to find out just how exotic the passive and autonomous array currents are.

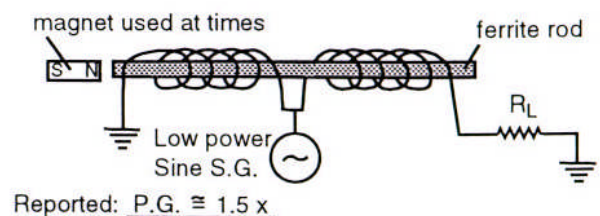
[Dr. Samuel Faile does not claim to be the world's greatest electronics expert. If you have any explanations or suggestions, please send them to *NEN*.]

COSMOLOGY NOTE

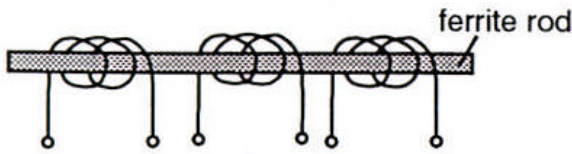
Greg Hodowonec 3/8/97

I. An early Sweet VTA test:

A. It was reported in the March 1995 issue of *NEN* (page 8), that a simple Sweet VTA circuit was claimed to have over-unity power gain. Briefly, the circuit was as follows:

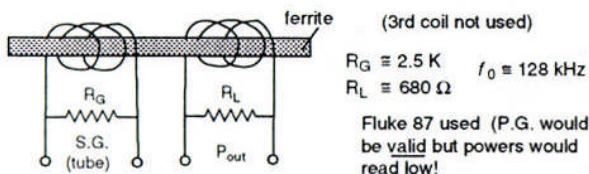


B. Bill Ramsay sent me a sample 3-coil transformer as follows:



coils \cong 1 mH each (each separate)

I had previously roughly tested this transformer in the Mini-MRA mode and saw P.G.[Power Gain] \cong 5x or so. To explore the test of A. (above) I ran the following test:



Note: Circuit was broadly resonant at about 128 kHz, which is a sub-harmonic of the universal Rhythmic frequency!

Test Data:

$$\text{S.G.} \left\{ \begin{array}{l} V_G \cong 0.98V(RMS) \\ i_G \cong \frac{0.98}{2.5 \times 10^3} \cong 0.39mA(RMS) \end{array} \right\} P_{in} \cong 0.98 \times 0.39 \cong 0.38 \text{ mW (RMS)}$$

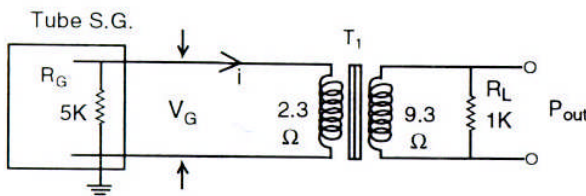
$$\text{Output} \left\{ \begin{array}{l} V_{out} \cong 0.98V(RMS) \\ i_{out} \cong \frac{0.98}{0.68 \times 10^3} \cong 1.44mA(RMS) \end{array} \right\} P_{out} \cong 0.98 \times 1.44 \text{ mW (RMS)}$$

Therefore, $P.G. \cong \frac{1.44}{0.38} \cong 3.7 \text{ times}$

Waveforms: Sinusoidal

C. Retest of Original Red Mini-Transformer

In view of the above results, it was decided to retest the 5:1 mini-transformer as shown below:



This test was first performed on 4/2/95, with the output rectified to dc power using a simple diode-filter to a 15 K load. The initial circuit developed about 4 mW of dc power at about 190 KHz, with apparently **high power gains**. Since I did not have a calibrated

scope at that time, I was not able to determine the true input power. The data was sent to McClain and Wooten for verification but there was no response.

The test as shown above was repeated on 3/8/97, using the 25 MHz scope. The data is given here ($f_0 \cong 185.5 \text{ KHz}$):

$$\left. \begin{array}{l} V_G \cong 0.8V(ph-pk) \cong 0.56V(RMS) \\ i_G \cong \frac{0.56}{5 \times 10^3} \cong 0.11mA(RMS) \end{array} \right\} P_{in} \cong 0.06 \text{ mW (RMS)}$$

$$\left. \begin{array}{l} V_{out} \cong 2.8V(ph-pk) \cong 1.98V(RMS) \\ i_{out} \cong \frac{1.98}{10^3} \cong 1.98mA(RMS) \end{array} \right\} P_{out} \cong 3.9 \text{ mW (RMS)}$$

Therefore, $P.G. \cong \frac{3.9}{0.06} \cong 65 \text{ times}$

Waveforms: Good Sinusoids

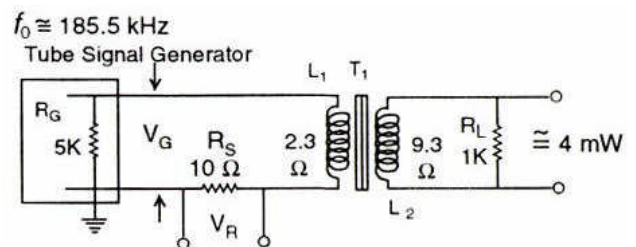
II. Conclusion

A. The *NEN* reported VTA tests were probably valid and is supported by the two tests made here (as above).

B. The tests also support the Rhythmic contention that some purely reactive elements can interact 'directly' with the ever-present fundamental Rhythmic frequency of about $1.855 \times 10^{43} \text{ Hz}$ and 'amplify' to a point where that 'reactive' power can be dumped into a resistive load. Under the reactive conditions, there is no power dissipation, so that heating losses are very minimal (remember Moray's test?). It is the writer's view that the Universe is the **sole** source of energy (what we use now is the many conversions possible) and that at last we are seeing how to 'extract' this energy more directly. These simple tests will show the way!

III. Added Note (3/19/97)

A. Revised test



T_1 : 5 mH (5:1) transformer (used reverse)

L_1 : \cong 1 mH

$$X_{L_1} = 2 \pi f_0 L_1 \cong 1165 \Omega$$

1. There appears to be a broad resonance at about 185.5 kHz (which is a sub-harmonic of the Rhythmic Frequency).

B. Reactive power in L_1

1. Voltage across $L_1 \approx 56$ V (rms), same as V_G .
2. Sensing resistor R_S (10 W) measures:
105 mV (pk-pk) \approx 74.2 mV (RMS) (per 25 MHz Scope)

$$\therefore I_{\text{circ.}} \approx \frac{V_R}{10} \approx \frac{74.2}{10} \approx 7.42 \text{ mA (RMS)}$$

Therefore, reactive power in L_1 equals:

$$V_G \times I_{\text{circ.}} \approx 0.56 \times 7.42 \approx 4.15 \text{ mW.}$$

(Same order as P_{out})

C. Current Determinations

1. Generator line current:

$$\frac{V_G}{R_G} \approx \frac{0.56 \text{V(RMS)}}{5 \times 10^3 \Omega} \approx 0.11 \text{ mA (line current)}$$

2. Reactive line current:

$$I_{\text{circ.}} \approx 7.42 \text{ mA (from B above)}$$

D. Power Gain (P.G.) determinations

$$1. \text{ P.G.} = \frac{P_{\text{out}}}{P_{\text{in}}} \approx \frac{4 \text{ mW}}{0.062 \text{ mW}} \approx 64.5 \text{ times}$$

Same order

$$2. \text{ P.G.} \approx \frac{i_{\text{circ.}}}{i_{\text{line}}} \approx \frac{7.42 \text{ mA}}{0.11 \text{ mA}} \approx 64.5 \text{ times}$$

E. Conclusions

1. The nature of the resonance at about 185.5 kHz is not clear but probably related to the Rhythmic Frequency.
2. The resistor, R_S , probably is sensing only the reactive current due to L_1 .

WORLD ENERGY REPORT

Courtesy Gordon B. Moody

Gordon B. Moody is the editor of the excellent *Global Energy Outlook*, with worldwide circulation. Here are some excerpts from the March 1997 *Outlook*:

The U.S. has long passed the **peril point** where oil imports threaten U.S. security, as designated by Congress. The **peril point** was established as when the level of oil imports exceeds fifty percent of the oil used in the U.S. Senator Jesse Helms, Chairman of the Senate Foreign Relations Committee (which

tracks oil imports) said, "Politicians had better ponder the economic calamity that would hit (the U.S.) should foreign producers shut down supplies or sharply increase their prices."

More than 84 million Americans now own stocks, double the number of stockholders in the later 1980s. Last year, the U.S. trade deficit was \$186 billion, of which crude oil imports accounted for more than \$54 billion. The implied threat by the Federal Reserve Chairman, Alan Greenspan, to raise interest rates has some Wall Street economists predicting that the dollar must keep rising in value, since other central banks are unlikely to raise their rates. **This is a dangerous illusion.** Foreign central banks don't have to raise interest rates to sink the dollar. **All they have to do is to stop buying dollars.** Sung Won Sohn, Chief Economist for Norwest Corporation of Minneapolis, says a steep 20 percent correction in the stock market could pare consumer spending by \$100 billion and trigger a major recession. [As of 31 March 1997, a 7.5 percent drop in the Stock Market has accrued since January. -Ed.]

Daniel Yergin, President of Cambridge Energy Research Associates recently said, "In two years, Asia will overtake North America as the world's number-one consumer of oil." **When the U.S. oil imports passed 40 percent, President Jimmy Carter called for "The Moral Equivalent of War." "Actually, it has become the moral equivalent of indifference,"** according to Gordon Moody. Meanwhile, the U.S. oil industry has grossed half a trillion dollars. Now it is forecast that drilling for oil, such as that in the Gulf of Mexico, cannot provide sufficient oil to maintain current prices. "Put simply, the oil industry can no longer keep up with the growth in demand simply by turning on old taps, as it has been doing over the past decade. The oil service industry is operating at full capacity," say Gordon Moody.

NEW PARTICLE DISCOVERED?

Courtesy of Dr. Sam Faile & Jim Parda

David Kesenbaum, "Surprising New Particle Appears, Or on the Other Hand, Maybe Not," *New York Times*, Science section, pg B-8, 25 Feb 1997.

Deborah Blum, "Possible new particle's a major matter for scientists," *Sacramento Bee*, 24 Feb 1997, pg A1 & A10.

EDITOR'S SUMMARY

For several tens of annual graduating classes, college students have been taught about the fundamental nature of matter with one of the smallest being the quarks that

supposedly make up protons and neutrons. Recently at least two research groups, using experimental data provided by the Deutsches Elektronen-Synchrotron (DESY) and the Hadron-Electron Ring-Accelerator, have discovered highly energetic reactions. These reactions occur as the result of bombarding protons with positrons. Under the operating conditions of the equipment and time of operation the current model predicts 4.7 of these observed high-energy events. Twelve events have been counted in the analysis of data. If further work provides additional anomalous data, then the physicists expect that the theories about the fundamental nature of matter will have to be modified. Scientists from 19 countries are involved in the analysis of data. The four-mile accelerator ring uses several house-sized particle detectors to look for these unusual particle reactions. Data from millions of collisions have been reviewed to find the 12 unusual events. Further experimental data is scheduled to begin in March 1997. The important observation is provided by Dr. Joseph Lykken, a physicist at Fermilab in Batavia, Ill. He says, "I'm positive the Standard Model is incomplete." *New Energy News* is quite sure that Dr. Lykken is correct. In fact, it is probably accurate to say that "all models are incomplete." Discovering and explaining anomalies is one of the most fascinating aspects of science.

Nuclear Waste

MEDIA SHOULDN'T BE DUPED BY PRO-NUKE LETTER WRITER

Brian Greenspun, Editor of the *Las Vegas Sun*
Editorial from 3/4/97, excerpted with permission

The nuclear waste industry, in its unrelenting desire to force the Congress and president to do its dirty work for it, has continued a public relations program designed to stir up the people to action. It does this by writing letters to the editors of the nation's newspapers, seemingly from regular Americans, sharing with them Nevada's desire to serve as the country's nuclear dumping ground.

Wittingly or not, newspaper editors fall victim to this subterfuge and give credence where none is deserved. In short, they print the letters.

The latest example is the *Chicago Tribune*, a newspaper that has grown up in the rough and tumble of Chicago politics and one which we'd expect would have a bit less naiveté about the who and whys of letter writing.

Alas, that was not the case. Last week, the *Tribune* published a letter from Hal Rogers with the dateline of Dayton, Nev. The headline read, "Nevada open to nuclear fuel storage."

Why the *Tribune* had to go all the way to Dayton, Nev. to find someone who favored the state [Nevada] as a garbage dump for America's high-level nuke waste is the first question any curious editor should have asked. Hasn't the editorial page editor ever heard of Las Vegas or Reno, two metropolitan areas of the Silver State that contain most of the state's human population. And what does that editor know or should have known about Hal Rogers, a prolific letter writer on nuclear waste issues who is well known to the editors of the major papers in our state?

The fact remains that the *Chicago Tribune* was duped, not unlike many larger newspapers around the country who have a passing interest in this nuclear waste issue but less than passing knowledge about the subject. If newspapers around the country were interested in the Voice of the People on this issue, they would talk to the hundreds of thousands of Nevada parents who are very concerned about any move by the federal government to force the world's most deadly substances down our throats and into our backyard. If they truly cared about doing what was right, they would question the scientific deals for singling out Nevada a decade ago as the only potential site for burying deadly plutonium and other high-level wastes that don't start to lose their potency for a least 10,000 years!

And if they were as interested in discussing this issue to the end of informing their readers, the newspapers would be very careful that the letters they publish not be from paid minions of the nuclear power industry who have billions at stake and millions of dollars to spend trying to sway public opinion.

In fairness, I shouldn't be so hard on the media because not every editor in the country knows what we know about the Hal Rogerses of the world. We know he is the co-chairman of the Nuclear Waste Study Committee, a high-sounding organization that sounds scientific but, in reality, is a paid-for public relations machine for the nuclear waste industry. And Rogers is the head mouthpiece.

He is hardly what I would call a "voice of the people" of Nevada. I might use words like traitor to the men, women and children of our state to describe someone who would sell out our futures for a few dollars. We all realize that what to do with nuclear waste is a national problem and it demands a national answer. But burying that problem in the desert a few miles from Las Vegas, after trucking the deadly garbage through practically every state in the country along the way, seems more like a stupid political solution than a well-reasoned scientific response.

But, if what will be the 21st century age of science and discovery, an era when animals are cloned and space is explored beyond our imaginations, is it that difficult to believe that a better answer can be found? **Why is it**

necessary to pick on vote-poor Nevada to solve the nuclear power industry's money problems when science can find the right answer?

It obviously isn't. The reason for the push is that it appears clear that there will not be another nuclear power plant built in this country until the solution to the radioactive waste is found. Those who stand to make billions of dollars from the design, construction and operation of those plants couldn't care less if a few million people in Nevada live the rest of their lives in mortal fear. This is all about money. . .

Rogers says the people of this state are prepared to host the nation's nuclear nightmare if the government and nuke industry are willing to pay the price. That is about as far from the truth as any liar can get. No, Mr. Rogers, Nevadans don't want the dump. **They want good science to find the kind of 21st century answer to this problem that will make it a national solution and not one that punishes only us, our children and their children.**

FIGHTING NUCLEAR WASTE IMPORT

Courtesy of Gary Vesperman

The Las Vegas, March 11, 1997 edition of the *Review Journal* reports "City adds funds for nuclear waste fight." The Las Vegas City Council voted to provide \$78,000 this year for fighting the importing of nuclear waste from other states into the proposed high-level nuclear waste geological storage facility being developed at Yucca Mountain. Yucca Mountain is about 100 miles northwest of Las Vegas. President Clinton has threatened to veto a measure which proposes to make Nevada a nuclear waste dump site. **The important issue is that with the new developing technology, such as the Neal-Gleeson Process, the nuclear wastes can be treated on-site. There is no longer any real need to package, transport, and store nuclear wastes. Just remove the radioactivity on-site where the nuclear wastes are now stored.** There is just one problem. Not very many people know about this new technology unless they subscribe to *New Energy News*.

Electric Vehicles

NOW AVAILABLE - HONDA EV

Courtesy of Jim Pardau

Mark Glover (Staff writer), "Honda Electric Car Hits Highway Today," *Sacramento Bee*, 26 February 1997.

Some may believe that this is the beginning of the electric motoring age. Honda has joined General Motors in making available, **for lease**, in southern California, an electric vehicle. The big difference

between the two EVs is the use by Honda of nickel-metal hydride batteries. The new battery is more expensive but is expected to last for four years. The battery charger that you can use at home will cost from \$750 to \$1000. The automobile has a suggested retail price of \$53,999. The 36-month lease price is \$499 a month.

The Honda EV PLUS is expected to provide about 75 miles on a single charge or 50 miles if driven flat out at speeds of more than 80 miles per hour. The recharge time from either the on-board charger or the permanent home charger is about six to eight hours. However, there are no oil changes nor stops for gasoline. What the EV PLUS may provide is the ability to provide zero tailpipe emissions and help meet the requirement for zero-emission vehicles to be 10 percent of the vehicles offered for sale by 2003 to meet the California Air Resources Board requirements.

SAMPLES FROM ELECTRIFYING TIMES

Courtesy of Bruce Meland, Editor

The Winter 1996-1997 edition (\$5 on newsstand) of *Electrifying Times* provides a welcome number of items about developments in the new energy field **with an emphasis on news and ads about electric vehicles.** Here is a list of the articles we found most interesting:

Gerald Orlowski, "Magnatron, Fusion Magnetic Motor." This article is much like that presented at the April 25-28, 1996 International Symposium on New Energy.



Bruce Perralt, "The Radiant Energy Device on T.H. Moray Web Connection." This article offers the reader a reprint of a manuscript by Moray for \$29.95. The funds to be used for further research to replicate Moray's 1930s work on producing electrical power from the aether.



Bruce Meland, "Coler Converter" summarizes the information made available from a declassified British Intelligence report. The Coler devices used special magnets and windings to produce energy which is thought to have been further developed into a power source for a German flying saucer. [We would like to see someone replicate this work of Coler. -Ed.]



Joseph M. Olberman, "Flywheel Energy Storage System Development and Test." Funded by the U.S. Department of Energy and Ford Motor Co., Unique Mobility of Golden Colorado has developed and tested a 0.5 kWh, 40 kW, 30,000 rpm flywheel energy storage system. Initial tests were promising.

Mike Fisher (Zenergy Corp.), "Advanced Energy Prototype Testing and Preparation for Commercialization." This article is an excellent list of the types

of testing and means to avoid self-delusion that should be followed by anyone who is promoting a new energy device or system.

◆ ◆ ◆

J.W. "Bill" Yerkes, "Lithium Battery Update." This and accompanying short articles provide good information about the various types of batteries being developed to make electric vehicles a commercial success.

◆ ◆ ◆

Charles Seife, "Quantum Mechanics: The Subtle Pull of Emptiness." This article reports briefly on the recent positive results in measuring the very small forces involved in the Casimir Force.

◆ ◆ ◆

Bruce Meland, "Power from Plastic Batteries." This is a short report on the development by Joe Suter of John Hopkins University of a plastic battery. In time, it is believed that this development will replace metal-electrode batteries.

◆ ◆ ◆

Bruce Meland, "Ken Shoulder's Charge Clusters," and "What is a Charge Cluster?" Bruce taps the sources of Jeane Manning's new book: [A Search for Free Energy](#) and *New Energy News* to describe the charge cluster work pioneered by Kenneth Shoulders.

◆ ◆ ◆

Bruce Meland, "Ultracapacitors for EVs & Hybrids - Requirements, Status of Technology and Key Future Considerations." This is a summary report from one presented at the '96 Infrastructure Conference in San Diego, CA by A.F. Burke, Inst. of Transportation Studies, Univ. of CA-Davis.

◆ ◆ ◆

Electrifying Times can be obtained for \$12 for one year (3 issues). Send your \$12 to 63600 Deschutes Market Road, Bend, OR 97701.

Magazine Reviews

DEUTSCHE PHYSIK REVIEW

Courtesy of Stefan Marinov, Editor

Stefan Marinov, "Siberian Coliu Machine with Eccentric Circular Current Rotor," *Deutsche Physik*, vol 6, no 21, Jan-Mar 1996, pp 5-36, 5 refs, 27 photos and figs.

Stefan Marinov has long devoted his talents to showing that there are many aspects of contemporary physics that are wrong. One of his prime goals in life is to produce a perpetual motion machine. This article reviews his long-time efforts by mathematics **and experiments** to produce a self-running electromagnetic machine. That he has not yet succeeded is not evidence that the task cannot be accomplished. It is fascinating that he has devoted so much of his time and money to the quest. You will find that some of the equations may be heavy going, but reading this review is an excellent history of how

one scientist has not accepted current dogma and is still on his quest.

◆ ◆ ◆

Sir Edmund Whittaker, "A History of the Aether and Electricity," *Deutsche Physik*, vol 6, no 21, Jan-Mar 1996, pp 47-54, 12 refs. Excerpt of Vol 1, Chap III, first published 1910, revised 1951, Humanities Press, N.Y., 1973.

Stefan Marinov chose this excerpt due to the discussion of the Whittaker formula for the forces between two current elements. Others have formulated equations to describe this force including Ampere, Lorentz (the one most accepted by today's scientists), Grassman, Nicolaev, Marinov, and perhaps many others. Marinov shows that all of these equations are wrong. Marinov has spent many hours in both math and in experiments related to this interesting question as to the precise nature of the force between two current elements. Marinov may be the person to finally discover the proper nature to express this force. More power to him.

◆ ◆ ◆

Stefan Marinov, "The Deisting Drive," *Deutsche Physik*, vol 6, no 22, Apr-Jun 1996, pp 5-14, 9 photos and figs.

In this article Marinov describes a new approach to the development of a perpetual motion machine by mechanical motion. This is an interesting effect described by Marinov and could be developed into an interesting toy to teach some of the basic elements of mechanical forces. It is worth reading. [Note: a further description by Marinov, of attempts to make perpetual motion will appear in the Spring 1996 issue of the *Journal of New Energy*.]

◆ ◆ ◆

Stefan Marinov, "A Sensitive Hall Detector Which Everybody Can Put Together," *Deutsche Physik*, vol 6, no 22, Apr-Jun 1996, pp 19-21, 3 photos and figs.

In this article Marinov provides the details for the construction of a sensitive probe for measuring magnetic fields. With this probe, Christian Monstein proved the existence of Monstein-Barnett Effect, and the Monstein-Barnett Effect for Non-Ferromagnetic Materials. In addition, Marinov claims that this led to the Monstein and Marinov discovery of "The Cause for Magnetization of the Celestial Bodies." In addition, the Monstein-Wesley Effect was discovered. **With that type of record for a simple but sensitive magnetic field probe, many of the readers of *New Energy News* will want to make just such a device. It would seem to be worth the cost of a copy of this issue of *Deutsche Physik*.**

◆ ◆ ◆

Stefan Marinov, "Marinov's Formula is Dead, Long Live Marinov's Formula," *Deutsche Physik*, vol 6, no 22, Apr-Jun 1996, pp 29-36, 5 refs.

The good news is that Marinov has not given up on the task of finding a proper formula to express the force between two current elements. Marinov states: "At the present time there are no experiments falsifying Marinov's formula, where the term with B_{mar} will be deleted, until such experiments will be presented, this mutilated Marinov's formula is to be accepted as the right one."



Stefan Marinov, "Grassmann's Formula Violates the Angular Momentum Conservation Law," *Deutsche Physik*, vol 6, no 22, Apr-Jun 1996, pp 7-49, 3 refs, 6 photos and figs.

AUTHOR'S ABSTRACT

It is tacitly assumed that at the interaction of complete circuits, Grassmann's formula preserves the angular momentum conservation law. I show, however, that when calculating the torques with which a small and a larger rectangular currents interact, a net torque different from zero is obtained. Meanwhile, the experiment demonstrated NULL net torque. Another experiment (observation of the net torque produced at the interaction between two bar magnets and a linear current squeezed between them) demonstrated that Ampere's formula is wrong, too. At the present time there is **NO** formula predicting the effects in **BOTH** these **EXTREMELY** simple experiments.

In the article, Marinov also states, "Thus, this simple experiment, which can be accomplished by any child in 10 minutes, shows that Ampere's formula for the force of interaction of two current elements, which preserves Newton's third law, is wrong." **Marinov shows that after 200 years of electromagnetism, we still do not have a correct formula for the calculation of the force with which a current element acts on another current element. Strange, is it not?**



The quarterly publication *Deutsche Physik* is available from East-West Publishers, Morellenfeldgasse 16, A-8010, Graz, Austria. Phone/Fax (43) 316-377 093. Price per copy DM 40, one year subscription 160 DM for corporations, 80 DM for individuals. Double the amounts if paid in checks "because of the rapacious clearing policies of the banks".

SAMPLING THE *ELECTRIC SPACECRAFT* JOURNAL

Courtesy of Charles Yost

The following are samples from the *Electric Spacecraft, a Journal of Interactive Research*, Oct/Nov/Dec Issue 20, Published Jan. 31, 1997. 73 Sunlight Drive, Leicester, NC 28748.



Richard Hull, "Electrostatics and its Measurement," *ElectricSpacecraft*, issue 20, Oct/Nov/Dec 1996, pp 9-14, 7 figs, 13 refs.

One of the important concepts in this article is that in a capacitor the charge is stored in the dielectric and not in the plates. Another concept is that a wiggled charge wand can be detected remotely by the electrostatic waves that are emitted. Which suggests an interesting experiment: Place such a charged wand in a vacuum under conditions where the charge is very slow to "leak off." Does the motion and creation of electrostatic waves cause a reduction in the charge on the wand?



Michael Schoessow, "Isotropic Capacity, the Capacity of a Single Body with the Universe at Large," *ElectricSpacecraft*, issue 20, Oct/Nov/Dec 1996, pp 15-17, 5 figs, 4 refs.

Conceptually shrink one plate of a large capacitor to a point and ask what the capacity would be. By using a charged sphere (rather than a point) as the capacitor, one can achieve a surprising level of capacitance. The article provides the equations by which the observed capacity can be calculated.



Robert L. Forward, summarized by Leslee Kulba, "Casimir Forces," *ElectricSpacecraft*, Issue 20, Oct/Nov/Dec 1996, pp 18-20, 4 figs, 8 refs.

This is a timely article to report because of the recent experimental work measuring the Casimir force (reported elsewhere in the issue). The article suggests that it may be possible to weigh the matter of the vacuum.



Leslee Kulba, "T.T. Brown's Rock Electricity," *ElectricSpacecraft*, Issue 20, Oct/Nov/Dec 1996, pp 21-25, 6 figs.

According to experiments by T.T. Brown, some rocks generate electricity spontaneously and it is long lasting and only affected by diurnal cycles. A rock that had lost its generating capability could be heated up to beyond the Curie point and cooled in a high voltage field. That process would restore its "everlasting battery" capability. This suggests that the most suitable natural rocks would be those of volcanic origin that somehow cooled in a strong electric field. The diurnal change in voltage apparently can not be shielded. This may mean that a part of the rock electricity may be linked to **torsion fields**, a topic first mentioned in *NEN* for March 1997 (See "Torsion Fields - A New Science," page 12-14.) **[We would like to challenge our readers to pick up and measure various rocks and report on the types that show evidence of "rock-electricity."** -Ed.]



Charles Bert Schreiber, "Spark Experiments," *Electric Spacecraft*, Issue 20, Oct/Nov/Dec 1996, pp 26-31, 17 figs.

Bert Schreiber shows an experimental setup that can be done by any experimenter with only a few bucks available. See the accompanying figure. Bert uses an

aluminum Mylar™ film connected in series with a couple of light globes, a dimmer switch, and the film clamped with two bulldog clips. The images that are produced on the film are shown in the article using regular 115 volts and also using higher voltages. This work has some similarities to the work being done by Sam Faile and Nick Reiter and reported periodically in *NEN*. This would make a good science project for

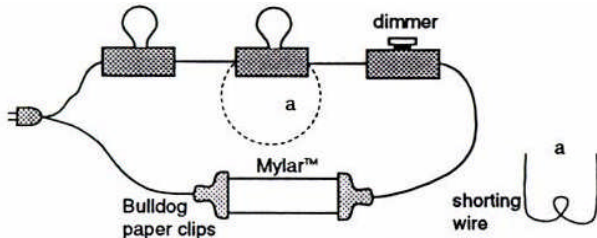
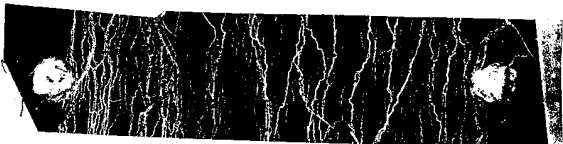


Diagram of experimental setup with 115V ac power supply.

high school.

Editor's Comments: As usual, the editors of this



Example of Mylar™ strip from experiment.

quarterly journal provide its subscribers with interesting information on the way to develop an electric spacecraft. See Commercial Column / Sources for address.

WHAT'S HAPPENING IN INFINITE ENERGY?

Interesting contents of volume 2, issue 11:

Chris Tinsley (contributing editor), an interview with Prof. Martin Fleischmann, pp 10-21.

◆ ◆ ◆

Eugene Mallove (editor), "A Bombshell Techno-Thriller – The Saint; Hollywood's First Good Cold Fusion Movie," pp 23-27. (Movie released 4/4/1997)

◆ ◆ ◆

W. David Wallman (Mgr., DW Research), "COH₂ and AquaFuel™ Update," pp 35-36.

◆ ◆ ◆

PTO Insider (a correspondent and cold fusion advocate who works inside the US Patent office), "Cold Fusion and New Energy: Coping with an Obstructionist U.S. Patent Office," pp 43-47. "Someone will succeed in the U.S. besides Patterson and Ahern. Then, many others can follow when the field is enabled. I'll keep trying from the inside to break through the new declared motto of the USPTO, **To Help Our Customers Get Patents.**" Gives specific help to those desiring to pursue patents.

◆ ◆ ◆

Jed Rothwell, "Development of Advanced Concepts for Nuclear Processes in Deuterated Metals," pp 60-65. A review of EPRI TR-104195, Research Project 3170-01, Final Report, August 1994, McKubre et al.

◆ ◆ ◆

Patent: GB 2,282,708 B; Electrical Motor-generator; Harold Aspden, Robert G. Adams; appl. 30 Sept. 1993; issued 6 Nov. 1996. 17 claims. (pp 70-75)

Abstract: This invention relates to a form of electric motor which serves a generating function in that the machine can act regeneratively to develop output electrical power or can generate mechanical drive torque with unusually high efficiency in relation to electrical power input. The field of invention is that of switched reluctance motors, meaning machines which have salient poles and operate by virtue of the mutual magnetic attraction and/or repulsion as between magnetized poles. The invention particularly concerns a form of reluctance motor which incorporates permanent magnets to establish magnetic polarization.

◆ ◆ ◆

Patent: US 5,590,031; System for Converting Electromagnetic Radiation Energy to Electrical Energy; Franklin B. Mead, Jr., Jack Nachamkin; appl. 27 July 1994; issue 31 Dec. 1996. 14 claims, 8 drawing sheets. (pp 29-34)

Abstract: A system is disclosed for converting high frequency zero-point electromagnetic radiation energy to electrical energy. The system includes a pair of dielectric structures which are positioned proximal to each other and which receive incident zero-point electromagnetic radiation. The volumetric sizes of the structures are selected so that they resonate at a frequency of the incident radiation. The volumetric sizes of the structures are also slightly different so that the secondary radiation emitted therefrom at resonance, interfere with each other producing a beat frequency radiation which is at a much lower frequency than that of the incident radiation and which is amenable to conversion to electrical energy. An antenna receives the beat frequency radiation. The beat frequency radiation from the antenna is transmitted to a converter via a conductor or waveguide and converted to electrical energy having a desired voltage and waveform.

Effectiveness is the foundation of success, efficiency is a minimum condition for survival after success has been achieved.

Efficiency is doing things right.

Effectiveness is doing the right things.

(P.F. Drucker)

LETTERS

to the Editor & Others

LETTER FROM HAL PUTHOFF

With Arthur C. Clarke as our press agent, who could ask for more? His sequel to 2001 and 2010 (both books and movies) has just come out as a book: 3001: The Final Odyssey. A feature in this book is an inertia-canceling drive known as the **SHARP Drive**. **SHARP** standing for "Sakharov, Haisch, Alfonso, Rueda, and Puthoff." In his end notes he explains that he thinks our paper on inertia will be considered a landmark paper, and in any case he has made it so for his novel. So at least we are making it into a minor myth of our day, even if we don't know how to build one yet!

Best regards, /s/ Hal Puthoff

[The paper is B. Haisch, A. Rueda, and E. Puthoff, "Inertia as a Zero-Point Field Lorentz Force," *Phys Review A*, Feb 1994. -Ed.]

LETTER FROM BILL RAMSAY

The brief "article" is about the old "Floating Magnet" trick which, for some reason, I've not seen written up. So I did! Maybe this will be of interest to some of your technical readers? And give them a chance to actually do some "hands-on" research? (Copies sent to other publications include *Nexus*. **Printed in this issue of NEN.**)

Thanks for continuing to publish Greg Hodowanec's work. In the 7 + years I've known him I continue to be impressed by his thoroughness and reasoning! A rare combination of talents. Not the least of which is his always present desire and willingness to share. A true scientist indeed! I especially appreciate this in this era of "Internet jumble" where if it weren't for "mis" and "dis" the "information explosion" might be over!

Take care and have fun!
Bill Ramsay

LETTER FROM MILLENNIUM TWAIN

Thank you for your letter, and the announcement of our Workshop in *NEN*. Ken Shoulders called me and said he may want to participate.

Please do go ahead and announce it in the upcoming *NEN* and *JNE*. At present only the date is missing.

We are going to wait until we get more responses before finalizing a date. I want to try to accommodate the schedules of our most active participants. [Date was finalized as 18-20 July 1997, see 'Meetings.']

Do you have references for me on the Superluminal Torsion Fields? I am possibly the first to show their origin in the superluminal twist structure of the proton.

MORE THOUGHTS FROM MILLENNIUM TWAIN

[Editor's note: The following are excerpts from a letter written by Millennium Twain in reviewing a book to be published. Phrases within " " are from the book being reviewed.]

Mathematics is almost always used to spread lies, almost never to discover or reveal truth. It's authority then is not based on wisdom or deserved respect, it is based on the fearsome power of government.

Quarks are not, and have never been fundamental or building blocks of matter. They are created by the input of fantastic sums of energy, from the collisions of protons. They are products **of** protons, built **from** protons. Protons are not built **from** quarks. Quarks are transient **trash** produced in a collision.

Energy and matter are not fundamental, only small subsets of the basic stuff of nature/experience also known as light, or inertia or aether. Also known as EMG waves incorporating basic experience -- spin and propagation. Space, an artifact and concept but not an experience, does not exist. What exists are waves and particles, with spins and propagations which create an illusion of 'space'. Ditto 'time', another metric (not 'entity') comparing events, objects and experiences.

"Clarifying the models of the photon and electron." **No** models of either exist, in covert physics, so we cannot clarify them. We must therefore **create** them.

"The energy of the electron at the moment of its remaining in the first orbit of this atom is equal to 13.6 electron-volts." No. This is not the energy of the electron. This is not the energy of the proton (nucleus). It is the energy of the standing lightwave shared **between** them. Therefore, it must be a harmonic of the frequencies of **both** the proton and the electron. Therefore, any conclusions about the frequency of the electron, will also yield conclusions about the frequency of the proton.

LETTER TO THE EDITOR OF FUSION TECHNOLOGY

Excerpts from Letter

"On an Experimental Curiosity That If Undetected May Lead to Erroneous Far-Reaching Conclusions," *Fusion Tech.*, vol 31, no 2, Mar. 1997, pp 248-250, 4 refs, 2 figs.

... As in the previous studies, we compared certain radio-chemical properties of a mixture of chemicals before and after a chemical reaction (burning). Under discussion here is a peak that we observed in the range of 412 keV in the gamma spectrum of one of our burned samples after neutron activating it for 3 min. at 1 kW.

... To verify further the forgoing conclusion, we again neutron activated the samples before burning and determined that in the gamma spectrum taken immediately after irradiation, all three peaks (photopeak at 1434.1 keV, single escape peak at 923.1 keV, and double escape peak at 412.1 keV) due to vanadium were indeed present. Come 15 minutes after the irradiation, peaks disappeared. In this way, our initial observation of the "unusual" event found its explanation.

... We encourage all our colleagues who have done neutron activation of such samples and claim to have seen similar transmutations, but still claim their reality, to check again their gamma spectra and note whether their findings can have a trivial explanation similar to ours.

Vesselin C. Noninski, Judith L. Ciottone, Paul J. White, Fitchburg St. Col., Dept. Chem., Fitchburg, MA.

Meetings

INTERNATIONAL SYMPOSIUM ON NEW ENERGY

Memorial Day Weekend
May 23-26, 1997

Marriott Denver Tech Center

Call for information on presenting papers.

Registration fees: \$180 until May 22, \$200 at the door.
\$75/day, \$45/half-day.

216 Commerce Drive #4, Fort Collins, CO 80524
Phone 970-482-3731, Fax 970-482-3120
Website: www.acad4newenergy.com
Cust. Service: csrep@acad4newenergy.com

Marriott Denver Tech Center: Reservations
800-228-9290 or 303-779-1100

Intersociety Energy Conversion Engineering Conference

IECEC - 1997

July 27 to August 1, 1997

Hilton Hawaiian Village, Honolulu, HI

Abstracts in the area of "Innovative Concepts – Cold Fusion" and other Advanced Energy Conversion Technology areas were accepted until January 17, 1997. Draft papers due March 1997, and Final papers are due in May 1997.

More info. available at: [<busassist@aol.com>](mailto:busassist@aol.com)

CONFERENCE ON THE FUNDAMENTAL STRUCTURE AND MECHANISMS OF THE UNIVERSE

May 30 - June 1, 1997

at the Gold Rush Country, about 2 hrs. from San Francisco in the foothills of the Sierras.

"The conference will be a search for a common structure that will clearly explain the behavior of electromagnetism and matter, forces, space, time, entropy, at a fundamental level, and remove the wave particle duality, and should allow physics to move forward again." Organized by the Alexandria Foundation.

For further details, refer to web site:
www.kcbbs.gen.nz/users/rtomes/conf-l.htm

– *Call for Papers* –

ÆTHER!

First Global Workshop on the Nature and Structure
of the Æther

July 18-20, 1997

Stanford University, Silicon Valley, CA

Zero Point Energy? Space-time Continuum?
Generalized Mach Principle? Faraday's Vibrating
Magnetic Field Lines? Electromagnetodynamic
Particle Sea? Post-Relativistic Velocity Plenum?
Unified Inertial Vortex Field? Action-at-a-Distance?
Æther!

As this is a global, cooperative workshop, attendance is not required. Papers, references and resources of the participants will be shared in advance. Pre-workshop collaboration on definitions, language, theory, and experiment will take place via telephone, mail and internet. A dedicated WebPage to chronicle and post

the results will be created. A report will be released – Web and hardcopy.

A special emphasis will be placed on Visualization (illustration) of the Æther continuum, in its unbounded frequency plenum and multifaceted helical vortex topology.

This 3 day Workshop will be equal-participatory. The goal is to bring together all contacts, references, perspectives, theories and experiments; to find and refine the many unasked questions on the Æther structure, build real answers, and discover further questions. To advance all of our individual perspectives, and create a greater collective physical understanding and technical capability.

To participate, contact either:

Norm Silliman, 315 Betty Lane, 2nd floor, Pleasant Hill, CA, 94523-2808 phone 510-687-6557
Email <NLSilliman@aol.com> or <silliman@ccnet.com>
or
Millennium Twain, P.O. Box E, Menlo Park, CA 94026 phone 415-569-3299 or 408-885-1631

ICCF-7

**International Cold Fusion Forum
Vancouver, B.C., Canada
April 19-24, 1998**

With the maturation of the field, ICCF-7 seeks to attract a more diverse audience including additional scientists, research institutes, students, national funding agencies, commercial interests, journalists, and spouses. It is the objective of ICCF-7 to provide a productive international forum for communication and education.

Calendar:

June 1997: Local Organizing Committee call for 1-2 paragraph abstracts for sampling of potential presentations. Selection rules and evaluation criteria will be provided at this time.

September 1997: Official call for full, one-page abstracts. Final peer review process begins.

December 1997: Final notification to all presenters regarding the format of their presentation.

January 1998: Deadline for final abstracts to be published in ICCF-7 Program Manual and Website.

April 1998: Conference. All presenters must hand in their final papers during the conference for timely inclusion in the publication ICCF-7 Proceedings.

A different topic is planned for each day at ICCF-7. An invited presentation with summary review or global implications for the entire field will begin each day's topic, followed by five oral presentations on the topic. Afternoons will be entirely devoted to enhanced poster

sessions, which include a 3-5 minute oral preview and summary. A "Top Ten" poster presenters will be selected by the attendees, and each will conduct an expanded 15 minute presentation to the full audience on Thursday afternoon. Three evening workshops will also be held.

Topics include: Heat & Related Products, Nuclear Processes & Products, Materials & Innovative Approaches, and Theory & Nuclear Physics.

For more information or to get on mailing list, contact:

ICCF-7 c/o ENECO
391-B Chipeta Way, Salt Lake City, UT 84108 USA
Phone (801) 583-2000 Fax (801) 583-6245
jaeger@ENECO-USA.com

Commercial Column

SPOTLIGHT

JET Energy Technology, Inc.

E n e r g y

Technology

Our systems use a n o m a l o u s temperatures. develop excess to 400+%. The achieved with increased from

the generation of excess heat at low Such technology can heat in the range of 2 peak power levels these systems have 1989 (-20 Watts per cubic centimeter of palladium) to levels more than two orders of magnitude greater. The reactions occur only after successful loading of an active metal by an isotope of hydrogen.

JET Energy Technology electrodes, calorimeters, data acquisition boards, Phusors™ and software.

Several of our present products have passed preliminary developmental and quality control landmarks. This includes small light water nickel based generators (JET Energy Technology Phusor™ 101) with optional

secondary support structures. These can be contained within an accessory multiring calorimetric system capable of 10 milliwatt resolution, with simultaneous noise measurement. A 1998 release date is anticipated.

References – There are several papers published which describe some of our equipment and methods: "Consistency of the Biphasic Nature of Excess Enthalpy in Solid State Anomalous Phenomena with the Quasi-1 Dimensional Model of Isotope Loading into a Material," M. Swartz, *Fusion Technol.*, vol 31, pp 63-74, January 1997.

"Four Definitions of Power Ratio used to Describe Excess Enthalpy in Solid State Loading Systems," *J. New Energy*, vol 1, no 2 (1996), pp 54-59.

"Isotopic Fuel Loading Coupled to Reactions at an Electrode," M. Swartz, *Fusion Technol.*, vol 26, no 4T (1994), pp 74-77.

"Quasi-One-Dimensional Model of Electrochemical Loading of Isotopic Fuel into a Metal," M. Swartz, *Fusion Technol.*, vol 22, no 2 (1992), pp 296-300.

The following companies (listed alphabetically) are commercializing cold fusion or other enhanced energy devices: [Listings with your additional copy, or boxed, for small annual service fee.]

COMPANY: PRODUCT

American Pure Fusion Engineering and Supply: Warren Cooley, 1-800-789-7109 or 503-585-6746. Email to: Coolwar@aol.com

CAI, Inc., CAI has acquired rights to develop and produce a new-type of thermal power based on the controlled production of clean nuclear reactions from micro-miniature tokamaks (provided by nature). Contact through FIC, Voice 801-583-6232, Fax 801-583-2963.

Clustron Sciences Corp.: Contact: Ron Brightsen, 703-476-8731.

ENECO: is in the business of commercializing the exciting new field of low energy induced nuclear reactions in solids via patent licensing, joint-ventures, and co-operative research. ENECO, University of Utah Research Park, 391-B Chipeta Way, Salt Lake City, Utah 84108 USA. Contact Fred Jaeger, Voice 801-583-2000, Fax 801-583-6245. Email: jaeger@ENECO-USA.com

E-Quest Sciences: Contact Russ George, FAX 415-851-8489.

Fusion Information Center (FIC): Research and development of new energy systems. The world's most complete resource depository for cold fusion research information, as well as other new energy research including zero-point energy; space energy research; electronic, electromagnetic, and mechanical over unity devices and transmutation. We are the publishers for ***Fusion Facts, New Energy News***, and the ***Journal of New Energy***. Voice 801-583-6232, Fax 801-583-2963. Contact Hal Fox.

Holotec AG: Clean Energy Technology, contact André Waser, Gen. Mgr., Bireggstrasse 14, CH-6003, Luzern, Switzerland. Phone 011 41-41 360 4485, or Fax 011 41-41 360 4486.

Hydro Dynamics, Inc.: Rome, Georgia. Contact James Griggs, Voice 706-234-4111 Fax 706-234-0702.

JET Energy Technology, Inc.: Weston, MA. Contact Dr. Mitchell Swartz, Voice 617-237-3625. Fax 617-237-3625.

Labofex, Experimental and Applied Plasma Physics: Ontario, Canada. Contact Dr. Paulo N. Correa. Tel 905-660-1040 Fax 905-738-8427

Magnetic Power Inc.: Sebastopol, CA. Contact Mark Goldes, voice 707-829-9391, Fax 707-829-1002.

Nova Resources Group, Inc.: Denver, CO. Call Chip Ransford, Phone 303-433-5582.

UV Enhanced Ultrasound: Hong Kong. FAX 852-2338-3057.

"YUSMAR"- Scientific-Commercial Company: President: Dr. Yuri S. Potapov, 277012 Kishinev, Moldova. Phone and Fax 011-3732-233318.

Zenergy Corporation: 390 South Robins Way, Chandler, AZ 85225. Contact Reed Huish: 602-814-7865, Fax 602-821-0967, e-mail: info@zenergy.com

Note: The Fusion Information Center has been acting as an information source to many of these companies. We expect to augment our international service to provide contacts, information, and business opportunities to companies considering an entry into the enhanced energy market.

INFORMATION SOURCES

Academy for New Energy (ANE) 216 Commerce Drive, Ste. 4, Fort Collins, CO 80524. Tel. 970-482-3731

ANE Newsletter, quarterly publication of ANE, edited by Robert Emmerich.

Advanced Energy Network Newsletter, quarterly. Advanced Energy Network, P.O. Box 691, Rondebosch 7700 Capetown, Rep. South Africa.

Cold Fusion, monthly newsletter, edited by Wayne Green, 70 Route 202N, Petersborough, NH 03458.

Cold Fusion Times, quarterly newsletter published by Dr. Mitchell Swartz, P.O. Box 81135, Wellesley Hills MA 02181. Home Page : <http://world.std.com/~mica/cft.html>

Cycles, a R&D newsletter, published by Dieter Soegemeier, Editor, GPO Box 269, Brisbane, QLD.4001, Australia. Phone/Fax: +61 (0)7 3809 3257.

Electric Spacecraft Journal, quarterly, edited by Charles A. Yost, 73 Sunlight Drive, Leicester, NC 28748.

Electrifying Times, 3/year magazine. 63600 Deschutes Market Rd, Bend, OR 97701 541-388-1908, Fax 541-388-2750, E-mail <etimes@teleport.com> www.teleport.com/~etimes/

Fusion Facts has become a section in the *Journal of New Energy*.

Fusion Technology, Journal of the American Nuclear Society, edited by Dr. George Miley, 555 N. Kensington Ave., La Grange Park, IL 60525.

German Association of Vacuum Field Energy, Sekretariat Deutsche Verelignung für Schwerkraft-Feld-Energie, Kelkenstrasse 50, D-26121, Oldenburg, Germany. Dr. H.A. Neiper.

Infinite Energy, bi-monthly magazine. P.O. Box 2816, Concord, NH 03302-2816. Voice: 603-228-4516. Fax : 603-224-5975 E-mail 76570.2270@compuserve.com

Institute for New Energy (INE), organization to promote and help find funding for new energy research. Salt Lake City, Utah.

Visit our **Home Page**: www.padrak.com/ine/ which contains many important scientific papers and current reports on all areas of research. E-mail: ine@padrak.com Voice 801-583-6232, Fax 801-583-2963.

New Energy News monthly newsletter for INE, highlighting the research and development in the worldwide new energy arena. Edited by Hal Fox.

KeelyNet BBS - Jerry Decker, 214-324-3501

Internet: www.keelynet.com

E-mail: jdecker@keelynet.com

Planetary Association for Clean Energy Newsletter, quarterly, edited by Dr. Andrew Michrowski. 100 Bronson Ave, # 1001, Ottawa, Ontario K1R 6G8, Canada. Web page : <http://energie.keng.de/~pace>

Journal of New Energy, quarterly, presenting papers representing the new areas of energy research, leading-edge ideas in the development of new energy technology, and the theories behind them. Published by the Fusion Information Center, Inc. Editor: Hal Fox.

Space Energy Journal, quarterly, edited by Jim Kettner & Don Kelly, P.O. Box 1136, Clearwater, FL 34617-1136.

The above list of commercial and information sources will be growing. New listings will be added as information is received. Send information to *NEN*, P.O. Box 58639, Salt Lake City, UT, 84158.