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TAPPING SPACE ENERGY - HERE'S EVIDENCE

By Hal Fox, Editor

The experimental facts summarized in this article, which can be or have been replicated, attest to the existence of an all-pervading, energetic space. The author believes that the study and use of the following information can lead to a solution of the world's energy problems. Clean, inexpensive, and inexhaustible energy is demonstrably available. All or most of the following eight types of phenomena demonstrate the reality of space energy and man's ability to tap this inexhaustible energy.

1. NON-COLLAPSING HYDROGEN ATOM

If not excited (energized above its ground state), the electron orbits around the hydrogen nucleus at a distance (energetic level) called its ground state. In that "orbit" or "shell", the electron both receives and gives up minute quantities of energy but does not spiral into the nucleus. This jitter from the electron of a normal hydrogen can be observed with a high-quality spectroscope [1]. This effect was noted by Nobel laureate Willis Lamb. Were it not for space energy no atoms would be stable and matter and life as we know it would not exist.

2. THE NEWMAN EFFECT

If a very long copper wire is wound into a large multi-layered coil and intermittently connected to an electrical battery, the current flowing in the coil appears to be considerably larger than the current drain from the battery [2]. Newman presents numerous affidavits from engineers and scientists who have witnessed the ability of his machines to produce excess power. If his reports are correct, then the Newman Effect taps space energy.

3. SUPER-COOLED NIOBIUM TIN

When a niobium-tin alloy is immersed in liquid helium a strong magnet is formed. The magnet disappears when the alloy warms above a critical temperature. No electrical current nor other magnet is used to create this effect [3]. The existence of an energetic space provides a theoretical basis for this unusual phenomena.

4. ROTATING "N-MACHINES"

At least three machines, based in part on the 1831 experiments of Michael Faraday, have been fabricated and extensively tested and shown to produce over-unity power. "Over-unity" refers to the fact that the ratio of power produced to power input is over 1.0. In the case of the Tewari machine, 3,000 watts of power have been generated using about 1,000 watts input to the driving motor. DePalma (who formerly did his experimental work in the U.S.), Tewari (India), and Inomata (Japan) have built successful machines [4]. These machines obtain their **over-unity** power from space energy. [See also Dr. Aspden's report on p. 7]

5. COLD FUSION

Certain metal lattices catalyze nuclear reactions by proton (or deuteron) capture. These effects include the Pons-Fleischmann effect, the Mills-Bush-Eagleton effect, the Liaw-Liebert effect, the Kucherov-Karabut-Savvatimovæ effect, the Dufour effect, the Cravens effect, the Letts effect, and capillary cold fusion [5]. While most of these effects have been widely replicated, no theorist, that I know of, connects these effects to space energy. However, this author suggests that at least part of these effects are attributable to space energy.

6. HIGH-DENSITY CHARGE CLUSTERS

Ken Shoulders has shown how high-density charge clusters (clusters of millions to trillions of highly-dynamic electrons) can be used to produce over 30 times as much power as is required to produce the charge cluster [6]. The patent declares that the source of this power is thought to be the zero-point vacuum energy. This is the first U.S. patent (known to this author) that declares that the energy source is space energy.

7. ACCELERATING ELECTRONS IN CERMETS

Dr. Wingate Lambertson has shown that special types of ceramic metals (called cermets) can be used to accelerate electrons in such a manner that power can be tapped from the energetic space [7]. The complete details of this work will be announced as soon as the patent application is completed.

8. GRAVITY DROP TESTS

Don Kelly has demonstrated how certain types of electromagnets can, when energized, fall at a slower rate than the same system falls when not energized [8]. This experimental observation needs to be repeated by other scientists. If replicable, this experiment probably is best explained as an interaction of an accelerated electromagnetic system with space energy.

THE CASE FOR SPACE ENERGY

Some scientific training, especially in the past, rules out any of the above effects as being against, for example, the Law of Conservation of Energy. That statement has merit only if one rebels against the concept that space is energetic. The above discoveries demonstrate that space is energetic, therefore, tapping space energy does not violate the Law of Conservation of Energy anymore than tapping thermal energy to create electricity. Rather, the above evidence supports a **Law of Universal Energy**: Space and matter are everywhere permeated with energy which can only be tapped (measured, felt, sensed) from an accelerated frame of reference and this energy has equivalent to the magnitude

of at least 10^{90} grams of matter per cubic centimeter.

One of the purposes of this article is to provide much needed experimental information to theorists who are struggling to explain such seemingly diverse phenomena as **cold fusion** and **high-density charge clusters**. Please note that the above cited discoveries have been replicated from a few to hundreds of times except for items 7 and 8. Perhaps only item 1, the existence of spectrographic fine structure of the hydrogen atom, is currently well-known to and accepted by a large fraction of the scientific community.

It is a well-known phenomena in the progress of science that new discoveries are not readily accepted. This fact does not deny the validity of the evidence, because scientific advancement does not depend on voter acceptance. Scientific advancement stems from dissemination of information, scientific replication, and engineering application.

You, who are inventors, engineers, or scientists and are willing to work with new information about new discoveries, this article is dedicated to you. The author freely admits to having access to many other discoveries that can be added to this list **after sufficient replication**. *NEV* is dedicated to gathering additional evidence that the discoveries of other "fringe workers" demonstrate that they are tapping space energy and the Editor asks for your help in gathering further information. Meanwhile, this list should be considered sufficient evidence to encourage you in your work to harness space energy. Hopefully, together we can make sufficient progress so that investing entities will provide the much-needed development funds to make commercial products from these discoveries.

Two exceptionally good books that should be consulted are the new book by Peter and Neal Graneau [9], and the newest book by Stefan Marinov [10]. An important publication is now being completed by Harold Aspden which is expected to be an excellent tutorial on space energy.

Note: The author takes full responsibility for any errors in this article, either in selection of topics or in including topics that may be shown to be unrelated. The author believes that these topics that are currently not covered in modern college textbooks will soon be included in scientific curricula. For those who desire to be scientific leaders, these phenomena merit your serious review.

REFERENCES

[1] Harold E. Puthoff, "Quantum Fluctuations of Empty Space: A New Rosetta Stone of Physics," *Frontier*, Fall/Winter, 1991, Vol 2, No 2, pp 19ff, 8 refs.

[2] Joseph Westley Newman, The Energy Machine of Joseph Newman, c1982, published and distributed by J.W. Newman, Lucedale, MS 39452, illus.

[3] Work performed at the Avco-Everett Labs, Everett, Massachusetts. This facility is now a part of Textron Defense Systems.

[4] See the following three articles: Bruce DePalma, "Where Electrical Science Went Wrong," *New Energy News*, vol. 1, no. 5, Sept. 1993, pg 1-4, 5 figs, 3 refs.; Paramahansa Tewari, "Generation of Cosmic Energy and Matter from Absolute Space (Vacuum)," *Proceedings of International Symposium on New Energy*, Maury Albertson, Ed., Denver, Colorado, April 16-18, 1993, pp 291-303, 6 figs, 8 refs.; and Shiuji Inomata & Yoshiyuki Mita, "Small Neodymium Magnet Twin N-Machine," *Proceedings of 28th Intersociety Energy Conversion Engineering Conference*, August 8-13, 1993, Atlanta, Georgia, pp 2.347-2.352, 11 figs, 2 refs.

[5] Hal Fox, "Cold Nuclear Fusion & Enhanced Energy Devices: A Progress Report," Paper presented at the Fourth International Conference on Cold Fusion and accepted for publication in the proceedings, Maui, Hawaii, December 6-9, 1993.

[6] Kenneth R. Shoulders, "Energy Conversion Using High Charge Density," U.S. Patent 5,018,180, May 21, 1991, 80 pages, 97 figs, 42 claims.

[7] Personal Communication with Dr. Wingate Lambertson, Holmes Beach, Florida, June 1, 1993, November 29, 1993.

[8] Donald A. Kelly, "Gravity Drop Experiments," Unpublished manuscript, 13 pages, 5 tables, 10 references.

HOW IS ELECTRICAL ENERGY REALLY TRANSFERRED?

A book review by Win Lambertson, Ph.D.

Newton versus Einstein - How Matter Interacts with Matter, by Peter Graneau and Neal Graneau, Carlton Press; 219 pages, \$14.95.

The impossible has been found to be conceivable when two well-qualified physicists write an entire book describing the evolution of our understanding about electricity without the use of mathematical formulas. The authors trace electromagnetism from Aristotle into our present knowledge of quantum mechanics and compare theories of the giants in the field. Matter can interact with other matter in two ways - through contact action or far-action - and this treatise clarifies ones' understanding of far-action. It will be a valuable addition to anyone's library who is concerned about the field of free energy.

Far-action is also known as action at a distance, distant action and field action. The science of these actions is called electrodynamics and examples are: inertia, magnetism, gravitation and electrical force action. The Newtonian theories which were further developed by Coulomb, Ampere and Neuman are favored by the authors over that of Einstein because they agree with experimental results.

The authors are unusual in that they are a father-and-son team and are both experimental physicists. Peter, the father, spent the major part of his career at M.I.T. and Neal, his son, is a researcher at Oxford. I have been involved in experimental free energy research for 20 years and over that time have read at least one paper a year about how Einstein is wrong and Newton is correct in far-action theory. The problem is that Einstein did away with the ether concept which

was used to explain far-action. Richard Feynman came up with the concept of photons moving back and forth to explain the field effect of electrons and called it electrodynamics. I am now able to visualize little arrows in each direction and call them photons, gravitons and magnetons.

This concept creates another dilemma as photons are not permitted to move faster than the speed of light. Bell confirmed the existence of distant action between photons experimentally. One photon communicates to a second photon instantaneously. How does the second photon know what the first photon is doing and know it faster than the speed of light?

in about 1985 Neal replicated and improved upon a pendulum experiment devised by Athens physics professor Panaiotis T. Pappas. He did this in collaboration with his father in a summer's work at M.I.T. and found: "*the energy stipulated by relativity theory was more like 10,000 times as large as the energy which actually collided with the pendulum. This amply confirmed Pappas findings.*"

This is all they tell us. In the free energy field we would call that an output/input ratio of 10,000 and do our best to find a way of expanding upon that knowledge. When the research directors at M.I.T. and Oxford read this book, will they not wonder what then happened? I do.

Editorial

HAVE YOU QUIT BEATING THE SCIENTISTS?

By Hal Fox, Editor

The title is like the question, "Have you stopped beating your wife?" No matter what you answer, you appear to be culpable. We have read several articles and letters recently, from persons whom we respect for their good works, that berate scientists, the "science camp", the peer-review system, and even cast aspersions on the

"scientific method." Our readers should know that most of the world's scientists (but not all) are not a part of a "big science game" that is played to frustrate inventors. Most scientists have neither the time nor the inclination to keep up with all of the new developments and inventions; scientist are indeed **specialists**. However, most of them, in their fields are honest, open-minded, and willing to learn more about **discoveries in their own fields of science**. As a group, they tend to get their information from peer-reviewed journals. There are those inventors and discoverers who have participated in being **overly criticism** of some scientists. However, in most cases there were reasons that new discoveries were not quickly adopted by the scientific community. People like Tesla, Henry Morey, and many others (especially the entrepreneurial inventors) had or have a great propensity to secrecy. Many, like Tesla, liked to proclaim enormous benefits for their latest discoveries, even before they themselves had worked out all of the engineering details.

We must remember that most scientists have spent many hours during their careers meeting with hopeful inventors that had made some type of discovery for which they wanted either scientific affirmation or evaluation. Usually, the inventors were unable to talk the language (and seldom, the mathematics) of science. In most cases the scientist could determine, from his/her scientific training or experience, that what was being presented was obviously incorrect or that it would take a lot of time to make a determination of the reality of the invention or discovery. **Therefore, most scientists tend to avoid these sessions with inventors.** They would sooner spend their time talking, in a mutually understandable language, with other scientists.

If you are one of the unheralded inventors who have had bad experience with scientists or with the peer-review system, here are some ideas. The scientist usually is very well qualified in a limited specialized field. He expects himself and you, the inventor, to observe the principles of science. As a quick review, these principles are:
1. Science does not deal with the supernatural to explain observations.

2. Experimental data leads to the development of hypotheses, models, ideas for new experiments.
3. The new experiments are performed to gather new data and **not to justify the scientist's nor the inventor's latest hypothesis.**
4. New data should result in recycling through modified hypotheses, new experiments, and newer data.
5. As the experiments and hypotheses mature, scientists should come up with models, theories, and mathematical descriptions (a shorthand way of communicating scientific reality).
6. Highly matured, replicated, and accepted new science can become a new **Scientific Law.** However, there are not many new laws.

We wish to remind our readers: A **scientific fact** is the close agreement among a series of observations of the same phenomena. A single event may be an historic fact, but not a scientific fact. Scientists like to deal with scientific facts. The observations of a single inventor may not qualify as a scientific fact.

Good scientists and good inventors are extremely careful to keep journals on all of the parameters that are involved in or that may affect an experiment. These include time, temperature, weather (not in all cases), equipment used (including attention to calibration procedures), and, **most important**, careful documentation of the **measured** results. If you want to communicate or share your discoveries with a scientist you should be able to talk his language and know how to follow scientific procedures.

In your interest in new energy sources, remember that some of the current crop of scientists are the ones that are defining and publishing the nature of space energy (zero-point energy), and the fact it can be tapped. Therefore, the peer-reviewed scientific literature now accepts that space energy can be tapped. See especially Code & Puthoff ref. [1]. Dr. Hal Puthoff has worked diligently within the scientific community to develop a better understanding for and the acceptance of the reality of space energy.

Even if you have been frustrated by one or more members of the scientific community, remember

that it is members of this scientific community who have provided the following information:

1. Space is highly energetic. Thousands of watts per cubic centimeter [2].
2. Space energy can be tapped [1].
3. The type of energy in space cannot be measured (assessed, gauged, felt, tapped) except from an accelerated frame of reference [2].

This above collection of scientific teachings should be extremely important to an inventor or a scientist. Note that this scientific information, if you find and read the peer-reviewed references, informs us that the density of space energy is equivalent to 10^{94} grams of matter turned into energy (by Einstein's famous formula of $E = mc^2$) for every cubic centimeter of any space volume. You will also learn that the energy of space **can be tapped.** Of great importance is the scientific finding that space energy can only be **tapped from an accelerated frame of reference.**

For example, if you dropped a device from a height, the device will accelerate as it falls and, conceptually, if properly made could tap space energy. Rotational motion is constantly accelerated motion (always changing directions). Therefore, it would be wise to seek out methods of tapping space energy using some type of device in which rotation is occurring. As readers of this newsletter already know, the Indian engineer P. Tewari [3], the Japanese scientist S. Inomata [4], and the former work of Bruce DePalma [5] all used rotating machines to obtain excess energy. The EVs of Kenneth Shoulders [6] are most likely small, highly dynamic toroids consisting of millions or billions of electrons. These highly dynamic **high-density charge clusters also tap space energy.** This scientific knowledge should allow any inventor or scientist to make much more progress in developing devices that tap the energy of space.

New Energy News is dedicated to reviews of current work (including the interpretation of peer-reviewed literature), sharing of information about new energy systems, and building a two-way bridge between the science community and the inventors or engineers working on energy systems. One group of our readers are involved in the development of an on-board battery

charger for electric automobiles. As this work progresses, and is properly protected, we will be among the first to report this and other new energy developments to our readers. In return, we want to hear from you about the latest new energy developments.

REFERENCES

- [1] Code & Puthoff, "Extracting energy and heat from the vacuum" *Physical Review E*, Vol. 48, No. 2, August 1993, pp 1562-1565.
- [2] Harold E. Puthoff, "The Energetic Vacuum: Implications for Energy Research.", *Speculations in Science and Technology*, 1990, Vol 13, No 4, page 247.
- [3] Paramahansa Tewari, "Generation of Cosmic Energy and Matter from Absolute Space (Vacuum)," *Proceedings of International Symposium on New Energy*, Maury Albertson, Ed., Denver, Colorado, April 16-18, 1993, pp 291-303, 6 figs, 8 refs.
- [4] Shuji Inomata, "Letter from Shuji Inomata with Conceptual Design of JPI-II Test Machine," *New Energy News*, vol 1, no 7, pp 7-8, 2 tables, 3 figs.
- [5] Bruce DePalma, "Where Electrical Science Went Wrong," *New Energy News*, vol. 1, no. 5, Sept. 1993, pp 1-4, 5 figs, 3 refs. Also, "On the Nature of Electrical Induction", *New Energy News*, vol 1, no 6, pp 2-8, 5 figs, 14 refs.
- [6] Kenneth R. Shoulders, "Energy Conversion Using High Charge Density," U.S. Patent 5,018,180, May 21, 1991, 80 pages, 97 figs, 42 claims.

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Fusion Briefings

ENECO ACQUIRES LICENSE TO PONS-FLEISCHMANN PATENT APPLICATIONS

The University of Utah and ENECO, Inc. announced yesterday that ENECO, Inc. (a Utah corporation, formerly Future Energy Applied Technology) has received exclusive worldwide licensing rights to the University's cold fusion technology developed by Drs. B. Stanley Pons and Martin Fleischmann.

Fred Jaeger, President of ENECO, returned Sunday, November 29, 1993, from a meeting with Drs. Pons and Fleischmann where these famous cold fusion scientists approved the agreement between the University of Utah and ENECO.

Fred Jaeger said, "Presently, the value of the worldwide exclusive license to the Pons-Fleischmann patent applications is entirely unknown. As a private company, we understand and are well suited to assume the consequences of the risk-reward dynamics involved with this type of acquisition. The agreement is structured so that ENECO will save the University substantial on-going patent expenses if the science does not become commercially viable. However, commercial applications will provide the University with generous royalty income for the life of the patents."

UNITING COLD FUSION?

Robert T. Bush (Dept. Phys., California State Polytechnic Univ., Pomona, California), "Will the Light Water Excess Heat Effect Lead to a Unification with Cold Fusion?" *21st Century Science and Technology*, vol 6, no 3, fall 1993, pp 75-79, 10 refs, 2 figs.

SUMMARY

Dr. Bush has hypothesized a unification of the heavy water and light water excess heat effects as essentially two sides of a coin, with cold nuclear reactions within, or at the surface of, a metal lattice constituting the common coin. In experiments that further explored the light water work begun by Randell Mills in 1990, Dr. Bush and his colleague Dr. Robert Eagleton have noted higher levels of excess heat production than in heavy water experiments. This has proven true for most light water researchers, Bush states. Some light water critics contend that this result is due to normal amounts of D_2O in light water.

In a recent experiment "two identical light water electrolytic cells were run in series. The only difference between them was that the electrolyte of one employed ordinary light water and that of the other employed de-deuterated light water (from Aldrich), which had only 1 percent of the D_2O contamination; that is, 1 out of every 555,000 molecules was D_2O . The fact that the de-deuterated water cell evidenced essentially the same average excess power within the limits of error ($\pm 10\%$) as the ordinary light water cell over a significant period of time is strong evidence against the contamination hypothesis. Without a doubt the light water excess heat effect involves protons, while the heavy water excess heat effect involves deuterons."

...According to Dr. Bush's "Cold Alkali Fusion" hypothesis, "the light and heavy water excess heat effects are associated with a metal-lattice-catalyzed cold fusion reaction in which the nucleus of an alkali atom (hydrogen, sodium, potassium, rubidium, cesium,...) accepts a proton to achieve increased nuclear stability. The excess energy can be calculated from Einstein's mass-energy relation and the Law of Conservation of Mass and Energy applied to the reaction."

"It appears that we are seeing an important unification of the light water and heavy water work that vastly expands the earlier horizons of cold fusion. It would be an unbelievable surprise in itself if there are no additional major surprises left in this enterprise. And, finally, in view of the history of science and technology, the odds that practical applications for the betterment of

mankind will follow from this new science strike this observer as overwhelming."

BLINDED BY TAX DOLLARS

By Hal Fox, Editor

In the November 1993 issue of *American Nuclear Society News* the following exchange appeared in "The Speakers Corner":

"**Question:** What is the status of cold fusion?"

"**Answer:** Many scientists feel that cold nuclear fusion is a dead issue, even while hoping that this is not true. A small portion of the nuclear industry is still investigating the claims and counterclaims (mainly a group of Japanese companies which have pooled their resources). Meanwhile, work proceeds slowly, but steadily, toward "hot" nuclear fusion . . ."

Fusion Facts recently made a count of the number of articles printed in journals (usually peer-reviewed) and papers presented at meetings of professional societies and symposia. As of midsummer 1993 there were 313 articles/papers reporting positive results on obtaining nuclear byproducts from cold fusion experiments. It is evident that otherwise bright scientists have been blinded by the \$500 million being spent on hot fusion and cannot see through their Tokamaks as to what is going on in their own profession. This poor editorial performance stems from the American **Nuclear Society** -- one of the premier organizations who should be the most aware of the new discoveries in nuclear science. The page headline above "The Speakers Corner" reads **Public Information/Education!**

It is recommended that the members of the American Nuclear Society request the resignation of their editorial staff and replace them with persons who can read the technical literature and report honestly and professionally to their members. We hasten to report that many professional members of the American Nuclear Society are aware of the work going on in cold fusion in over 30 countries, including the U.S. Several ANS members are actively involved with laboratories and/or organizations which are advancing the development of the new science of cold fusion.

JAPANESE COLD FUSION VISION

Courtesy of Jed Rothwell

Oyou Butsuri (JJAP) Articles

People interested in cold fusion who read Japanese will definitely want to see six articles in the July 1993 issue of the *Oyou Butsuri*, vol 62, no 7, (Journal of the Japanese Society of Applied Physics). This is one of the most authoritative, respected physics journals in Japan.

The articles are grouped together in the table of contents under the heading "Has Cold Fusion Been Verified?"

*"Production of Neutron, Tritium, and Excess Heat," Akito Takahashi.

*"Emission of Energetic Charged Particles," Jirohata Kasagi and Keizo Ishii

*"Helium-4 Production and its Correlation with Heat Evolution," by Eichi Yamaguchi and Takashi Nishioka.

"Critical Points for the Evaluation of Measured Results on Cold Fusion," [the Japanese adds: "Evidence of Nuclear Reactions"], Tokushi Shibata (Inst. for Nuclear Study, Univ. of Tokyo).

"Key Points in the Evaluation of Experimental Results (the Excess Heat)," Michio Enyo (Catalysis Research Center, Hokkaido Univ.).

"Next Step to Promote Cold Fusion Researches," Hideo Ikegami (NIFS).

* abstracts in November issue of *Fusion Facts*.

Rotating Space-Energy Machines

FREE ENERGY - THE WAY FORWARD

by Dr. Harold Aspden, England

The publicity launched by the Australian magazine Nexus in introducing the "Free Energy Machine" developed by Robert G. Adams has triggered several independent researchers in several countries into replicating and confirming that we have a demonstrable technology that operates in the 'over-unity' mode.

This author has developed from the U.K. a working association with Robert Adams in New Zealand and we will together be promoting both the science and the technology underlying this landmark invention.

In view of the excitement surrounding the Adams Pulsed Electric Generator, an invited audience participated in a briefing meeting held on 14th September 1993 at the Reef Restaurant in Whakatane, New Zealand. The enthusiastic confirmation resulted in media publicity, one newspaper showing a photograph of Adams and the working machine that he had demonstrated. The article was headed 'SubAtomic Energy', and ended with the announcement: "*Two working generators will be on display at next week's Spring Show.*"

On the first day of the show, October 1st 1993, a further newspaper article reported that a Brisbane man, Bill McMurthy, had built an Adams machine based on details in the Nexus publication and confirmed the over-unity operation. A photograph of McMurthy with his machine was prominent in the article, where one reads:

"Mr. McMurthy said there were a lot of people in the world today claiming to have invented motors of all descriptions. "I have followed the work of various people in the past 10 years or so, and I've attempted to reproduce their work," he said, "Quite often it is in error or quite fraudulent - they are writing fictional stories."

After explaining his decision to build the Adams motor McMurthy then said:

"I have had remarkable results. All of Bob's claims have been proven to me in that the motor does exactly what he says."

The article ended with the words: "*Mr. McMurthy's model along with three developed by Mr. Adams, will be on display at the Whakatane Agricultural and Pastoral Show today and Saturday. Included will be one demonstrating actual work.*" "*The Motor will be powering a motorized saw.*"

Robert Adams reports that the demonstration (1-2 October 1993) was a success and was witnessed by hundreds of people. Pieces of wood were

sawn by a machine having a power input of 22 watts!

Robert Adams will also be working with Bill McMurthy in developing production versions of the motor, well recognizing that the existing machine aims at proving a principle, namely that the over-unity conversion of electricity into mechanical power is possible, notwithstanding the energy laws of orthodox science.

This author, now as a co-inventor with Robert Adams, has expedited the filing of a patent application covering such a potential development, and this was lodged at the U.K. Patent Office on September 30th 1993, one day ahead of that Whakatane Show.

It is our intention, in view of our desire to see this technology advance for the world's benefit and, in the spirit of 'Power to the People' (Nexus, December '92-January '93 issue), to be more open about disclosing developments than is usual in a commercial venture. In return, we hope to engender cooperation and a positive, rather than a hostile and negative reaction from the electrical industry that will be taking this new technology forward. We expect, of course, to encounter reaction and hostility from an academic establishment that has stood firmly opposed to the concept of 'free energy' and now find themselves on quaking foundations.

In this regard, this report will open the door on a scientific question that emerges from the excitement of the Adams machine publicity. As may be expected, Adams was inundated by many people expressing interest and, in communication to this writer, he said:

"I have read of other inventors with free energy devices experiencing unexplained phenomena - some of these strange phenomena that take place appear not to register correctly with established measurements. (Food for thought!) There was a recent occasion when I received a report of one person who replicated my machine and he reported, upon moving my machine from one locality to another its efficiency varied but remained over-unity. Unfortunately I did not record who this fellow was - Nexus may possibly

know. This came to my knowledge approximately 6 months or so ago. At this stage, primarily because I have been so busy out of the lab, I have not had time to give this phenomenon the attention it deserves and so have not yet been able to verify this activity. This would be an interesting aspect to keep an eye out for in future development."

So, here is a challenge: We have to know what scientific reason there can be for this anomaly. Also, this writer hopes that, wherever this report is published, it will come to the attention of that person who contacted Robert Adams and revealed that news about locality dependence. In that event that person is requested to contact this author.

Technologists in industry would (like Bill McMurthy and others who have replicated the Adams machine) rather build a motor and verify that it works, than worry unduly about the underlying science. Those of a more academic mind have had their day ridiculing the claims concerning cold fusion and now we wait for the case to be decided by those funding that technology. These academicians can either see the Adams motor claims as an opportunity to probe the free energy potential of space itself and research the curious anisotropy effect suggested, or they can try to laugh the proposals out of court and so create prejudice which makes it difficult to find funding or secure patent cover.

Therefore, the comments below should interest all readers:

The source of the 'free energy' in the Adams machine is the sub-atomic vacuum spins that activate Planck's quantum of action, the 'empty space' scenario that tells energy how to package itself in electromagnetic units labelled by different frequencies.

There can be no doubt whatsoever on this point and academics cannot deny this assertion. They have no established explanation for the origin of the Planck quantum of action and cannot explain why it is that atoms, and especially atoms in a ferromagnetic material, have the same quantum properties, whether in Australia, USA or England

or, for that matter, whether on Earth or on the Moon.

The academicians can only question how it can be that we can expect to get something for nothing in energy terms, when their 'experience' tells them otherwise. This author has pointed out repeatedly that the onset of the state of ferromagnetism as a piece of iron cools does take energy from the space background, proved simply by the fact that the heat released by normal cooling is augmented for some mysterious reason at the transition -- there being no change of crystal structure at that transition.

In theorizing about this and about the energy responses and the subtle structural properties of the vacuum itself, which in fact behaves much as the fluid crystal activation by which numbers are displayed in a pocket computer, this author was inevitably challenged by academics who said that the vacuum had no inherent directional properties.

What they meant was that the physics they had been taught did not show evidence of any preferred direction in space. To understand why this is relevant, suppose the vacuum has a preferred spin direction. Then the reaction of whatever it is about electrons in atoms, as they respond in their spin-coupling with the Planck mediator in space, is possibly dependent upon orientation of the body affected. In a ferromagnet there is very good reason to believe that the axes of magnetization in different domains and at different moments are directed in a spread of directions. Therefore, one could understand why the local vacuum might have a preferred field direction and yet not reveal this property in our experiments. On the other hand, if such a preferred direction were to be sensed by scientists researching this question, then that must reinforce the vacuum energy proposition and help us to better understand why the Adams motor really works.

It was on 28th April 1993 that Dr. D.M. Eagles, with whom I had collaborated over twenty years ago in developing aether theory, unexpectedly contacted me to advise that Russian researchers had reported the 'Experimental Observation of Space Magnetic Anisotropy' (Baurov, Klimenko

and Novikov, Physics Letters A, 162, pp.32-34; 1992).

A magnetically responsive test specimen located inside a superconducting electromagnetic solenoid was subjected to forces which varied with time of daily rotation and rotation about the sun. This effect is not supposed to be possible, because it lies outside the logic relied upon by so many academic scientists who subscribe to relativistic teachings. Yet, here were the Russians in Moscow showing the world that, after all, the space we see as a vacuum has an intrinsic directional property connected with magnetism.

This author's writings have for many years propounded the case that the vacuum energy interaction was sensitive to direction of a spin reaction in relation to a preferred direction in space. What is involved is the strength of induced magnetic fields in spinning rotors that are of metal and so are electrically conductive. The direction of rotation and the orientation of the spin axis of the machine in relation to a space axis and the Earth's magnetic axis are parameters than can affect the interaction between space energy and the machine.

This may explain why some homopolar machine experiments, the so-called N-machines, are said to work over-unity and others have difficulty verifying such claims. It may simply be a question of orientation, time of day, or location.

Having regard to this fact and the developing research interest in the feasibility of the N-machine, this author did wonder whether the Adams machine could possibly be sensitive to orientation and this was **before hearing from him on the 16th October 1993 that someone had actually discovered that relocation of an Adams-type motor altered operational efficiency.**

Indeed, in wondering how to propose to Robert Adams how the properties of his machine might be researched and lead to something patentable, the author took the bold step of gambling on filing a U.K. patent application dated July 19th 1993 addressing the solution to this orientation problem in a stationary generator.

From a practical viewpoint and concerning a mobile motor application, however, given a possible attitude-sensitivity of an Adams-type machine, the use of multiple pole magnets with different orientations would suffice and, indeed, the specific Adams machine demonstrated at the Whakatane Spring Show in New Zealand may well be of the right rotor design to avoid such problems.

These, therefore, are exciting issues to explore as the Adams motor technology progresses and it is, indeed, quite a coincidence to find that someone somewhere has discovered experimentally an efficiency dependence that bears so closely upon the conjecture suggested by the author's aether theory.

As more and more people now confirm the over-unity operability of the Adams-type machine, it is hoped that they will explore this possibility that the over-unity quality can be dependent upon where the machine is located and how it is orientated relative to the compass bearings and cosmological axes.

The author wishes to hear from any reader confirming the latter phenomenon, thereby to share information as to underlying scientific fundamentals and, to that end, the author will disclose to such persons on a nonconfidential, private basis the reasoning fully documented in the author's U.K. Patent Application 9.314,939 of 10 July 1993, and prior to its eventual general publication.

Space-Energy Miscellaneous

HEAT AND ENERGY FROM VACUUM

Daniel C. Cole (IBM Corp., Essex Junction, VT) and Harold E. Puthoff (Inst. for Adv. Studies at Austin, TX), "Extracting Energy and Heat from the Vacuum," *Physical Rev. E*, vol 48, no 2, Aug. 1993, pp 1562-1565, 9 refs, 2 figs.

AUTHOR'S ABSTRACT

Relatively recent proposals have been made in the literature for extracting energy and heat from electromagnetic zero-point radiation via the use of the Casimir force. The basic thermodynamics involved in these proposals is analyzed and clarified here, with the conclusion that, yes, in principle, these proposals are correct. Technological considerations for actual application and use are not examined here, however.

EXTRACTING ENERGY AND HEAT FROM THE VACUUM

By Dr. Harold Puthoff

Quantum theory tells us that empty space is not truly empty, but rather contains an enormous amount of untapped electromagnetic energy known as the *zero-point energy*, or ZPE. (The adjective "zero-point" signifies that such energy exists even at a temperature of absolute zero where no thermal effects remain.) Such energy can be traced to radiation from the fluctuating quantum motion of charged particles distributed throughout the universe (see "Where does the zero-point energy come from?", *New Scientist*, December 1989). The ZPE is responsible for such diverse phenomena as the van der Waals forces of chemical attraction at absolute zero, the perturbation of atomic spectral lines known as the Lamb Shift, and the Casimir effect, a unique attractive quantum force between closely-spaced metal plates.

The energy associated with the ZPE is known to be essentially inexhaustible and ubiquitous, so a question that arises in the mind of the technologist is whether such energy can be "mined" for practical use - and thereby constitute the "Holy Grail" of energy research. At first thought, it would only be natural to assume that any attempt to extract energy from the background ZPE might violate energy conservation laws, or at least thermodynamic constraints, as in misguided attempts to extract energy from a heat bath under equilibrium conditions.

Although deferring for the present any technological considerations for actual application and use, Daniel Cole of IBM in Essex Junction, Vermont, and Harold Puthoff of the Institute for Advanced Studies in Austin, Texas, have addressed this issue in a recent article entitled "Extracting Energy and Heat from the Vacuum." Writing in *Physical Review E*, these researchers critically examine the underlying energetic and thermodynamic processes involved in such a concept and come to the conclusion that, yes, in principle, proposals to extract energy from vacuum fluctuations do not violate any fundamental precepts (*Physical Review E*, vol 48, p 1567).

[see abstract above]

For those interested in detail, the model proof-of-principle ZPE extraction technique they examine is the Casimir effect. This attractive force, typically between closely-spaced metal or dielectric plates, can be shown to derive from an imbalance in radiation pressure from the background ZPE. Specifically, waveguide cutoff effects reduce the number of modes, and hence the associated radiation pressure, between the plates, with the result that the plates are driven together by the overriding exterior radiation pressure. If unchecked, the plates accelerate toward each other with an inverse fourth law force as additional modes are rejected by the closing geometry. In this process energy is conserved as vacuum energy associated with the disappearing modes is converted first into kinetic energy and then into heat as the plates collide. Continuous energy generation by such a process would require a continuous supply of plates as "fuel" which, being discarded after use, would be analogous to the "exhaust products" from gasoline engines or the "waste" from nuclear fuel.

Although clearly impractical in this mechanical embodiment, the authors reference other work involving potentially more practical approaches based on the generation of Casimir pinch effects in charged plasmas.

Practical considerations aside, however, what has been shown is that the basic concept of the conversion of vacuum energy to other potentially useful forms is a legitimate and viable physics principle. What remains, however, as with solar and thermonuclear energy, is the matter of engineering and demonstration as to whether vacuum energy conversion can be developed to

the point that it constitutes a significant energy resource.

Miscellaneous

SURFACES AND SUPERCONDUCTIVITY

D.M. Eagles (NASA Marshall Flight Center), "A Conjectural Explanation for Room-temperature Superconductivity in Narrow Channels in Oxidized Polypropylene," to be published in Proceedings of the Conference on Physics and Chemistry of Oxide Superconductors, Eugene, Oregon, 27031 July 1993, which will be published in the *Journal of Superconductivity*, 4 manuscript pages, 10 refs.

AUTHOR'S ABSTRACT

Two groups of scientists have observed conductivity at least five orders of magnitude higher than that of copper at room temperature in narrow channels perpendicular to surfaces of films in oxidized polypropylene. For pulsed currents, this conductivity starts at a minimum value of applied current, and is destroyed at a current of about thirty to sixty times this value. Because of the existence of an upper critical current and of the observation that electronic thermal conductivity is negligible in the channels, it is thought that the channels are superconducting. A study is made of the hypothesis that these results are due to enhanced pairing, as first suggested by Parmenter, when the drift of velocity of current carriers becomes close to the velocity of sound or, in work by Hone and by the present author, to an appropriate phase velocity of optical phonons. Such enhancements can be expected to be larger in quasi one-dimensional systems.

COUNTDOWN TO SPACE

By Hal Fox, Editor

I received from *NEEN* reader Marc G. Millis a copy of his presentation "Warp Drive When?". His presentation prompted me to write the following article.

The message of this short article is that tomorrow's space voyagers will be using new energy developments that are based on today's discoveries and even patents. Tomorrow's spacers will need to be able to tap space energy wherever they are without having to pack fuel with them. The spaceship they drive will have to be propelled by forces that do not depend on the acceleration and disposal of mass. Unless these intrepid spacers are especially long-lived, they will have to overcome the perceived problem of the speed of light. Here are some possible solutions:

GET ENERGY FROM SPACE

Space energy is enormous. As shown by Puthoff [1] the energy in one cubic centimeter of space (everywhere), if we could utilize all of it, could provide all the energy needs of the earth for months. Kenneth Shoulders [2] has shown one method (but not the only or best method) of tapping the energy of space by using **high-density charge clusters**. This is today's reality, tomorrow's development, and next year's technology. **Therefore, science has solved the first of the spacer's problems. The availability of unlimited energy anywhere and anytime.** [see Dr. Aspden's article p. 7]

PUSH AGAINST ENERGETIC SPACE

Hal Puthoff has shown that gravity is a by-product of space [3] and that space is highly energetic [1]. Don Kelly has demonstrated that certain types of electromagnetic materials, when under acceleration, change the attraction of gravity [4]. Puthoff has stated that the energy of space (today's newly discovered ether) can be sensed (perceived, tapped, measured) only from an accelerated frame of reference. It would seem not to be inconsistent with known reality to combine space energy (ether), the new understanding of gravity, and the experimental evidence of Don Kelly to be able to find a means by which a vessel could be propelled through the

enormously energetic ether. **An alternative to mass ejection as a means of propulsion will be found soon after space scientists finally realize that space is more than a vacuum with a few atoms and ions per cubic meter. The spacer's second problem can be solved in this decade.**

ARCTURUS BY DAWN

"Arcturus by Dawn" is a paper written by Dr. Robert L. Carroll. His thesis is that the speed of light is a function of nearby mass and that in interstellar space the velocity of light is much faster! Dr. Carroll is a Professor Emeritus at the Baptist College at Charleston, South Carolina. **If Dr. Carroll is correct, then the third big problem for our spacers is solvable -- all we have to do is to leave the solar system and its mass.**

WHY WAIT?

A famous scientist, which one I've forgotten, stated that **new science is not adopted, it is delayed until the older scientists die off.** This editor and this publication are dedicated not to the preservation of last year's scientific dogma, but to the testing and acceptance of this year's new scientific truths. The essence of true science should not be preservation of the status quo but the rapid acceptance of new ideas and new discoveries. **Why wait? The only problem we have to overcome is old science.**

REFERENCES

- [1] Harold E. Puthoff, "The energetic vacuum: implications for energy research.", *Speculations in Science and Technology*, 1990, Vol 13, No 4, page 247.
- [2] Kenneth R. Shoulders, "Energy Conversion Using High Charge Density," U.S. Patent 5,018,180, May 21, 1991, 80 pages, 97 figs, 42 claims.
- [3] Harold E. Puthoff, "Gravity as a zero-point-fluctuation force," *Physical Review A*, March 1, 1989, pp 2333-2342, 33 refs.
- [4] Don Kelly, "Gravity Drop Experiments," unpublished manuscript, November 1993, 13 manuscript pages, 10 refs, 4 tables.

MAGNETIC VORTICES IN SUPERCONDUCTORS

I. Peterson, "Capturing the motion of magnetic vortices," *Science News*, 27 Nov. 1993, p 358.

Using a new imaging technique, Akira Tonomura and a team at the Advanced Research Lab of Hitachi, Ltd. in Saitama, Japan, have directly recorded the movement of magnetic vortices in superconducting oxides. Results reported in *Physical Review Letters*, 15 Nov. 1993, confirmed the forming of magnetic vortices which form into a lattice at low temperatures, and their movements as the temperatures were raised. At a certain temperature the lattice melted. This was the first confirmation of the theory that they would do so, although not at the temperature that was previously projected. Researchers sent an electron beam through a sample of bismuth strontium calcium copper oxide which was placed in a magnetic field, and captured an image of the magnetic vortices. These observations are a breakthrough in super-conductor research, due to the interference the vortices cause in current flow. More on this was also reported in *Nature*, 18 Nov. 1993.

COLOR OF SOUND

Philip Yarn, "The Color of Sound", *Scientific American*, Dec 1993, pp 24-5.

EDITOR'S SUMMARY

Dr. Seth-J. Putterman, U.C.L.A., is working with high frequency sound (about 25,000 cycles per second) delivered into a flask of water. The result is a flashing blue light in a bubble in the interior of the flask of water. The amazing feature of this experiment is that the frequency of the sound is essentially turning into optical frequencies about 12 orders of magnitude larger than the input sound. Calculations show that this concentration of energy into a bubble (whose size changes from about 1 micron to about 45 microns) produces the equivalent of a localized temperature of about 10,000 C! Formerly, this effect was being explained by cavitation phenomena (the effect that pops particles of metal out of ship's propellers). However, observing that the flashes of light from the bubble last only about 50 trillionth of a second has

scientists seeking for another explanation. While the observed phenomena emits blue light, there may be other circumstances that emit photons of a different frequency. Putterman and associates plan to use other liquids (water does not transmit ultraviolet) and test for light emission at other frequencies. Putterman has applied for patent protection with at least one claim using the phenomena as a picosecond light source.

ENGLAND - OIL & WATER FUEL

Courtesy of Steve Roen

Greg Neale (Environment Correspondent), "Who Said Oil and Water Don't Mix?" *The Sunday Telegraph*, No 1,691, Oct 24, 1993, page 1.

EDITOR'S SUMMARY

Neale reports that Rudolph Gunnerman may become a rich man from his invention of a mixture of oil and water or gasoline and water to be used instead of diesel fuel or petrol. A report by Professors Aldrich and Cullen (California State Univ.) show that about the same mileage is obtained with both diesel and auto road tests using the water/fuel mix. One of the requirements for successful combustion is the use of a small piece of nickel welded to the top of each piston. While the amounts of CO, and CO₂ are about the same, the nitrogen oxides are strongly diminished in most of the tests.

Apparently, the Gunnerman mix gives about the same mileage (using only half of the oil or petrol) and some improvement in atmospheric contamination. The end result could be a considerable saving in fuel costs. Steve Roen notes that the result is that Gunnerman has been getting some serious inquiries from Detroit Diesel, Caterpillar, John Deere, and the Air Force. Meanwhile, the Department of Energy states in an Oct. 22, 1993 letter to Gunnerman, "Our overall assessment of fuel/water emulsions is that they offer limited benefits, but these benefits are offset by added complexity and cost. ... We appreciate your interest in promoting energy efficiency technologies." **The Department of Energy hasn't discovered cold fusion, N-machines, nor high-density charge clusters but they are funding hot fusion.**

Meetings

INTERNATIONAL SYMPOSIUM ON NEW ENERGY May 1994

The purpose of the International Symposium on New Energy (ISNE) is to bring together outstanding New Energy researchers who will share and discuss their latest research findings. The goal is to stimulate new research ideas and to link researchers with industry. The objective is also to educate people through publications and news media about the potential of New Energy.

The ISNE is sponsored by the Institute for New Energy to promote the commercialization of New Energy methods. The INE believes that the planet Earth is in need of new and far reaching measures to avoid environmental damage and to equip the nations of the world with the energy to promote the highest possible level of health and welfare for their populations.

New energy or enhanced energy technology includes theory, research, construction, and testing of advanced energy conversion devices. These devices and systems operate with advanced concepts where energy conversion exceeds unity. The source of much of this potential energy utilized is not always scientifically understood, and the theory lags behind experimental data.

New energy topics include 'over unity' and 'free energy' machines, magnetic motors, vortex mechanics, cold fusion, electrostatic generators, nuclear isotopes, zero-point energy, N-machines, homopolar generators, etc.

The symposium will be composed of half-day sessions of speakers, and other research presented in poster sessions and a New Energy inventions exhibit. Concurrent workshops will also be available.

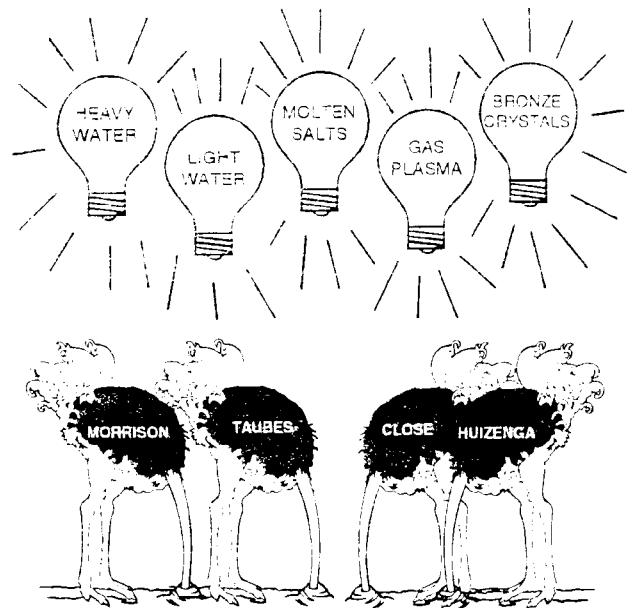
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I don't see anything, do you?
Don't know, I haven't really looked since 1990.

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