SEE THE LATEST VIDEO OF THE

7,500-LB NEWMAN ENERGY MACHINE

with a

1,650-LB ROTARY (INCLUDING 450-LB FLYWHEEL)

using only

TINY 9volt ENERGIZER BATTERIES CONNECTED IN SERIES!!!

Representatives of the Energizer Corporation recommend the largest load for their 9volt battery is a "TOY", and they state that even a small toy is a "high, battery-draining device".

Even small toys can quickly deplete such 9volt batteries which are typically used in low-load applications such as smoke detectors.

No way such a small battery would ever run a 7,500-LB MOTOR. Right?

Wrong.

In the video below, the "Energizer Bunny" battery not only run the 7,500-LB Newman motor, but it keeps right on running it --- not just for a minute, but for an hour!

This technology is proof that **the strength of the motor's magnetic field** is dependent upon the **VOLTAGE** --- **NOT** the CURRENT!

And during the course of an hour, the batteries don't even heat up!

Conventional technology would say that such is not possible.

Yet, the Newman Energy Machine can accomplish that ... and much more. In fact, the technology can be used to provide abundant, non-polluting, inexpensive electromagnetic energy to power the world.

No more fossil-fuel-related pollution.
No more skyrocketing energy costs.
No more global warming caused by the use of hydrocarbon fuels.
No more nuclear reactor wastes.
No more coal-burning power plants.

This technology will provide abundant, inexpensive, non-polluting energy to power homes, factories, automobiles, ships, planes, appliances ... in short, the entire world can utilize this revolutionary technology.

See the latest video at:

Individuals who can help bring this technology into production should contact:

Joseph Nolfe President, NEWMAN ENERGY CORPORATION (205) 835-9022

* * * * * *

A Brief Explanation of the Newman Energy Machine Technology

Joseph Newman supplies an external electrical stimulus to the machine's coil and uses a special commutator system that generates a magnetic field containing the gyroscopic particles (Maxwell's "matter-in-motion"). That external

electrical stimulus takes the form of high voltage --- and the higher the better until maximum atom alignment of the coil is achieved. At the same time the current is kept as low as possible to minimize resistance; thereby the Newman motor always runs **cool** -- unlike all conventional motors.

The externally-applied, high voltage is not "consumed" by the system --- it operates in the same manner as the hydraulic fluid system in an automobile. The reservoir of brake fluid is not "used up," but supplies a continual hydraulic pressure to the automobile's brake system. Similarly, the high input voltage (and low current) acts as an electrical 'hydraulic' pressure to continually realign the atoms within the energy machine motor's copper coil.

The continual collapse and expansion of the copper coil's magnetic field creates the mechanical torque of the motor.

(The special commutator system achieves this continual collapse and expansion of the magnetic field.)

The net increase of external electrical energy from the system directly comes from the energy produced internally within the copper coil. That net output is greater than the small amount of current originally inputted externally into the system along with the high voltage. The source of the system's excess energy comes from the atomic domains of the copper coil within the motor/generator.

It becomes apparent that we have failed in the past 200 years to fully understand the electromagnetic nature of the atom because science has ignored the fundamental mechanical implications of Maxwell's concepts regarding "matter-in-motion".

Essentially, Joseph Newman has integrated of the 19th Century work of Michael Faraday and James Clerk Maxwell (upon which much of our conventional electromagnetic theory is based) with the 20th Century work of Albert Einstein --- to produce a revolutionary new electromagnetic technology for the 21st Century.

Energy Machine Dimensions

There are no real size constraints with respect to his technology and there are two methods of increasing the energy output: 1) increase the amount of copper utilized in the conductor coil, and/or 2) increase the rpms of the

commutator attached to the machine's rotor. The latter can be done by increasing the applied voltage (not

the current which is what costs money) up to the maximum atomic alignment of the atomic domains in the copper conductor. And, if you seek to align more atomic domains, then use more copper. Once the atomic domains of the

copper conductor are aligned, the copper becomes magnetic and thereby releases energy electromagnetically in accordance with E = mc(squared).

You may find the following of interest:

PLEASE VIEW THIS VIDEO as soon as possible:

http://video.google.com/videoplay?docid=-1610087835473512086&hl=en

Also, please view:

http://video.google.com/videoplay?docid=-2699190582411275088&hl=en (the latest video -- more video updates will follow soon)

The following is background information about the energy machine technology:

To understand how (electro)magnetic energy can be properly harnessed, it is first essential to precisely understand the mechanical interaction of magnetic fields. Joseph Newman tackled that task in the late 1960s and that work ultimately led him to construct his first energy machine prototype in the late 1970s. To understand magnetic attraction and repulsion, then I would recommend that you carefully study the drawings show at:

http://www.josephnewman.com/more-info.html

Here's the website of a working table-top version of a Newman Energy Machine constructed by an independent French researcher:

http://jnaudin.free.fr/html/gmmv11.htm

Considering your interest in energy generation, I thought you might enjoy reading the following letter which was recently sent to a physicist who is studying the Newman energy machine technology. This letter provides a brief introduction to the technology and its implications for providing an alternative energy source to conventional, polluting sources such as oil, coal, and nuclear.

Dear Coleman,

Thanks for your email and supportive comments.

I hope you have had an opportunity to peruse all the documents posted on Joseph Newman's website:

http://www.josephnewman.com

Joseph Newman has invested thousands of hours over the past 40 years in researching and understanding the nature of (electro)magnetic fields, among other observables. As his research

proceeded, he developed a fundamental mechanical explanation (gyroscopic massergy interactions) for observable phenomena (light, heat & thermodynamics, gravitation, inertia, planetary motion) -- but his work began with a quest to understand the phenomena of magnetic attraction/repulsion and the phenomenon known as Fleming's Rule (the right-hand rule).

Conventional physics has no explicit, fundamental, mechanical explanation for such phenomena. However, Joseph Newman DOES have a very explicit explanation: his Theory of Magnetic Attraction & Repulsion. Note that I wrote "theory" --- not "hypothesis". As one knows, of course, a theory is a corroborated hypothesis. And JN's Theory of Magnetic Attraction & Repulsion has been corroborated.

Thus, based upon empirical evidence, a true scientist is obliged to <u>accept the hypothesis upon</u> <u>which that theory is based</u> -- IF there are no other competing hypothesis and/or if that hypothesis has fewer unproven assertions than any competitors (Occam's Razor).

I first understood Joseph Newman's Theory of Magnetic Attraction & Repulsion in early 1984. Since I am not mechanically-inclined, it took me about three months to master that theory. But an understanding of that theory paves the way for comprehending how JN's Theory of the Gyroscopic Particle (aka "Gyroscopic Massergy) explains ALL mechanical phenomena in the universe. The energy machine is simply ONE electromagnetic embodiment of the principle underlying that larger theory developed by Joseph Newman. [Note: JN also designed a gas embodiment and a static embodiment that encompasses that same principle.

Interestingly, Einstein's work is closely related to JN's theories. I hope you reviewed the document ---- http://www.josephnewman.com/Einsteins_Equation.html ---- posted on the website regarding a very important nomenclature originally used by Albert Einstein --- that has been all but forgotten. Such an understanding on Einstein's part (by using such nomenclature) underscores the TRUE relationship of ELectricity/ELectromagnetism and the fundamental gyroscopic massergy identified by Joseph Newman.

Joseph Newman has taught that an ELectromagnetic field consists of "matter-in-motion". And that "matter-in-motion" is identified as a gyroscopic particle (term originally employed by J. Newman), also called "gyroscopic massergy".

In addition to Einstein's realization of the fundamental nature of an ELectromagnetic field (originally EL = mc^2) and Joseph Newman's explicit mechanical understanding of that field (consisting of gyroscopic massergies), both Michael Faraday and James Clerk Maxwell recognized that such electromagnetic fields consists of **REAL**, **PHYSICAL**, **MATTER-IN-MOTION**.

Michael Faraday wrote:

"I cannot conceive curved lines of force without the conditions of a physical existence in that intermediate space."

and

"How few understand the physical lines of force! They will not see them, yet all the researches on the subject tend to confirm the views I put forth many years since. Thompson of Glasgow seems almost the only one who acknowledges them. He is perhaps the nearest to understanding what I meant. I am content to wait convinced as I am of the truth of my views."

James Clerk Maxwell wrote:

"In speaking of the Energy of the field, however, I wish to be understood literally. All energy is the same as mechanical energy, whether it exists in the form of motion or in that

of elasticity, or in any other form. The energy in electromagnetic phenomena is mechanical energy."

That is an unequivocal statement by James Clerk Maxwell. And so that no one might later misinterpret his remarks, he added, with emphasis: "I WISH TO BE UNDERSTOOD LITERALLY."

Maxwell also wrote:

"The Theory I propose may ... be called a Theory of the Electromagnetic Field because it has to do with the space in the neighborhood of the electric or magnetic bodies, and it may be called a dynamical theory, because it assumes that in that space there is <u>MATTER -IN-</u>MOTION, by which the observed electromagnetic phenomena are produced."

It was such an understanding by Faraday and Maxwell of the true, physical nature of electromagnetic fields that influenced Einstein to originally describe his fundamental theory as EL = mc^2 (see below).

COMMENTARY REGARDING EINSTEIN'S EQUATION OF E = mc^2:

Most physicists are unaware that Einstein's famous equation was originally written by Einstein as $EL = mc^2$.

Since all things happen for a reason, it is interesting to speculate on why Einstein originally used that nomenclature.

With respect to the importance and implication of that ORIGINAL description of Einstein's famous equation, I am suggesting that the use of such nomenclature demonstrated Einstein intellectual linkage to the work of James Clerk Maxwell and Michael Faraday --- both of whom preceded Einstein and for whom Einstein had great respect.

When one begins to understand the work of Joseph Newman, one realizes that something very important regarding the fundamental nature of ELectricity and ELectromagnetism has been overlooked in the past 100 years.

The article which described the nature of the original EL equation was published in 1996 in *The New York Times* under the by-line of Robin Pogrebin and it was entitled, "Einstein Paper Shows Science Can Be Artwork" --- subhead: "It's expected to fetch \$6 million."

The Einstein manuscript was scheduled to be auctioned by Sotheby's in 1996.

To quote from *The NY Times* article:

"The manuscript in which Albert Einstein elaborated on his special theory of relativity is both momentous as one of the central scientific tenets of the modern age, and captivating as a window into how the gears turned in one of the greatest minds in history."

"The 72-page untitled manuscript was written in 1912, seven years after the 'special' theory was first published. the manuscript's further insights were widely disseminated, but the paper itself was not published; and except for a fleeting moment when the document was put up for auction in 1987, it has never been available to scholars or the public.

"Today, at Sotheby's the manuscript is to be auctioned once more. It is expected to bring \$6 million, more than what a classic example of Monet's *Water Lilies* sold for last fall.

"Its value lies as much in its form as in its substance. In addition to offering a detailed review of Einstein's ground-breaking thesis on the relationship between mass and energy, E (equals) mc (squared), the document is also thought to be one of the few remaining Einstein rough drafts, rich with extensive revisions in the scientist's graceful handwriting.

"And in perhaps the manuscript's most striking example of Einstein's scientific gymnastics, he takes the equation EL (equals) mc (squared) and crosses out the "L," thus rendering the historic special theory of relativity -- energy equals mass times the square of the speed of light -- right before the reader's eyes."

END QUOTE

Personally, I find the use of the term "free energy" (as sometimes used) to be misleading at best and scientifically/economically inappropriate at worst.

However, I do believe it is quite possible to obtain from an electromagnetic system the following:

"Greater external energy output than external energy input." (EEO>EEI)

That is not the same as simply saying "more out than in".

The difference in that externally-produced energy output from that externally-inputted energy input comes from a source INSIDE that electromagnetic system.

Once atom alignment occurs in a permanent magnet, for instance, the **matter-in-motion** that comprises the magnetic field within each atom joins together at the instant of atom-alignment and subsequently extends beyond the boundaries of any given atom to create the magnetic field with which we are familiar: the **physical lines of force**.

Those lines of force are comprised of real, physical, matter-in-motion whose physical interaction with the matter-in-motion of an adjacent permanent magnet's (for instance) magnetic field --- results in magnetic attraction or repulsion, depending upon how those matters-in-motion in those two respective magnetic fields physically interact with one another.

If one precisely understands the mechanical characteristics of that matter-in-motion, it is also possible to properly harness and extract a portion of that matter-in-motion when it physically interacts with the matter-in-motion comprising the electromagnetic field of a coil of copper wire to which voltage has been applied (inputted) to align the atoms of that coil.

The result is that mechanical, electrical, and/or RF energy can be extracted from that system that exceeds the input energy (high voltage/low current) originally inputted into that system.

That is NOT so-called "free energy" in an economic sense because it costs money to obtain such permanent magnets and copper coils.

That is NOT so-called "free energy" in a scientific sense because the energy DOES come from somewhere: it is transferred from one domain to another: from within the permanent magnet and/or copper coil to along the copper coil and then outputted as electrical energy. (It can also be outputted as mechanical energy --- as in the torque of a rotary employed in such a system.)

Bottom line for me: from the beginning (over 24 years ago) what impressed me most about Joseph Newman's work was that he was he first person in history to develop an explicit, mechanical explanation for magnetic attraction/repulsion and the phenomenon of Fleming's Rule.

END OF LETTER

Additional technical comments regarding the technology:

As a result of the **voltage** (NOT current) input into the energy machine, a magnetic field occurs around the copper conductor within the machine. That magnetic field consists of spiral motions of rotating gyroscopic massergies. Applying voltage to the copper conductor results in fields of gyroscopic massergies extending beyond their respective atomic domains of origin.

See comments about the term "gyroscopic massergies" at:

http://www.josephnewman.com/Heat_and_Thermodynamics.html

See the diagrams at:

http://www.josephnewman.com/more-info.html

The above diagrams (several of many) as shown in Joseph Newman's fundamental book, only scratch the surface of Newman's work. I would recommend studying the above diagrams very carefully to understand the essence of Joseph Newman's theory and applied technology.

Eventually, the gyroscopic massergies transfer back into the conductor at the atomic level, or they are expelled from the system as electrical and/or mechanical energy.

When voltage is applied, the gyroscopic massergies not only travel in some direction at the speed of light - as mass/energy equivalents they would also continue to rotate at the speed of light. Thus the gyroscopic massergies are the **literal**, **mechanical equivalent of Einstein's equation of e = mc(squared)**. Joseph Newman has written that the magnetic lines of force are comprised of spinning gyroscopic massergies having tremendous kinetic energies. As such, he is first person in history to have explained electromagnetic energy on a <u>mechanical</u> basis.

He has also concluded that, as some of the gyroscopic massergies transferred outside the source atomic domains of the copper wire continue to cojoin into the physical, kinetic, magnetic field's "lines of force" created within the energy machine, the copper conductor loses submicroscopic amounts of mass.

By means of a special commutator, Newman has designed an operating system that harnesses the kinetic energy in the gyroscopic massergies <u>before</u> they are able to return to the original atomic domain sources within the copper conductor. As that transfer occurs, submicroscopically small masses of the copper conductor would be converted (transferred) into usable energy - electrical and/or mechanical output from the system.

Newman utilizes copper wire of extended lengths which provides the time to change the flow direction of the applied current <u>before</u> the gyroscopic massergies leave from the opposite end of the copper conductor. That occurs by continually switching battery polarity. At that point the gyroscopic massergies move in the opposite direction (as back-emf). As one of several results, the gyroscopic massergies that had been transferred from the battery now re-enter the battery and recharge it. Net result: the batteries do <u>not</u> deplete and the gyroscopic massergies comprising the electromagnetic fields are fully harnessed for the first time in history.

Such a process is NOT so-called "perpetual motion". The energy machine operates as a mass-conversion (or more explicitly a "mass/energy-transfer") system that fully operates in accordance with the First Law of Thermodymanics. Matter is neither created nor destroyed - as units of gyroscopic massergies (which are simultaneously MASS and ENERGY), the "mass" is **transferred** from one domain to another. Work is done in the process.

Fundamentally, Joseph Newman describes his system as one in which the (external) energy output is greater than the (external) energy input. The difference is generated by the energy produced (transferred) **INTERNALLY** within the system as it operates in keeping with the First Law of Thermodynamics. Thus, it operates not simply as a "motor" or a "generator" but rather simultaneously as a motor-generator.

Best regards,

Evan Soule'
JNPCo./NECorp.
http://www.josephnewman.com
Important video seen at:
http://video.google.com/videoplay?docid=-1610087835473512086&hl=en

UPDATE:
THE ENERGY MACHINE OF JOSEPH NEWMAN
NEW, FREE VIDEO ONLINE!

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To view the new video (two different sizes) with the latest information regarding

THE NEWMAN ENERGY MACHINE

visit:

Smaller video file URL (157MB) entitled "Cut Cost of Oil 2":

http://video.google.com/videoplay?docid=-1610087835473512086&hl=en

Larger video file URL (404MB) entitled "Cut Cost of Oil 3":

http://video.google.com/videoplay?docid=3484490731703421398&hl=en

Please let others know about these new videos! Thanks!

NEWMAN ENERGY CORPORATION

http://www.josephnewman.com/ Joseph Nolfe, President, NECorp. (205) 835-9022

THE ENERGY MACHINE OF JOSEPH NEWMAN

An Invention Whose Time Has Come!

Nikola Tesla once wrote:

- "The day when we shall know exactly what electricity is, will chronicle an event probably greater than any other recorded in the human race."
 - * **IMAGINE** a civilization with an access to virtually unlimited energy . . .
- * **IMAGINE** an energy source that is abundant, inexpensive, and environmentally-friendly . . .
 - * **IMAGINE** a stable and durable alternative to oil, gas, coal, and nuclear . . .
- * **IMAGINE** an electromagnetic Motor which runs *cool* and harnesses the elemental forces of the universe in complete accord with the 1st Law of Thermodynamics . . .
 - * **IMAGINE** such a Motor powering the world --- every automobile, appliance, home, farm, factory, ship, and plane, at a FRACTION of the present cost of energy . . .
- * **IMAGINE** such a Motor enabling us to someday reach the stars --- safely and inexpensively . . .

Such a technology now exists:

THE ENERGY MACHINE OF JOSEPH NEWMAN

The A & E (Arts & Entertainment) Network aired a national Special entitled "Conspiracies" which featured the revolutionary technology of Joseph Newman.

Joseph Newman has been featured on the CBS Evening News, The Tonight Show, ABC/CNN National News, LIFE Magazine, PBS's "All Things Considered," in thousands of newspapers/ magazines across the world, and on hundreds of radio talk shows presenting his revolutionary technology.

Better than 30 physicists, nuclear engineers, electrical engineers, and electrical technicians have signed Affidavits attesting to the validity of Joseph Newman's revolutionary invention: an electromagnetic Motor/Generator that could supply every America's home, farm, business, automobile, and appliance with electrical power at a fraction of the present cost and enable you to become **energy independent**.

[&]quot;The future of the human race may be dramatically uplifted by the large-scale, commercial development of this invention."

--- Dr. Roger Hastings, Principal Physicist UNISYS CORPORATION

"If the manner in which Joseph Newman conducted his experiments and the results were made known to the industrial or engineering community then, in my opinion, several companies and/or individuals possess the expertise and capabilities to construct the hardware required to fully exploit the apparent capability of his new concepts."

--- Dr. Robert E. Smith, Chief, Orbital and Space Environment Branch George C. Marshall Space Flight Center, NASA

"You have opened an area in Astrophysics which may revolutionize the magnetic energy problems which is now the most paramount problem in future energy and space travel. I do believe with proper research funds, the results would not only be a great financial boom to your financiers, but would lead to developments that will be practical and beneficial to all mankind and develop a new step in science."

--- Dr. E. L. Moragne, MORAGNE RESEARCH & DEVELOPMENT CO. [Dr. Moragne was an electromagnetic pioneer in the development of the first atomic bomb.]

FACTS CONCERNING THE TECHNOLOGY OF JOSEPH NEWMAN

- 1) Over 40 experts -- physicists, nuclear engineers, electrical engineers/technicians --- have tested Joseph Newman's energy machine (also known as the Newman Motor/Generator) and have signed Affidavits that it performs as indicated.
 - 2) Dr. Roger Hastings (Principal Physicist with Unisys) has conducted hundreds of hours of testing on Joseph Newman's Motor/Generator and has signed Affidavits attesting to the operability of the Newman Motor/Generator. Robert J. Matherne, a physicist from Entergy Corp, (and who was instrumental in the development of the nuclear power plant at Taft, Louisiana), has also attested to the significance of this new technology.
 - 3) Joseph Newman has constructed many operational prototypes of his technology over the years, ranging in size from 4 pounds to 15,000 pounds.
 - 4) The energy machine will totally decentralize our access to energy and will have a profound socio-economic impact upon our civilization. The energy generated by this machine is harmless, non-polluting, and will replace ALL present forms of energy generation. With the energy machine, every consumer could make a one-time purchase of a unit that could be installed in one's backyard and virtually unplug themselves from local utility companies. The energy machine could also be utilized to power all air, land, and sea vehicles and would eliminate the polluting effects caused by the internal combustion engine.

5) Joseph Newman has published a book entitled **THE ENERGY MACHINE OF JOSEPH NEWMAN**

in which he discloses all of his theories and the technical processes relating to the construction of his energy machine. It is important to Joseph Newman that this knowledge be preserved and disseminated.

- 6) Joseph Newman has been working on his concepts for over 30 years. He submitted his Technical Process to the U.S. Patent Office several years before he constructed the first operational prototype of his energy machine.
- 7) The energy machine is a physical embodiment of Joseph Newman's Technical Process. Joseph Newman hopes that someone with the requisite ability will use his **mechanical** innovations to formulate a **mathematical** extrapolation. Such an accomplishment would be similar to the manner in which Michael Faraday's **mechanical** work led to mathematical theories developed by James Clerk Maxwell. [Although Michael Faraday was "mathematically illiterate" (his own words), he was a *mechanical* genius.]
 - 8) The theories of Joseph Newman also represent a precise, mechanical explanation of the phenomena of magnetism (not otherwise currently understood) and the principle of "action at a distance." When one understands the nature of the energy discovered by Joseph Newman, then one can understand how it would be possible to build a technical application capable of harnessing such mechanical motion (energy). As Maxwell explicitly stated:

 "The energy in electromagnetic phenomena is MECHANICAL ENERGY" and consists of "matter in motion."

Joseph Newman describes the fundamental mechanical essence of a magnetic field as a massergy having a "gyroscopic spin." Such gyroscopic action is fundamental to understanding the *mechanical* nature of electromagnetism.

- 9) Technically-speaking, what Joseph Newman teaches is that one's goal
 in the construction of one of his operational Motor/Generators is
 "to have the LEAST amount of current input to create the GREATEST amount
 of atomic domain alignment within the material of the conductor,
 thereby causing the GREATEST magnetic field to be created."
- 10) The energy machine of Joseph Newman is far more efficient than conventional nuclear energy and does not release any harmful radiation or emission. This invention can be used to power the home, industry, or to produce electrical energy for flight at a small fraction of today's cost.

 As Joseph Newman states: "The finished prototype of what I teach will drastically change the world for the good of humanity, more so than any invention before this time."
 - 11) Joseph Newman has developed a precise and fundamental mechanical explanation for both magnetic attraction and repulsion as well as Fleming's Rule. An understanding of this explanation is what originally led him over thirty years ago to began to truly understand the mechanical essence of electromagnetic fields and enabled him to create an innovative technology capable of harnessing the energy contained within these fields.

Update:

A Classic '71 MG is now running at *high speed on low voltage* using a Newman Energy Machine, and it demonstrates that a production model can retail for \$10K or less.

THE ENERGY MACHINE OF JOSEPH NEWMAN NEW, FREE VIDEO ONLINE!

To view the new video visit:

Google video file (3 min. 5 sec.) entitled "Practicality of Joseph Newman's Energy Machine":

http://video.google.com/videoplay?docid=-9094515037555440762&hl=en

* * * * * * *

Related Newman Technology:

Physicist Dr. Roger Hastings, PhD, testified to the nature of Joseph Newman's electromagnetic levitation phenomenon during a well-documented news conference in Mobile, Alabama in the 1980s. Additionally, included below is an Affidavit prepared by Dr. Hastings describing how the levitation device can be practically scaled up to enable humans to lift into outer space without conventional rocketry.

AFFIDAVIT

OBSERVATIONS AND PERFORMANCE PROJECTIONS ON JOSEPH NEWMAN'S ELECTROMAGNETIC AIR/SPACE VEHICLE

I have witnessed a demonstration of Joseph Newman's Electromagnetic Air and Space Vehicle prototype. It consists of an aluminized helium balloon wrapped with #38 gauge copper wire. The system is nominally heavier than air. When the wire coil is connected to a 200 volt battery, the balloon gradually lifts into the air. It then aligns with the earth's magnetic field as it rises. If the current is cut off, the balloon immediately begins to fall. If the current direction is reversed, the balloon rotates to align with the earth's field. The balloon can be made to rotate or oscillate by manipulating the direction of current flow. If the current is periodically switched so that the balloon always repels the earth's field, its rate of descent is about 25% faster than the case of steady attraction of the coils to the earth's field.

Joseph Newman's design calls for creation of a magnetic field which is an average about equal to the earth's field over the volume of the balloon. This can be achieved with minimum input power using a large number of turns of fine wire. I have considered vehicle modules with the following properties:

Volume = 10'x10'x10' = 1,000 cubic feet

Helium Lift = 70 lbs.

Wire = 12,000 turns of #38 AWG copper

Wire Weight = 23 lbs.

Battery = 3,000 volts DC

Battery Weight = 15 lbs DC Current = 10 mA Material Weight = 10 lbs. Payload Weight = 22 lbs.

A vehicle which is 100 feet in diameter and 50 feet high would consist of 400 of the above cubes and would carry a payload of 4.4 tons. A vehicle which is 1,000 feet in diameter and 500 feet high would consist of 400,000 of these cubes and carry a payload of 4,400 tons.

The following points should be noted:

- (1) The total payload is proportional to vehicle volume.
- (2) The electromagnetic torque and lift are also proportional to volume in this design.

- (3) Navigation is achieved by manipulating the orientation of the coils.
- (4) If superconducting wires become available, the batteries would not be required.
- (5) For improved efficiency with copper wiring, sets of the cubes can be connected in series and energized with pulsed high voltage. Joseph Newman has developed such techniques to extend battery lifetime.
- (6) In the atmosphere, lift is provided by a combination of ohmic heating of the helium gas, electromagnetic interaction of the helium atoms with the applied fields, and interaction of the applied magnetic field with the earth's magnetic field.
- (7) It is intended that the craft can operate entirely through interaction with the earth's magnetic field once it leaves the atmosphere. The interaction will be especially strong in the ionosphere and persists in the earth's magnetotail.

Joseph Newman's invention was designed and disclosed in a patent application to its construction. It represents a vastly improved means for propulsion and navigation of helium balloons (blimps). Large versions may well carry us gently and safely into space.

Dr. Roger Hastings, Ph.D. [Signed and Notarized] *Physicist*

ABOUT THE AUTHOR:

Dr. Roger Hastings has a Ph.D. in Physics, University of Minnesota, 1975; MS in Physics, University of Denver,

1971; BS in Physics, University of Denver, 1969.

Dr. Hastings was a Postdoctoral Fellow at the University of Virginia, 1977-77 with research in organic superconductors and the physical properties of solutions of macroions and viruses. Dr. Hastings has been a Principal Physicist with the UNISYS Corporation. As a consultant, Dr. Hastings also designs electric motors for other corporations.

"Just as a long-legged spider can lift itself from the surface of a pond by dispersing its body weight over a wide area upon the molecular surface tension of the water, so too, by analogy, can a vehicle lift itself from the surface of the planet by dispersing a magnetic field over a wide area upon the planet's magnetic field."

--- Joseph Newman