

“Outside-the-Box” Technologies, Their Critical Role Concerning Environmental Trends, and the Unnecessary Energy Crisis

A Compilation of

Briefing Papers Prepared For:

The U.S. Senate Environment and Public Works Committee

Background:

The briefing was requested by Senator Smith (R-NH and Chair of the EPW) and Mr. David Conover (Chief of Staff-EPW) because of the need to look at energy and technology issues over times scales of 5-20 years. The briefing was organized by Dr. Theodore Loder and was held on Oct. 18, 2000 in the Senate Dirksen Building, Washington, DC.

Further information may be obtained from:

Dr. Theodore C. Loder III
Institute for the Study of Earth, Oceans, and Space
University of new Hampshire
Durham, NH 03824
ted.loder@unh.edu
603-862-3151

Background to the Briefing

The Issues:

Our present methods for solving current environmental problems are only partially working, because they attempt to solve the result of a problem and not get to the root causes of why a particular problem has occurred. Most of our problems stem from energy issues and our tremendous dependence upon fossil fuels, especially in the transportation and power generation sectors. In addition, increasing populations worldwide and the desires of second and third world countries to obtain what we in the US take for granted spells increasing worldwide environmental problems coupled with significantly increased oil/gas prices. In summary, the risks associated with our present course are ever-increased environmental degradation coupled with a significant long lasting economic downturn, recession or depression.

As a world community, we must realize that we will need the last remaining decades of fossil fuels to create and integrate new energy sources without losing the momentum of our developing world society. In 10-20 years from now, we have to be at a point in our global development where we are no longer dependant on fossil fuels for our energy generation and we want to arrive there by a route that does not create global environmental and economic chaos.

The purpose of this briefing was to show that:

1. We have growing environmental problems that will have major economic impacts.
2. There are technologies, presently being repressed, that are real and could replace the present fossil fuel usage with the appropriate investment in research necessary to bring them on line.
3. There are scientists ready to testify at a Senate hearing on the realities of these issues.
4. The need to move ahead is very urgent because the time necessary to implement the use of these technologies may take the better part of this decade and neither the environment nor the economics of fossil fuels can wait any longer.

The goal is not to push any specific type of technology that will “save the world”, but to convince those attending that there is a whole set of new technologies that are waiting in the wings which will change the way we live on this planet for the better.

The Briefing presenters and topics covered included the following:

Dr. Theodore Loder, Convener and overview of the issues and urgency
Dr. Steven Greer, Implications of the implementation of non-polluting free-energy devices
Mr. Thomas Valone, Present energy issues, energy devices and patent office issues
Dr. Paul LaViolette, Physics reassessment and anti-gravity research
Dr. Scott Chubb, Cold fusion, scientific responsibility
Dr. Eugene Mallove, Cold fusion, scientific response and patent office issues
Dr. Thomas Bearden, Physics reassessment, the world energy crisis, and “free energy device” technology

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* A short biography for each author follows each paper.

Moving Beyond the First Law and Advanced Field Propulsion Technologies

Paul A. LaViolette, Ph.D.

gravitics1@aol.com

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1. The Repression of Nonconventional Energy Technologies.

According to U.S. patent law, a patent has the right to be issued if the technology is new and if it works. There is nothing in the legal code that says that the patent necessarily has to conform to theories of physics or chemistry as they happen to be defined by certain academic science societies. Unfortunately, administrators of the U.S. Patent and Trademark Office (PTO) have been illegally blocking the issuance of patents on new technologies that challenge current scientific thinking. This discrimination is often carried out in response to lobbying by Robert Park, who is Director of Public Information of the American Physical Society (APS), and by his affiliates. The process usually begins with media smear campaign aimed at defaming the inventors of nonconventional technologies or at embarrassing PTO examiners who hold scientific views they disagree with. Then this group of lobbyists email these media attacks to PTO administrators, or they may call up PTO officials with whom they have developed close associations to voice their dissatisfaction. The PTO administrators then respond in a knee jerk fashion to this outside pressure to either make sure that certain patents don't issue or to reprimand or even fire examiners who take an open minded approach to considering such new technologies.

An example is the BlackLight Power Corp. case. BlackLight's inventor Randall Mills has developed a process for producing large amounts of energy from normal tap water. This is the kind of technology that we need to solve the present energy crisis. The reality of this technology has been independently verified by other scientific laboratories. Yet, Mills and his company have been repeatedly attacked by this APS lobby through Robert Park's news postings on the society website, derisive editorials written in mainstream science magazines, in lectures at the 1999 APS annual meeting, and even in a book authored by Park. Because this technology challenges the currently popular theories of physics, this lobby has unjustly branded it as being fraudulent. PTO administrators obediently responded to this outside pressure by unlawfully withdrawing one of BlackLight's patents after it had already been slated to issue in February 2000. One of the PTO officials who was involved in taking this action has admitted that they did this in response to media attacks leveled against BlackLight. The company is now suing the Department of Commerce for this travesty of justice.

Another example concerns a patent awarded in February 2000 on an invention capable of sending communications faster than the speed of light. Witnesses attested that the invention worked as claimed. Yet shortly after the patent had issued, believing that the invention violated the theory of special relativity, Park posted a news item on the APS website which made fun of the PTO for having issued the patent. Arrangements were even made to have one patent website proclaim it to be the most ridiculous patent of the year. Papers published in refereed physics journals have described laboratory experiments in which waves have been made to travel faster than the speed of light. Yet disregarding this evidence, the Commissioner decided to side with the APS lobbyists. He severely reprimanded the patent examiner who had issued the patent and also threatened to fire his supervisor.

Also there is the case of the firing of two patent examiners, Tom Valone and Paul LaViolette. Park and the APS lobby had been ridiculing them because they had an interest in nonconventional energy technologies and because they were involved in organizing a conference that included papers on nonconventional energy technologies. They attacked the examiners in postings on the APS website, in

magazine editorials, and in lectures presented at the 1999 annual APS meeting where they admitted to their ongoing efforts to secure the removal of anyone at the PTO who sympathized with cold fusion technology. They also initiated an email campaign to PTO officials as well as made personal contacts with PTO officials. Within a day of this email blitz, Paul LaViolette was given notice of termination and proceedings were begun against Tom Valone which resulted in his removal 5 months later. Both examiners at the time had a commendable record of job performance. Both examiners now have Justice Department litigation pending on this matter.

As a result of similar discrimination, government research moneys are routinely withheld from companies or individuals trying to develop such cutting edge ideas. In the name of preserving an outmoded set of theories that they claim their particular view. Government officials need to recognize that a working technology should not be suppressed just because it lies outside of the current scientific paradigm and produces results that refute that paradigm. The goal should be to solve society's problems, not to reaffirm outmoded theories espoused by today's enfranchised physicists and chemists.

2. The Nonconventional Energy Technology Bill of Rights.

Nonconventional technologies may be our only hope for solving the problems that presently lie ahead of us, but they are currently the underdog. We need an affirmative action program to educate government agencies and mainstream media to develop a more positive attitude toward nonconventional technologies, to treat the researchers of these technologies in a fair manner, and to stop engaging in witch hunts. If we are going to deal with the problems we face, the scientific community needs to make a radical paradigm shift. They have to adopt a radically different attitude with respect to what is possible and what is not. There is not much time.

3. The First Law of Thermodynamics is not inviolable.

The First Law of Thermodynamics states that energy may be neither created nor destroyed. But there is evidence that nature routinely violates the First Law.

Energy creation: The discovery that the jovian planets (Jupiter, Saturn, Uranus, and Neptune) lie along the same luminosity trend line as stars of the lower main sequence (e.g. red dwarfs) throws a monkey wrench into theories of how stars generate their energy. Nuclear energy cannot explain this correspondence. One very simple solution to this problem is that a photon's energy is not constant, that photon's inside celestial bodies slowly blue shift – increase their energy over time. Thus energy is being continuously created in stars throughout the universe. This so called "genic energy" emerges as a prediction of a new physics methodology called subquantum kinetics. Since red dwarfs make up most of the stars in our Galaxy, as a rule genic energy may be the dominant energy creation mechanism. Nuclear energy becomes important only in the much rarer, massive stars such as our Sun. Consequently, most of the stars in the universe may be run on "free energy" in violation of the First Law.

Although this rate of energy creation is ten orders of magnitude smaller than what can be detected in laboratory experiments, it nonetheless weakens the arguments of those who maintain that the First Law is an inviolable doctrine of nature. If nature violates it, why can't we violate it also? Physics needs to make a major shift in thinking, shed their linear models which predict that there is no such thing as a free lunch, and embrace the newly emerging nonlinear models which allow the possibility that matter and energy may be created and destroyed.

4. Gravity Field Propulsion is Real: Townsend Brown's Technology of Electrogravitics.

In the mid 1920's Townsend Brown discovered that electric charge and gravitational mass are coupled. He found that when he charged a capacitor to a high voltage, it had a tendency to move toward

its positive pole. This became known as the Biefeld-Brown effect. His important findings were opposed by conventional minded physicists of his time.

The Pearl Harbor Demonstration. Around 1953, Brown conducted a demonstration for top brass from the military. He flew a pair of 3 foot diameter discs around a 50 foot course tethered to a central pole Energized with 150,000 volts and emitting ions from their leading edge, they attained speeds of several hundred miles per hour. The subject was thereafter classified.

Project Winterhaven. Brown submitted a proposal to the Pentagon for the development of a Mach 3 disc shaped electrogravitic fighter craft. Drawings of its basic design are shown in one of his patents. They are essentially large scale versions of his tethered test discs.

Aviation Studies International. They are a think tank that produces intelligence studies for the military. In 1956 they issued a report entitled "Electrogravitics Systems" which called for major government funding to develop Townsend Brown's electrogravitics technology and make Project Winterhaven a reality. The report stated that most of the aerospace was actively researching this antigravity technology. It named companies such as: Glenn-Martin, Convair, Sperry-Rand, Bell, Sikorsky, Douglas, and Hiller. Other companies who entered the field included Lockheed and Hughes Aircraft, the latter being regarded by some as the world leader in the field. This report was initially classified. It was missing from the Library of Congress collection. Their staff made a computer search and found that the only other known copy was located at Wright Patterson Air Force Base. I obtained it from there through interlibrary loan. It is now published in the book *Electrogravitics Systems*, T. Valone (editor).

Northrop's Wind Tunnel Tests. In 1968, engineers at the Northrop Corp. performed wind tunnel tests in which they charged the leading edge of a wing to a high voltage. They were investigating how this technique could be used beneficially to soften the sonic boom of aircraft. Hence they were performing large scale tests on Brown's electrogravitic concept. Brown's R&D company had previously made known that sonic boom softening would be a beneficial side effect of this electrogravitic propulsion technique. Interestingly, Northrop later became the prime contractor for the B-2 bomber.

The B-2 Bomber. In 1992, black project scientists disclosed to *Aviation Week and Space Technology* magazine that the B-2 electrostatically charges its exhaust to a high voltage and also charges the leading edge of its wing-like body to the opposite polarity. This information led Dr. LaViolette in 1993 to reverse engineer the B-2's propulsion system. He proposed that the B-2 is essentially a realization of Townsend Brown's patented electrogravitic aircraft. The B-2 is capable of taking off under normal jet propulsion. But when airborne, its electrogravitic drive may be switched on for added thrust. This system can only be turned on under dry conditions. If the B-2's dielectric wing were to become wet, the applied high voltage charge would short out, which explains why the B-2 is unable to fly in the rain. With electrogravitic drive, the B-2 is able to drastically cut its fuel consumption, possibly even to zero under high speed flight conditions.

The commercial airline industry could dramatically benefit with this technology which would not only substantially increase the miles per gallon fuel efficiency of jet airliners, but would also permit high-speed flight that would dramatically cut flight time.

Subquantum Kinetics Predicts Antigravity Effects. General relativity doesn't explain the Biefeld-Brown electrogravitic effect or any other antigravity phenomenon since it predicts that masses have just one gravitational polarity and should only attract one another. It allows the possibility of charge-mass coupling, only at very high energies, such as those attainable in particle accelerators far more powerful than any thus far built. The subquantum kinetics physics methodology, however, offers a much needed answer to the insufficiencies of relativity. It predicts that gravitational mass should have two polarities (+ and -) and that these mass polarities should be correlated with the charge polarity of a particle. According to subquantum kinetics, Brown's electrostatic disc should establish a gravitational field gradient from front to back which has the effect of propelling the disc forward. The movement of the charges may contribute an even larger thrust effect. The same would apply to the B-2 bomber.

5. Other Advanced Aerospace Propulsion Technologies.

The Searl Electrogravity Disc and Russian Experiments. This device, developed over 40 years ago by the British engineer John Searl, consisted of a segmented rotating disc each of whose segments was supported by a set of cylindrical permanent magnets rolling within a circumferential track. It is alleged to have achieved complete lift off. In the past few years two Russian scientists associated with the Russian National Academy of Sciences, Roschin and Godin, have built a simplified version of the Searl Disc that confirms its anomalous weight loss effects. They spun a 1 meter diameter disc at 600 rpm and obtained a 35% reduction in its weight while at the same time generating a 7 kilowatt excess electric power output.

The Podkletnov Gravity Shield and Project Greenglow. A research team in Finland led by Dr. Podkletnov were experimenting with a rotating superconducting disc that was floated on a repelling magnetic field generated by a series of electromagnets. In 1996, they reported that the disc was able to partially screen the Earth's gravitational field, reducing the weight of objects positioned above the disc by two percent. Greater weight reductions are envisioned by stacking several discs over one another. Besides propulsion, there are obvious applications to tapping the resulting gravity differential for mechanical power generation. In the last few years, BAE Systems a company formed by the merger of British Aerospace with Marconi Electronic Systems, has been researching the Podkletnov gravity shield. They are doing this work under Project Greenglow, a project they have set up to investigate the feasibility of nonconventional technologies.

The De Aquino Antigravity Effect. A Brazilian university professor, Fran De Aquino, has produced a 50% weight reduction in a 2 foot diameter, annealed pure iron toroid weighing 77 pounds. He does this by internally energizing the toroid with 10 kilowatts of 60 cycle electromagnetic radiation. His data predicts complete weightlessness of the toroid could be achieved with a 15 kilowatt power input.

Gravito Inertial Lift System. Aerospace engineer Jim Cox has recently improved on the Dean Drive, an inertial propulsion engine that was patented in May 1959. He reports tests demonstrating an upward thrust equal to 90% of the engine's weight. It uses a 1/4 horsepower motor to revolve two counter-rotating rotors, each about 1 cm in diameter, spinning them at about 600 rpm for a power consumption of about 200 watts. The lift is gotten by sinusoidally oscillating the rotors up and down and coupling them to the lift platform on their upward stroke. He obtains about 45 pounds of lift force per horsepower (~55 pounds/kw). He plans by the end of the year to have a freely lifting device which would be spun to 1200 rpm with a 1/2 horsepower motor drawing 400 watts. He estimates that using this technology a 200 horsepower automobile engine would be capable of generating a lift force of about 9000 pounds.

Kineto-baric Field Propulsion. German scientist Rudolph Zinsser discovered that sawtooth electromagnetic waves could be made to push distant objects. He produced a radio tube circuit that transmitted 45 megahertz radio waves having a sharp rise and gradual fall. His experiments demonstrated that these waves could exert impulses of up to 10^4 to 10^5 dyne seconds, which is equivalent to the application of about 1 to 3 ounces of force for a period of one second. He found that this force could be generated with an amazingly low input power, the output-force-to-input-power ratio surpassing that of conventional propulsion methods *by several powers of ten*. His projections imply a thrust of 1350 pounds force per kilowatt.

Field Thrust Experiments on Piezoelectrics. James Woodward, a physics professor at Cal State Fullerton, is conducting research that indicates that electromagnetic waves can induce lofting forces in piezoelectric ceramic media. His ideas are described in a 1994 U.S. patent and in a 1990 physics journal article. Woodward has conducted experiments that confirm this thrust effect in the audio frequency range (~10,000 Hertz), and his calculations suggest that it may be substantially increased at higher frequencies, with optimal performance being obtained in the microwave range (0.1 to 10 gigahertz). His work has gotten some support from DoE.

The Author

Since 1984, **Dr. Paul LaViolette** has been president of the Starburst Foundation, an institute that conducts interdisciplinary scientific research in physics, astronomy, geology, climatology, systems theory, and psychology. He has degrees in physics and Systems Science and has authored four books: *The Talk of the Galaxy* (2000), *Earth Under Fire* (1997), *Beyond the Big Bang* (1995) and *Subquantum Kinetics* (1994). In addition he has authored 34 papers appearing in books, scientific journals and conference proceedings on topics ranging from subquantum kinetics and the unified field theory, to ice polar ice cores to the big bang theory and to antigravity research. He is listed in the 1996 edition of Marquis Who's Who in Science and Engineering.