# **Tests Verify A-Vector Gravitational Action**

# Last updated 04-17-2005.

# ELECTROGRAVITY WORKS

# April 17, 2005 Update:

Recent electrogravitational experiment reports (below) suggest that a pulse of d.c current excites magnetic domains across a frequency spectrum and part of that spectrum is what rotates the domains at the rate necessary to resonate. By resonate, I mean the A-vector associated with the orientation of the magnetic domains will rotate to a point where they will be pointed at the Earth when the pulse current is synchronously applied. It may help to bias the domains with a steady magnetic flux via a second winding on the torus. This will be investigated to see if that is true.

The resonance may build the A-vector at the right time so that the anti gravitational force will build up over time. When a pure 60 Hz sine wave of current was applied to the toroid winding, the result was attraction, not repulsion. This was evidently a non resonate frequency for the permeability of the toroid core being tested. However, if the exact sine wave frequency (such as is contained within the spectrum of the pulse current) is found, it may pump up the amplitude of the A-vector at the right time when the domain is synchronously rotating in the iron medium. Thus, this process may not work in just the air or in a vacume since magnetic domains are nonexistent.

That may be the secret of the powdered iron core torus of Fran De Aquino. Furthermore, Edward Leedskalnin may have used a combination of a.c. potential field as well as a.c. magnetic field to accomplish the same thing concerning the orientation of the electric domains in the coral blocks he is said to have levitated. This also applies to the Kowsky-Frost experiment wherein a quartz crystal was said to have been levitated using a strong electric field bias while also being impinged by a radio frequency electromagnetic field.

There is a plethora of design possibilities that may work as long as the mechanics as outlined above are accomplished.

It is of interest that in some cases, UFO's have left an oily film on the surroundings where the craft have been observed to land and the oily film contained ferromagnetic particles in abundance. It is also established that true crop circles have magnetic particles in abundance within the perimeter of the circle.

Test Report Date: March 21, 2005

Subject: Balance Beam Current Transformer Test Results.

Test results utilizing a 60 Hz current sine wave have the following results:

1. Placing thin steel sheeting between the balance beam end mounted torus and the Earth causes measurable attraction increase as compared with no steel sheeting. Thereafter, a doughnut of iron wire placed under the balance beam current transformer caused a very pronounced movement towards the Earth as compared to the thin steel sheet as above.

2. A fixed position current transformer having the secondary shorted and mounted above the moving current transformer will cause lift of the moving torus and iron sheeting will increase the lift when placed between the two current transformers.

3. Removing the upper fixed current transformer while leaving the iron sheeting in place will cause no net motion of the current energized moving current transformer.

4. A current is induced into the fixed current transformer from the active current driven transformer even through shielding by the iron/steel sheeting.

Conclusions:

The presence of higher than air magnetic permeability between the active current transformer and the Earth or another fixed current transformer increased the attraction of the current driven current transformer to the Earth or the fixed current transformer.

Removing the fixed current transformer from the vicinity of the moving current driven transformer while leaving the steel sheet caused no discernible attraction to the steel sheet which suggests that attraction was not accomplished via magnetic flux force acting on the iron/steel in the intervening sheet of steel.

The results agree with the form of the electrogravitational equation which utilizes a connecting permeability constant equal to the permeability of free space. The magnetic vector potential is not shielded against by ordinary magnetic or conductive metal and this shows up in the induced current action in the fixed current transformer that occurs even through the iron/steel sheeting from the current driven moving current transformer.

Previous tests involved a pulse width controlled d.c. current at approximately 16 kHz which caused repulsion of the Earths gravitational field. This suggests that the wave shape and/or frequency of the driving current may play an important role in the type of field interaction that the current transformer accomplishes on the ambient gravitational field.

## Test Parameters:

Driving current is 6.6 ampere sine wave at 60 Hz into secondary of current transformer as described on my web site. This is a 40:1 ratio saturable reactor construction. The active current transformer is mounted on a wooden balance beam. Current is limited by a suitable series resistance type load cell capable of dissipating about 800 watts and supplied with nominal household voltage of 125 volts a.c. Measurement is accomplished via an electronic offset voltmeter assembly also described on my web site. Nominal separation of current transformers is 1 cm.

Final Comments and Recommendations:

Further testing and analysis is necessary to determine why it is that pulse currents cause repulsion while sine wave currents cause attraction concerning the ambient gravitational field.

Test Director:

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#### Tests: 01-19-2005:

Current transformers are wound in a torus fashion. Recent tests were performed to determine if the A Vector generated by a pulsed current torus configuration would interact with the gravitational field of the Earth. Included with this test report is a link to the test recently presented on the web site of a similar test by Telos Research.<sup>1</sup> This test report verifies the results of the Telos test.

In the Telos test, a smaller torus is mounted in close proximity to a larger torus, and the center axis of both toroids is common and aligned parallel. In my own test, one torus is used to prove that the A-Vector is the most important feature related to electrogravitational action although more that one torus mounted as in the Telos test will likely enhance the gravitational action.

The current transformer <sup>2</sup> I used is available from Jameco Electronics and thus is easily available for those wishing to duplicate my tests. A picture of the current transformer is shown below with the windings exposed for determining the direction of current in the windings relative to the direction of the current path through the center of the torus. Tests have demonstrated that the A-Vector transits the iron pipe with no reduction in field strength. This test is demonstrated in an mpg video included in my complete works CD, Electrogravity Works<sup>3</sup>.

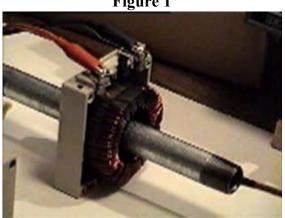


Figure 1

#### **Test Results:**

The test torus was mounted at the end of a sensitive balance beam so that the opening in the center has the center axis vertical, or perpendicular to the Earth's surface. The torus center opening was void of conductors or other material. When the torus was energized with pulses of current, the torus rose into the air. When the current pulses were reversed in polarity, the torus rose again into the air. The A-Vector pointing up caused the torus to raise slightly more than when the A-Vector pointed down towards the Earth. When the torus was oriented so that the torus axis was horizontal with respect to the surface of the Earth, only a slight rise was noted with both polarities of toroid winding input pulses.

Testing was also done for the condition of one lead lifted and tied to the opposite polarity lead at the toroid connector. There was no rise or fall of the beam with zero current going through the toroid. All other conditions regarding current level and test parameters remained the same. The purpose of this test was to eliminate the possibility of artifact readings occurring due to stray coupling a.c. fields unduly influencing the balance beam electronic measuring circuit.

# **Analysis Of Results**

The A-vector is known to exist outside of the torus wound coil but the magnetic flux is trapped inside the torus. The A-vector changing with time generates a -E volts/meter field outside of the torus and consequently causes current in a conductor to move opposite in direction than the current that generated the original A-vector. This explains Lenz's law more directly than Maxwell's equations which deal with time varying magnetic flux. Thus, the A-vector is more fundamental than the magnetic flux. When the A-vector changing with time acts on a charge in a conductor, force is the result which then amounts to current flow.

Therefore, for the case of the iron wire reportedly shot out of the center of a toroid wound set of coils when the coils were pulsed by a heavy current, we cannot attribute the action to the explanation of Lenz's law but rather the more fundamental action of the time changing A-vector. (Lenz's law states that a magnetic field is built up to oppose the magnetic field that is attempting the induction. There is not a magnetic field in the torus center to induce with.) Further, Lenz's law provides for a repulsion of the iron wire in the direction of minimum opposing field. That is, if it is induced opposite magnetic flux causing repulsion, the side with the most iron wire sticking out of the center axis of the toroid will also be the direction that ejects the iron wire. The wire will thus not likely have a central point of balance.

# It is also established that a copper wire will not be affected at all when subjected to the same current-impulse field as for the iron wire. If Lenz's law applied as an explanation for the iron wire being shot out of the current-impulsed torus, the copper wire would have also been similarly affected.

The faster the rate of change of the A-vector, the stronger the action will be. Further, the A-Vector acts on matter in general. Not just on charged particles. In the quantum sense, the A-Vector is a momentum changing vector field. It works on all matter containing energy. This explains the paper dot experiment where a paper dot was flipped into the air from the pulsed toroid configuration as previously reported.

I would like to pose this question: What if all A-Vectors had the same velocity in the direction of the vector? If so, then A-Vectors pointing in the same direction and inline to each other could not interact with each other. Only if the A-Vectors were pointed at each other would interaction of the A-Vector field occur. This would explain how I measured lift of the torus with the recently reported balance beam experiment where one polarity of pulses generated almost twice the lift than the other but both polarities generated lift. The center of the torus has more A-Vector field and is thus is a more dense action field that the outside of the torus. A little thought tells us that if the center of the torus is opposite vector to the Earth's field of gravity, a strong action occurs. However, reversing the polarity of the A-Vector field by reversing the pulse current polarity will cause the A-Vectors through the center of the coil to be in the same direction as the Earth's A-Vectors and thus no action of force occurs through the center but does occur around the weaker field of the outside of the torus A-Vector field.

## **Related A-Vector Test:**

Of relevance is the fact that the A-Vector is inline, or in the same direction as the current flow. The A-Vector associated with the inside of the current carrying torus windings will create current in a center conductor passing through the center of the torus and further, the current will be in the <u>opposite</u> direction as the current passing through the windings inside of the torus proper.

The relative current direction test was accomplished via an oscilloscope externally triggered (+) from the toroid winding signal input. It was verified that a loop of wire having a series resistor of about 1 ohm allowed for the voltage drop across the resistor to be measured relative to the primary signal time. The toroid winding signal was provided by a variable pulse width 12 volt d.c. motor control circuit fed to the torus winding through a 1 ohm current limiting resistor. It was formally established that the direction of the current in the inside of the torus windings and

the wire passing through the torus center both had current traveling in the <u>opposite</u> direction. Thus, Lenz's law is upheld concerning the A-Vector action, even in the absence of inducing magnetic flux regarding charged particle motion relative to the sourceing and sinking of current.

It is an important feature of torus winding construction that a torus contains very nearly 100% of the magnetic flux inside of the torus windings. Thus interference with the Earth's magnetic field is minimized to nearly 0%. Further, changing the polarity of the excitation pulses serves to further remove the Earth's magnetic field as a source of error.

#### **A-Vector Notes:**

The A-Vector points in the direction of momentum. This is quite generally true concerning all energy, charged or not, whether it is a particle or electromagnetic wave. Further, the group velocity is inline to the A-Vector and thus the related phase velocity is 90 degrees to the group velocity. Mass is associated with the group velocity. Particle phase information (alignment of other particles with each other) is associated with the phase velocity. A simple analogy is an ocean wave where the phase velocity is along the crest of the wave while the group velocity is the forward motion of the water particles towards the shore. The phase velocity is comparable to the De Broglie pilot wave which theoretically controlled how a particle moved through space. Therefore the phase wave controls particles to cause them to come into alignment by controlling individual particle momentum in an entangled manner to achieve coherent and synchronized parallel motion. The product of the phase velocity and the group velocity is equal to the velocity of the medium squared.

The mathematical relationship of the energy related group momentum and phase velocity is given as:  $v_p = mc^2 / mv_g$  where the denominator on the right of the equal sign is momentum. The least quantum allowed velocity is calculated in my theory of electrogravitation as being equal to the square root of the fine structure constant (=8.54 x 10^-02 in meters/second units) which would be associated with least quantum group velocity and therefore the maximum phase velocity is about 1.05 x 10^18 meters/second. This is for the medium of free space.

It is also important to note that the A-Vector direction remains the same whether the toroid windings are being energized or de-energized as long as the direction of the current does not reverse direction. A good example is a coil having a magnetic core where once energized, a steady current and associated magnetic field is established. When de-energized, the current (related to momentum) attempts to maintain the same direction of flow while the d.c. potential across the coil reverses as the field collapses. The voltage would tend to build to dangerous levels across the coil unless we put a diode across the coil with the cathode on the negative end of the coil. (If we use an a.c. signal instead of pulsed d.c., the direction of the A-Vector would change with the direction of the current.)

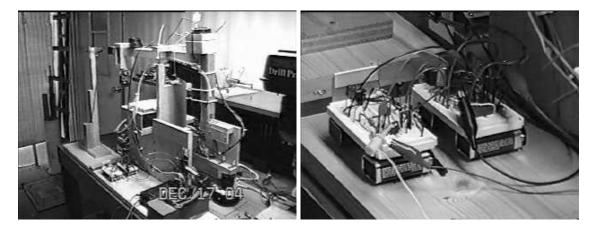
## **Test Configuration And Related Electronic Circuitry:**

Pictures of the balance beam and related components are shown below.

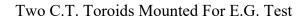
Multi-Function Balance Beam

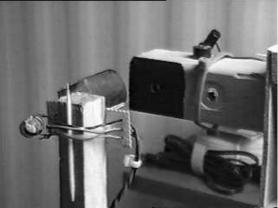
Light Detector Amplifier and Damping Ckt.

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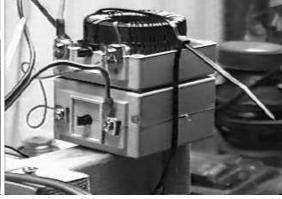


Infrared Detector and Source in Beam



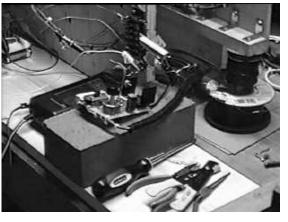


Damping Coil Under Balance Beam Arm

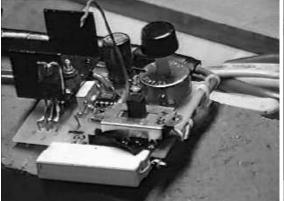


Variable Pulse Width Motor Control Ckt.

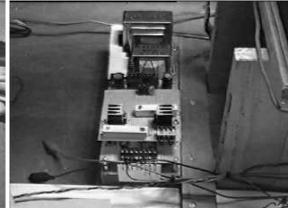


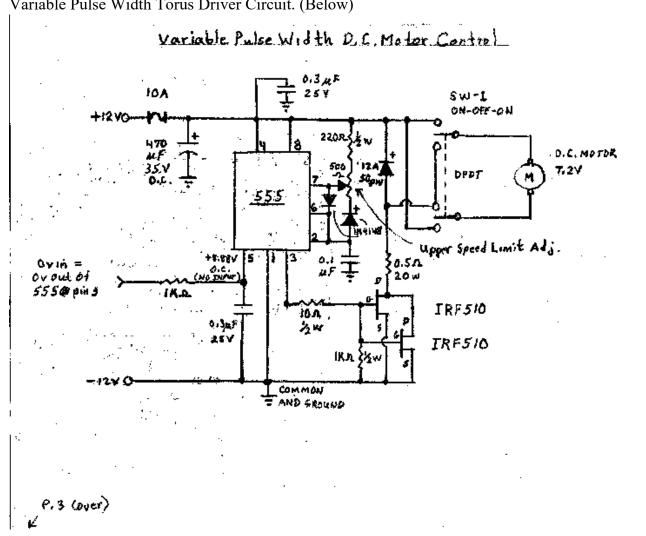


Motor Control Ckt. Close-Up



Main Plus and Minus 8 Volt Power Supply



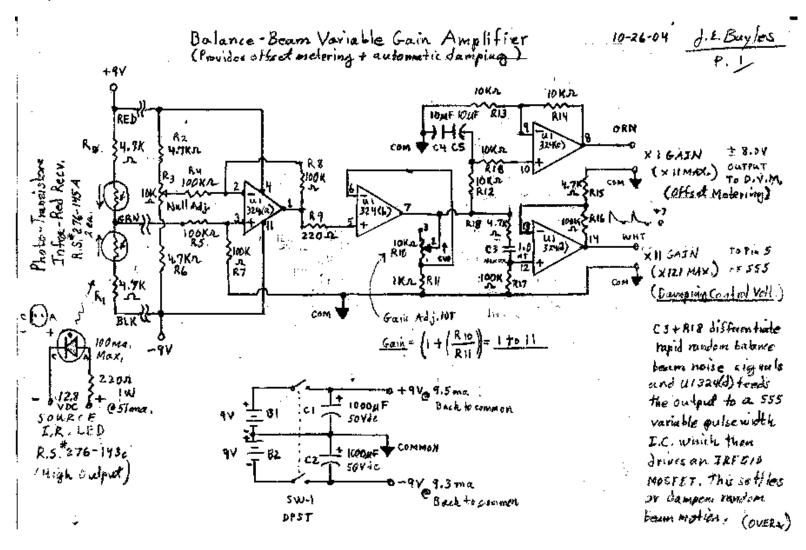


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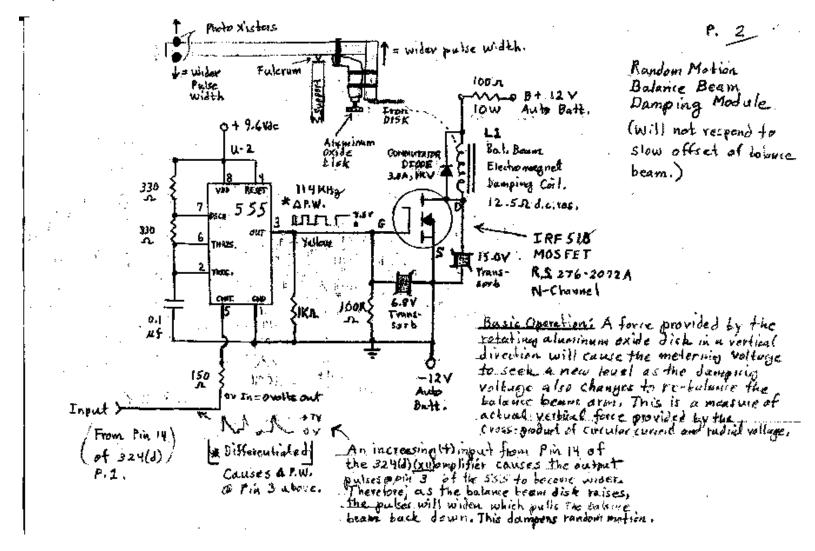
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Variable Pulse Width Torus Driver Circuit. (Below)

Balance Beam Null Detecting Amplifier and Auto Damping Circuit. (Below)

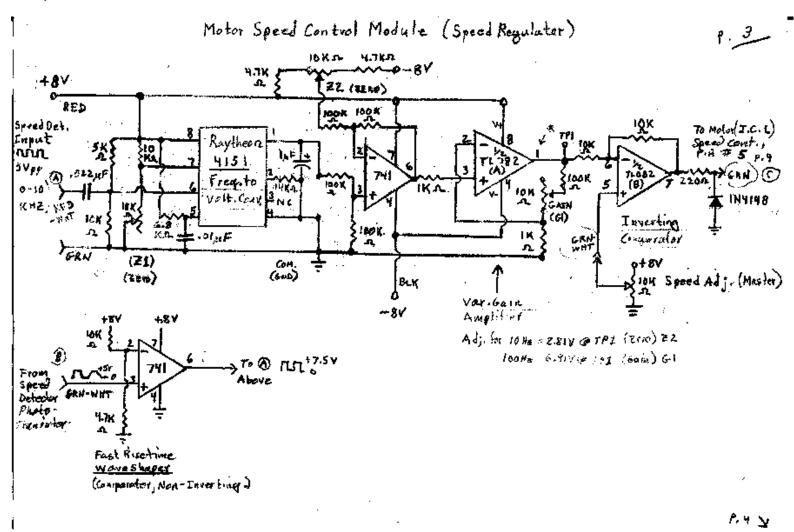


Automatic Balance Beam Jitter Damping Circuit. (Below)



Motor Speed control Circuit, Used for Spinning Aluminum Oxide Disk Test. (Below)

Tests Verify A-Vector Gravitational Action



The automatic motor speed control is not used for the electrogravitational A-Vector Torus test. It is used for the aluminum oxide spin test which will be presented in a different paper.

## **Conclusion:**

Since this result supports the Telos test results, further research investigating the A-Vector gravitational interaction as described above is strongly suggested. Perhaps the effect can be enhanced by making the opening smaller which would tend to bunch the A-Vector field into a smaller space. Also perhaps adding more toroids with the center axis' aligned along a common vector might add to the gravitational interaction with the Earth's gravitational field. Finally, it is hoped that others will also perform this simple experiment and share with the Yahoo newelectrogravity group their results.

Electrogravity Works Jerry E. Bayles December13, 2004 j.e.bayles@worldnet.att.net http://www.electrogravity.com

# **References And Related A-Vector Test Links:**

Jean-Louis Naudin's A-Vector Toroid Tests: <u>http://jlnlabs.imars.com/vpexp/</u> David Mason's A-Vector Toroid Tests: <u>http://www.ctglabs.com/teslos1.htm</u> Note: Ref. 1 below has been altered by the source to eliminate the record. There was no explanation for the removal of information. 1] http://67.76.239.187/

2] http://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?

- langId=-1&storeId=10001&catalogId=10001&pa=174887CL&productId=174887
- 3] http://home.att.net/~j.e.bayles/store.html