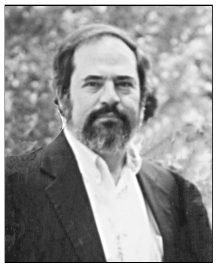
A Matter of Gravity

by Eugene F. Mallove, Sc.D.



Antigravity has been an enduring concern of human beings, long before Isaac Newton in the 1680s proposed there was even such a thing as "universal gravitation" between every two pieces of matter in the cosmos. Newton was first to express the magnitude of this all-pervading force with the simple formula, $F = GmM/r^2$, which relates the force to the masses that are gravitating (m and M) and the distance, r, between their centers. Long before there were airplanes—the most common "antigravity" machines of today—there were flying birds and insects, arrows and bullets that could be sent high, stones and spears that could be thrown upward, and soaring firework rockets. None of these actually escaped gravity's clutches, of course, all being destined to fall back or land on the ground. This "antigravity" was indeed fleeting.

Human beings wondered, no doubt for thousands of years, whether they could ever have the kind of temporary antigravity common to most birds. Could we learn how to fly? The very century that finally gave us heavier-than-air flight (after decades of dogmatism by many scientists that it would remain impossible) also delivered orbital spaceflight. That feat, achieved by the Russians in October 1957, had been proposed by Sir Isaac himself—his famous high-velocity cannonball fired horizontally from a mountaintop. Combining what Sir Isaac knew and advanced rocketry, humanity has haltingly begun to explore the wider universe. But. . .is there a better way? Could there be a "real" antigravity, something that wouldn't be fleeting, something that would last—like a gravity shield or a method to cancel or reduce gravity's bonds?

Apart from accounts in science fiction stories, our most recent encounter with *perhaps* genuine antigravity (or gravity "shielding" at least) was the rotating superconductor "gravity shield" of Eugene Podkletnov (who worked in Russia and Finland), a story which broke in 1996 and even rated a full page in *Business Week* (September 30, 1996, p. 42). *Infinite Energy's* Christopher Tinsley wrote a haunting piece about this experiment and its extensive theoretical precursors, "Table Top Antigravity?," for *IE* #9 (July/August 1996). The Podkletnov magnetically levitated superconductor was alleged to produce on the order of 2% to 5% weight reductions in a vertical zone several meters above it. The inimitable Tinsley even chose to quote the infamous Prof. Frank Close, a scurrilous anti-cold fusioneer ("who was not frank and not even close" about cold fusion, I say). Paraphrasing and quoting Close from a BBC/The Learning Channel production of that era, Chris wrote: "He said that possibly antigravity is closer to science fact than one might think, and that in some theories gravity had two components—the one with which we are familiar, and a 'little bit on top, which is like antigravity.'" In this instance, Close may have been a lot closer to the truth than he could possibly know! Read on. . .

Predating Podkletnov on the serious antigravity scene were Japanese scientists H. Hayasaka and S. Tackeuchi, who published an extraordinary article in the mainstream journal *Physical Review Letters* (Vol. 63, 1989, p. 2701). They reported that a rotating flywheel, spinning about a vertical axis in vacuum, experienced a small weight loss that was directly proportional to the rotation speed. The effect was observed only for rotation clockwise (as seen from above in their northern hemisphere laboratory). As with the parallel physics heresy that emerged in 1989—cold fusion—the Japanese anti-gravitational effect was buried in an avalanche of apparently rushed criticism and inadequate or flawed counter experiment. Unlike cold fusion, however, there arose no widespread community of dedicated investigators and supporters of the positive result, so the controversy has been quite removed from public view. Our esteemed scientific advisor Dr. Harold Aspden, however, took it upon himself in 1989 to write a most rewarding paper, "The Theory of antigravity," published in *Physical Essays* (Vol. 4, No. 1, 1991, pp. 13-19). In his view, the rotational antigravity effect (if real) was probably the expected effect of vacuum medium, *i.e.* ether, spin. Aspden wrote:

> The fact that the lift force depends upon the direction of spin is a clear indicator of the asymmetry arising from charge displacement. The author's theory of the vacuum field in terms of synchronous lattice electrodynamics specifies that there is a preferred spin direction in the vacuum. An action conductive to vacuum spin will displace electric charge radially outwards or inwards according to the orientation of the spin axis relative to the preferred direction. However, such displacement must be balanced by charge displacement in matter, and electrons can flow outwards in a conductive flywheel to sit just outside the vacuum region in spin, but positive ions cannot be so displaced. Accordingly, the coextensive rotation of the vacuum medium within a flywheel can only occur readily for one direction of spin, that which corresponds to the rotation of the Sun and all the planets.

Aspden was able to calculate a rough correspondence from his ether theory with the weight loss function of angular rotation found by the Japanese investigators. Aspden's article covered much more ground, however, than the Japanese experiment and its interpretation. He delved into the observations of

unexplained anomalies in simple flywheels that were introduced by the late Eric Laithwaite at London's Imperial College of Science and Technology. This issue of macroscopic "antigravity"—or perhaps more properly termed "mechanical reactionless thrusters" that are alleged to be in violation of Newton's Third Law (of action equaling reaction)—is a gigantic topic and controversy in its own right. It involves such figures as Robert Cook, whose thruster has been tested with some success at Boeing (see *IE* #28 and #29) and many others from Norman Dean of "Dean Drive" fame in the 1960s to B. Thornson.

A little known background to this antigravity matter in the mainstream and not-so-mainstream is physicist Robert L. Forward's discussion of *Newtonian* antigravity. Yes, in principle it is quite possible to achieve an antigravity zone using matter itself! In his imaginative book, *Future Magic: How Today's Science Fiction Will Become Tomorrow's Reality* (Avon Books, 1988), Forward notes that if a suitably dense mass (white dwarf-star density—about a million times greater than normal densities!) could be supported at Earth's surface (with columns of diamond strength or greater), the opposing gravitational attractions between the super-dense mass and Earth's gravity field would produce a zone of zero-gravity under it. Forward calculated that a disc-shaped mass 45 cm in diameter and 10 cm thick, supported horizontally on Earth, would produce a zone of cancelled gravity underneath. Immediately above the disk would be a 2g downward field. Technologically difficult as this would be, it establishes something like an existence proof for antigravity. Forward also suggests using super-dense neutron-star-like fluid circulating in coils to produce antigravity (under what I regard as the very hazardous assumption that Einstein's General Theory of Relativity is a valid description of nature). Clever as these ideas are, they are beset with the same problem that confronts the hot fusioneers and their non-working tokamaks. The solution to the problem of fusion is table-top and it is here already in prototype experiment form. The easy solution to antigravity is also table-top, and it too is here, albeit marginalized and ridiculed.

We come to the fascinating "lifter phenomenon," the subject of lengthy hands-on, build-one-yourself discussions elsewhere in this issue (see pp. 13-29). These conceptually simple "asymmetrical capacitor" devices (which NASA has just now patented!) certainly oppose gravity in their high-voltage-derived working. Hence, they are "antigravity," in that sense, just like airplanes. These all have parentage in the patented devices of remarkable American inventor Thomas Townsend Brown (1905-1985). However, simple as these are, there persists deep confusion and controversy about what precisely produces the thrusting effects, which can support more than the weight of the lifter itself. Furthermore, it is clear that thrusting occurs in horizontal orientation too. So, unlike Podkletnov-like claims, this is not purported gravity "shielding."

There have been unsuccessful attempts to correlate the lifter thrust with the admitted ion wind entrainment when these thrusters operate in air. Said ion wind seems to be a very small fraction of the total thrust effect, many have concluded by calculation and experiment. And, there are other asymmetrical electric field-type thrusters, such as the Jean-Claude Lafforgue device, which received French Patent No. 2651388 in 1991, "Isolated Systems Self-propelled by Electrostatic Forces." Testing by Jean-Louis Naudin, reported on his excellent site (http://jnaudin.free.fr), seems to confirm that ion wind is not the thrusting mechanism for that device (see also www.americanantigravity.com). The thruster of Hector Serrano of Gravitec, Inc. is in that lineage and was granted international patent WO 00/58623, "Propulsion Device and Method Employing Electric Fields for Producing Thrust," October 5, 2000.

My urgent suggestion to NASA is simply this: On the next space shuttle flight out (Hah, fat chance!), carry up a half-dozen versions of T.T. Brown devices, asymmetrical capacitors of recent vintage (inspired by the Transdimensional Technologies design), and Lafforgue and/or Serrano devices of recent vintage (NASA, please see photo on our cover for blue-sky inspiration!). On orbit, sequentially deploy each device, equipped with its own power supply outside the shuttle, and watch its movement. If it begins to accelerate away from the shuttle in the vacuum of space—fast or ever-so-slowly (because of the mass of the power supply)—we have reactionless thrusting *proved* once and for all! Not much "ion wind" out there. (Yes, some vacuum chamber tests on terra firma have been done, but these are still mired in controversy—one doesn't get a straight story.) But this would be much too simple (and cheap!) for NASA, which prefers to squander tens of millions on "gravity probe" tests of General Relativity and other probable mythologies.

Finally, we must confront a much more serious antigravity matter. What if antigravity were very common and universal, much more simple even than the asymmetrical capacitors seem to be? What if antigravity were right under our very noses, and we had been too mesmerized by the Fizzix Establishment to notice it? Well, ladies and gentlemen, it almost certainly is! Regular readers of *Infinite Energy* know that this editor has spent a great deal of time studying the exemplary work of Dr. Paulo and Alexandra Correa, of Toronto, Canada. If on their site, www.aetherometry.com, one reads my 2001 "Letter of Support," one will find my description of an anti-gravitational experiment that they performed for me in late August 2000 in their lab. A 43 milligram piece of gold leaf, which was suspended by a dielectric thread from the arm of a wooden beam connected to a sensitive electronic balance (far off to the side), was quickly reduced in apparent weight by 70%.

Now, this is, in gross "antigravity" performance, not as good as the "lifter phenomenon," but note well that there were *no* electrical connections whatever to the suspended foil, merely the imposition of an electrical frequency between distant (from the gold leaf) metal plates adjusted to match that of the corresponding gold "anti-graviton," as the Correas would call it. There were no ion wind issues in that experiment. And, the result is far, far more profound than the baroque claims of Podkletnov *et al*. are—with their rotating HTSC superconductor plate that NASA and other labs have still apparently failed to confirm. I honestly bless the HTSC antigravity people for trying to do good science amid the ignorant protests of Robert Park and his *Voodoo* scientist ilk, but this HTSC antigravity approach does not get to the core of what gravity, and anti-gravity, may really be.

It turns out that the common gold leaf electroscope, sitting in virtually every high school lab, may be a perfect tool to investigate anti-gravitation. This is a much larger topic than can be covered in this very brief space (I promise a future article devoted to just this topic), but a close reading of the Correa scientific monographs posted on www.aetherometry.com

leads to the profoundly unsettling conclusion that a component of the aether that they have identified (its "latent heat" component) is constantly performing antigravitational work on the moving electrons in the foil to keep the gold leaf supported, even when said leaf is in "static" position—held apart *allegedly* by only the static repulsion of the imposed charge (or so conventional "static electricity" theory would have everyone believe). Yes, if the Correas are correct, electroscopes may be exemplars of antigravity at work. They are apparently "perpetual motion machines" too. Energy is conserved, of course, but there is continuous expenditure of aether energy that goes into just holding those leaves up, the Correas propose. Professional skeptics will of course not devote one minute to the difficult study or experimentation with such claims, preferring quick, glib dismissive remarks that suggest the topic is off limits to rational investigation. Too bad for them.

The only problem with such a stance is that aether motors (apparently self-running, from a mass-free aether energy component) have been built and shown hands-on to over a dozen individuals. Embedded in the operation of such motors is the deep connection between electricity, gravity, and nature's antigravity. At the Innovative Energy Technology conference in Berlin (June 13-15, 2002), the Correas showed an excellent video tape of such aether motor operation and distinguished their characteristics from their earlier patented PAGD (pulsed abnormal glow discharge) motor work, as well as from Wilhelm Reich's "orgone" motors in the 1950s (which were not claimed to be self-running). The groundwork for the science of such motors is already publicly available. Perhaps more technical details of the motor construction will be made available too; website space has been allocated for that, one can verify from their outline. Patents have been applied for and are in process. On a shorter timeframe, it is likely that the one-hour video presentation for the German conference, which I have previewed, will be made available commercially.

The effects of antigravity and its direct link to freely available energy, via the long-sought *experimentally verifiable* connection between electrical phenomena and gravity, will eventually become common knowledge. But, most certainly, not without a great fight. Science killers like Voodoo Park and his groupies are out there to destroy novel science at every turn—". . .claims of antigravity devices seem to come up every few years, only to fade away in a matter of weeks or months. . ." (p. 138, *Voodoo Science*). Park and kindred dark spirits intuitively understand the free energy implications of antigravity. They have reason to fear it. They can hold it back, but they can no more stop it than the light of day. ❑❑❑

BREAKING NEWS! Please see page 68

UPCOMING EVENTS

The American College of Orgonomy

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The Ethics of Innovation, Suppression, and Crisis

November 9-10, 2002
Holiday Inn
College Park, MD

For more information visit our website:
www.integrityresearchinstitute.org
or e-mail us: iri@erols.com

ICCF10 Scheduled for 2003

The 10th International Conference on Cold Fusion has been scheduled for August 24-29, 2003, at the Royal Sonesta in Cambridge, MA.

Watch *Infinite Energy* and its website for information as it becomes available.

www.infinite-energy.com