UFOs and the Zero Point Field:

You Can Get Here From There

By Marie D. Jones

Most ufologists agree that alien spacecraft must be using a highly advanced technology or propulsion system to move them across vast distances in short periods of time. Quantum physics may hold the answer to how they are getting "here from there," and that answer just might be the Zero Point Field (ZPF).

Nothing exists in a vacuum. The concept of empty space has been shattered by the discovery of an infinite field of teeming activity, where tiny electromagnetic fields continuously fluctuate, even when temperatures reach absolute zero. A field where nothing, literally, is impossible because even at zero baseline values, there is something; quantum fluctuations or "jiggles" that cannot be measured, yet permeate every inch of space.

A field that, if tapped into, might possibly produce enough energy to power the entire planet for a long, long time…and send a spaceship or two across the galaxy at near-light-speed to boot.

The Zero Point Field.

The ZPF is made up of Zero Point Energy (ZPE), a literal sea of energy that we swim in, like fish in the ocean, unaware of the vastness of our surroundings. ZPE was first suggested in the early years of quantum mechanics, when physicist Paul Dirac theorized that the vacuum of space was instead filled with particles in negative energy states. These

particles were predicted to materialize for brief periods, and exert a measurable force. This force was predicted in 1948 by Dutch physicist Hendrik B.G. Casimir. The Casimir Effect is a weak, but measurable force between two separate objects, like two metallic plates hanging parallel to one another, which occurs due to the resonance in the space between the objects. This force can only be detected when the two plates are very close to one another, and the effect diminishes as the distance between the two plates increases. This force indicates a change in the electromagnetic field between the two plates.

The Casimir Effect proved the existence of ZPE, certainly in a scientific sense. As far back as 1911, Max Planck, Albert Einstein and Otto Stern were researching ZPE, and in 1916, Walther Nernst formally proposed that empty space was filled with this field of zero-point electromagnetic radiation. Nobel Prize winner Willis Lamb was the first to measure the discrepancy between calculated and measured energy levels of hydrogen gas in an excited state, which lead to a greater understanding of vacuum field fluctuations and the development of quantum electrodynamics and the concept of zero point energy.

In the Zero Point Field, particles pop in and out of existence, creating a “foam” of virtual particles that makes up empty space. Based upon the Heisenberg Uncertainty Principle, which states that the more accurately we can know the position of a moving particle, the less accurately we can measure its momentum, and also states that no quantum object can ever truly be completely at rest, the electromagnetic fluctuations of ZPE fill every corner of space, every nook and cranny, and are never at a state of absolute zero momentum, but instead vibrate at the most minute rate of oscillation allowable by the laws of quantum physics.

Thus, the tiny residual ”jiggle.” As it is the lowest state possible for energy to possess, the ZPF can only be visually detected in experiments like the Casimir Effect. But were we to somehow magically remove all matter and energy above the zero-point state that exists in space, what would be left is the ZPF.

The most fascinating promise of the ZPF is its potential as an infinite source of energy, one that modern-day physicists like Hal Puthoff believe may one day propel space craft to distant parts of our universe. Ufologists believe alien civilizations far in advance of our own are already using the ZPF, harnessing the unlimited field of energy as they literally shoot across amazing distances without ever having to stop “for gas.”

The ZPF is estimated to be massive, even infinite, and to exceed nuclear energy densities, meaning that just a small amount of ZPE could provide a whole lot of fuel. Science fiction novels and television shows already hype the ZPF as a powerful source for creating everything from “Star Trek’s” quantum torpedoes to “Stargate SG-1’s” modules made from the field that can allow intergalactic space travel.

Although currently we can only measure minute amounts of ZPE levels, physicists like Puthoff believe we can achieve the technology to one day tap the field in much bigger ways. And the aerospace industry seems to believe we can achieve that, too. A March 2004 article in Aviation Week and Space Technology titled “To The Stars” stated that two large aerospace companies, and one U.S. Defense Dept. agency are betting on ZPE, launching bold research projects exploring the potential energy source. Puthoff stated in the article that the potential is “practically limitless, way beyond what can be conceived.” But he points to the need to first design a viable way to extract the energy

from the Zero Point Field, a process that as of yet remains utterly inefficient at producing more energy than “a butterfly’s wing.”

There is also a yet-to-be-found catalyst that would “ignite the ZPE process.”

This “new physics” of the Zero Point Field could one day take us to the nearest planet in a matter of weeks instead of years. As a method of propulsion, the sky is literally the limit, thus the intense interest in the ZPF by NASA and both government and private industries.

But intense interest in the ZPF and its potential for powering spacecraft was not limited to U.S. agencies, nor was it limited to the last three decades. In “The Hunt for Zero Point,” author and Jane’s Defence Weekly aviation editor Nick Cook documents the Nazis’ intense interest in antigravity and Zero Point Energy. This potentially limitless source of power intrigued scientists in Nazi Germany, who were later brought over to live and do their research in the United States as part of Operation Paperclip. These scientists believed in ZPE as not just an energy source for fueling rockets and planes, but as the potential material for a powerful bomb.

Cook chronicles the quest to control gravity and take to the stars at speeds near or surpassing that of light. Military, aerospace and corporate interest in ZPE has been heated since the 1940s on both sides of the Atlantic, beginning with the concepts of “electrogravitic lift” of Thomas Townsend Brown, an inventor who, in 1929, wrote a paper called “How I Control Gravitation” to accompany his own creation – an electrical condenser he called the “Gravitor.” This device was a type of motor that utilized the principles of electro-gravitation, and led to Brown developing the ideal shape for electro-

gravitational lift – the disc. This was in the 1920's, when the aviation industry was still trying to get a fighter plane over 160 mph.

Brown's research would lay the foundation for his later work with the Naval Research Laboratory, where he would be assigned to work on experiments with acoustics and minesweeping. But he would during that time invent a method for canceling a ship's magnetic field, a critical element in wartime, and would later be linked to the notorious Philadelphia Experiment, which supposedly involved the disappearance of a naval warship and its crew into another dimension.

Brown went to demonstrate his Gravitor and flying discs to military officials eager to grasp the potential of defying gravity and eventually he established is own research foundation, continuing to pitch the military on his amazing disc technology.

Even the Nazis and their brilliant scientists were at work on antigravity technology, which Cook believes might account for the "foo fighters" so often spotted by Allied pilots during World War Two, and of course, the United States was forced to keep pace, doing their own black budgeted research. Other nations would step into the fray, with Russian, Finnish and British scientists all searching for a method of not just controlling gravity, but overcoming, or nullifying, it altogether.

Much of the groundwork into antigravity and ZPE had been laid by the likes of T.T. Brown, and German scientists working for the Third Reich (both voluntarily and involuntarily), such as Viktor Schauberger, who had built an unconventional machine in the early 1940s that generated lift, dubbed the "fleigende scheibe," or "flying saucer." The craft would later be dubbed the "Repulsine," and would be one of many prototypes created and tested under the Nazi flag.

ZPE research would fall into a kind of black hole of its own for the next few decades, with little public information and even less government admittance that it was even a serious pursuit. But documents recently declassified, and investigative reporting like Cook's would reveal a continuing interest at NASA and other government agencies, all of which were spearheading (including financially supporting) the work of various researchers. Russian intelligence agents also showed interest in the lifter technology of Viktor Schauberger, suggesting their own ongoing black program into antigravity.

UFO sightings would be linked with the disc technology of the Nazis, and when America made their power grab of the German technology after the war, many ufologists would wonder just how many UFOs were from "out there," and how many were from "down here," like the recently declassified Project Silverbug, a supersonic saucer being developed by the United States Air Force. Silverbug was rather conventional, being a jet-powered vehicle, but for the Americans, it was an attempt to develop prototypes closer to what the SS had been developing before the end of the war.

Today, physicists studying the ZPF and its energy believe we are nowhere near understanding how to extract and large amounts of Zero Point Energy for such uses as heating our homes and fueling our cars and planes. Yet, research is going on now that may come up with viable ways to tap into this repository of ground energy states and virtual particles that, according to physicist Richard Feynman, could contain enough energy in just one single cubic meter of space to boil the world's oceans. That's a lot of energy. And if the ZPF is indeed as infinite as space itself, the energy will never run out. Unlike fossil fuels, this field of energy will be constantly self-regenerating. In fact,

Puthoff calls the ZPF a “self-regenerating grand ground state of the universe.”

Research into the ZPF also shows its ability to affect gravity, and the ZPF may possibly be the missing link in the quest to bring together the four fundamental forces of gravity, electromagnetism, and the weak and strong nuclear forces, and give theoretical physicists their long sought-after Theory of Everything. ZPE spacecraft could also potentially solve the two main space travel problems of speed and fuel supply. The quantum fluctuations of ZPE must first be extracted from the vacuum, and engineering a machine effective enough to do so is the only thing many physicists believe stands in the way of human space travel beyond our wildest dreams. It is certainly feasible that advanced alien technology has already found a way to extract the ZPE, and according to the documented research of Nazi interest in the subject matter, we may be able to one day duplicate it beyond just lifting a disk a few feet off the ground in a lab. Delving deeper into the Casimir Effect might hold the key.

ZPE and antigravity both offer tantalizing methods of UFO propulsion, but the ZPE also holds the immediate appeal as a cheaper fuel source for a world “addicted to oil.” Some investigative researchers such as Jim Marrs, author of “Alien Agenda” and “Rule By Secrecy” suggest that these alternative technologies lack the funding and attention they require because of the monopolies of interest, such as oil and gas companies, that would suffer from the discovery of such abundant and cheap fuel sources being made available to the public. Marrs is also quick to note that antigravity and the ZPF might explain the many UFO sightings involving automobile engines stopping and

starting up again, and other such examples of the manipulation of energy reported by UFO witnesses all over the world.

Hal Puthoff, in an interview with "Fortean Times," also speculated that someday the ZPE could be used in the process of water desalinization, as well as reducing dependency on fossil fuels. It may also play a role in heating homes, and if a process is found to convert this energy into electrical form, Puthoff suggests we may one day have batteries that far outlast the Energizer Bunny in longevity!

The great thing about using ZPE as a fuel source for skipping across space is that your ship doesn't have to slow down and "stop for gas" along the way to another universe, as the fuel source is always available as you flit along, and the ship itself would be free from carrying a weighty amount of fuel to slow it down. But Puthoff pointed out to Fortean Times that a UFO could also possibly use ZPE as a means for "the perturbation of the space-time metric," and suggests ZPE might also account for natural atmospheric anomalies that some people mistake for UFOs, such as ball lightning.

Not all physicists are jumping on the ZPE bandwagon. Professor Steven Weinberg, in an interview with Scientific American's "Ask the Scientist" series, referred to the law of conservation of energy, which tells us that if we get energy out of empty space, we must leave it in a condition of lower energy. What, he asks, could have lower energy than empty space? But Puthoff, appearing in that same interview series, cites modern research that shows that a vacuum state such as the ZPF can have different energy values, and can even decay to a state of lower energy under specific conditions.

Though lab experiments with ZPE have shown results on a small scale, with further research and funding Puthoff hopes that within the next decade, "we will either be

confident that it is only a matter of time and engineering, or it will reveal it self to be only a laboratory phenomenon without the possibility of constituting a major energy resource." He compares attempts to harness ZPE to a "long list of harnessing energetic processes we find in our natural environment."

For our alien friends eager to visit our planet or just do a quick fly-by, the ZPF is like a superhighway of energy that might just be the preferred mode of fuel for civilizations that have already found extraction methods. Only time and a lot of cutting edge research will tell if we will one day be able to do the same.

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