Observation in nature: The Interchange of Force

Man’s natural curiosity and observations regarding the phenomena of birds in flight brought about the principles of thought which eventually led to heavier than air flight as we know it today. Manned flights to the Moon and subsequent decades of Space exploration have followed.

Consequently, the advanced studies on air and the ensuing applications of the physics involved, were directed and applied to the study of flight, without exception, and so it remains today.

As the many ensuing supportive formulas began erupting from some of the world’s brightest minds to overcome the phenomena for heavier than air flight, laws of physics were created to substantiate all the minute mathematical details and formulas were generated using conservation of energy principles for the conservation of mass, and the conservation of momentum, to name but a few. Subsequent studies of gas dynamics, fluid dynamics, aerodynamics, thermodynamics, and numerous continuum assumptions were committed to exact every calculation possible involving the air pressures related to flight.

George Cayley coined the terms defining the four elements of flight, Thrust, Drag, Lift, and Weigh. Hence, still in today’s world of observation we witness the manifest results of those curious phenomena of those birds in flight, as we observe that airplanes do, in fact, fly.

That wondrous scientific work once performed by the masters of thought for centuries, that mysterious marvel and curiosity of Air, and the exciting opposition and wonderful Force it naturally possesses, has not gone one step further in in study, or application, to allow this natural opposing force to perform Work!

Unfortunately, for us curious observers of today’s phenomena, and for the scientific community at large, it is indeed unfortunate that the scientific world and curious mindsets of the DeVinci, d’Alembert, Newton, Laplace, Cayley, and others, that there were no cars, or surface travel vehicles present in their world, for them to observe, contemplate, calculate, and apply their natural curiosities and sustained studies of air flows and air pressure to?

As a result of the absence of this natural curiosity, those dynamic forces of Air observed in nature so long ago, thus far, have been solely focused, and remain so, on the phenomena of flight. With the one exception of aerodynamic studies being applied to the movement of high speed automobiles.

In today’s world of the twenty-first century, however, similar curious daily observations can be made in the mass movement and patterns of our modern world mechanical devices. Such as those mechanical airplanes that now fly about in the sky like birds. Automobiles that cruise our interstates, and those trains that rumble slowly past.

Based on those daily observations of movement, I would like to propose a new hypothesis of classical mechanics. A paradox consisting of predictions based on many crude experiments which posits that those well-established applications of science and physics can now be equally and properly applied to the movement of solid objects on the surface of the Earth as well. Particularly so to such a highly scaled, aerodynamically designed, high velocity surface vehicle known as the SSGT-1.

Keeping in mind that what began with Aristotle’s keen observation in the dropping of a simple stone, and his subsequent logical conclusion and statement of fact, which are now the well known and well accepted principle laws of science and physics.

Aristotle’s keen observation and final conclusion that the stone’s natural downward motion of mass and velocity, were equally opposed by the displaced upward motion in the existing air particles, and caused by the stone’s motion in descent. A natural observation which must necessarily be considered and calculated because of the stone’s downward movement. Thus was, the beginning of Newton’s studies from whence his three laws of motion were created.

This too, is the genitor of my hypothesis and the foci of the subsequent studies I conducted for the next twenty-five years. One can assume, obviously, because Aristotle was surely standing on the ground when he made his ground breaking discovery of aerodynamic forces, my hypothesis of air pressure applies for ground level high speed surface travel.

Resulting in two centuries of study throughout the scientific world, these same studies of forces generated from movement of displaced air now covers a spectrum of specialized scientific fields of study. Computational Fluid Dynamics, Continuum Mechanics, Thermodynamics, Wind Tunnel Testings, and Particle Image Velocimetry, are but a few of on-going studies which are generally recognized as the pre-requisite formulas which are to be applied to the various elements of flight in determining all the precision needed to accurately determine Lift and Weight, Thrust and Drag specifications, and their numerous configurations and components.

Lift is an applied complex mechanical force formula which arises from basically squaring the determined mass flow rate component of volumetric air flow speeds applied to the perpendicular cross section of a designated wing area necessary to facilitate the proper amount of lift required to offset the components of the aircraft’s collective weight factors.

Unquestionably, this so called function of Lift is nothing more than Work being performed on the cross section area of the wing’s surface by the Force generated from the high velocity movement of Air Pressure equally opposing the velocity of Thrust. Cayley’s other three components of flight are man-made mechanical forces which are necessary to establish Thrust which are measurable to ascertain flight.

One may then observe, and subsequently determine, that Thrust and Drag are the added values of the applied physics and mathematical equations and formulas needed in order to provide the determinative amount of added Air flow speed necessary to generate the proper scale for lift to weight ratios in order to sustain the flight of heavier than air objects.

Therefore my ground hypothesis leads to firm Air velocity predictions which can be tested in various ways, including further observations, which may be replicated in order to gather empirical data to form a general theory, or to prove scientific grounds for falsification. I am happy either outcome.

But, “if” my hypothesis holds, we will no longer have a planet dependent on fossil fuels to provide electricity, travel, transport, or trade.

Everyone can certainly agree that perpetual motion machines are not possible to attain. So clearly what I am suggesting in my hypothesis is not a perpetual motion machine. It is merely common surface travel and common mechanical motion observed daily in today’s world of study and curiosity.

Movement of aircraft, automobiles, trucks, and trains. Rockets and space craft are all movement generated from within an enclosed energy system where vehicular movement is attained through a common chemical exchange of energy to establish sufficient acceleration and velocity for daily travel and movement of commerce.

A depleting chemical exchange of energy which expires from basic use and has to be replenished at different intervals of time according to individual consumption rates of the vehicles in motion.

My hypothesis supposes, and presents, the paradox of that said movement. Postulating the facts of observation that “whether, or not” the movement of those solid objects, en route to any destination in the universe, produces an Air pressure capable of performing additional Work. My position is that it in fact does.

My position that it in facts does, is based on the same underlying facts of physics and scientific principles that airplanes do in fact fly. Applying those same accepted scientific principles to surface travel bodies, we can confirm that the same aerodynamic phenomena and behavior of the air which occurs around the fuselage, and acts to exert the forces of Lift on the proscribed perpendicular areas of the wings, does in fact exist on all surface vehicular movement as well.

Without the presence of wings, the same mechanical forces and behavior of air surrounding these solid objects, are reasonably assumed to be strikingly similar. Conducting simple experiments, like holding your hand outside the window, or the sunroof in your automobile, or truck, you can feel the force of the air exerted against your hand. The velocity of your surface vehicle determines the equal and opposite velocity of the air pressure. As you stop, so does the force of air. As you accelerate, so does the opposing force of air pressure.

The paradox in question, is that phenomenal force of Air Pressure capable of performing other types of Work? I resoundingly say yes!

Based on the known fact that it is this same force of air which exerts the interchange between objects which produces the work necessary to establish Lift on the perpendicular cross section area of wings, the findings and conclusions are undeniable true.

Now the only question which remains, is how to apply this known Force of Air Pressure to perform the Work we desire? Air pressure is there by virtue of movement. Whether or not, we choose to develop a method, or several methods, to utilize this known force to perform Work, is entirely up to us. I have chosen, at least, to try.

Probably mistaken, but for now, I call this mechanical force of air pressure generated by movement of surface vehicles, an air pressure energy, rather than kinetic energy. An impetus transferred to the air through the kinetic energy developed by movement of any solid object.

Supposing that the same measurable kinetic energy amount, which we can determine by applying the formula, KE= .05m x v2 developed by the movement of the solid object, can be transferred equally and opposite, by impetus, into the kinetic energy of the wind, but air pressure isn’t considered wind.

This suggestion of expression is merely a means to be used as a starting point for conversation, and opening contrary dialog, to assist in determining the exact amount of work which can be functionally accomplished.

Applying the work to be done to a similar cross section area to that of the area of wing surfaces used to create Lift, through design, I have chosen to apply this Work to an exposed cross section area mounted firmly to the vehicle, with minimum area exposure to the applied work force.

A receptive cross section area which has the ability to rotate on impact when work is applied by the opposing air pressure. This interchange of work force which occurs between two objects generates electricity.

Through observation and experiment, I have determined that common surface vehicles such as automobiles, trucks, and trains do not contain the necessary dimensions, shapes, sizes, or velocity, necessary to produce a sufficient force of air pressure in the course of normal daily surface travel to produce those amounts of kinetic energy required to produce sufficient amounts of electricity to meet global demands.

Therefore, I have set out over the years to design a series of surface vehicles which would have those capabilities. The first of which, I call the HGCT-1, the second of which I call the HG-1, and the third of which I call the SSGT-1. Collectively, they are all components of an integrated system I call, QuantaRailN2N.

By conventional comparison, these surface vehicles are of massive dimensions with high velocity capabilities, Thrust elements which I have determined are necessary in order to attain the prerequisite condition conducive to meeting global demands for generating electricity.

Further observation, experiment, and testing, by the scientific community at large will either determine falsification, or accept this hypothesis as presented.