## A THEORETICAL UFO FIELD PROPULSION DESIGN

## Chapter 12

By now many people have heard of the famous Roswell, New Mexico UFO 'saucer' crash and also about Bob Lazar who claims to have been involved in backengineering a saucer type craft at the S4 area near Area 51 in Nevada. These events along with many other similar events involving UFO's indicate that these craft use some type of field propulsion system that is quite unlike known or conventional aircraft propulsion systems. This chapter will explore a possible design for field propulsion based on a mix of quantum and classical electronic field action.

The Testor Corporation has provided a 1:48 scale model (No. 576) of the flying saucer that Bob Lazar claims to have worked on. For the purpose of a beginning design platform, I am going to assume that a lot of the design features are fairly accurate as described by him and incorporated in the model itself. This is also by reason that it fits well into my own requirements for a craft design that would best fit the theoretical electrogravitational field generation characteristics.

Electronics is defined by Websters Collegiate Dictionary as a branch of physics. Since physics is a study in the broadest scope related to the understanding of nature it is natural that we narrow our research to an area of physics that has the most in common with the field of electronics. This is the quantum field of de Broglie and Schrodinger as applied to particle/wave action and this will be blended with conventional electronic wave theory.

There are many parallels in the macroscopic electronic and quantum particle/ wave theories such as standing waves, phase and group waves, wavelength, to name but a few. In fact, electronics is a science based on a particle, the electron.

The first consideration towards building a field propulsion system would likely be to allow for it to have a very strong field. Now most electromagnetic fields radiate so that in order that a strong field be achieved, it also must be fed a continuous amount of energy in the form of power from a reliable source. This has many drawbacks. If a field radiates, it tells everyone in the vicinity that you are there. Further, it is very wasteful concerning the loss of power to free space.

A good way to build a strong local non-radiating electromagnetic field is to build it as a standing wave. The electromagnetic standing wave field does not radiate. Also, very intense fields may be achieved since the field may be allowed to build through the use of flywheel kicker action that adds power to the returning wave at just the right time. This action would be repeated until the voltage/current peaks and nodes achieve the desired amplitude. If the shorted-end version of transmission line were used to produce standing waves, the current would be maximum and the voltage minimum at the shorted end of the line. Further, if we now rotate this shorted end about the location of the input of the line such that the short travels 360 degrees around the input to the transmission line, a saucer shape is the result. Therefore, the E-field is the defining shape for a saucer even if there is no body apparent. See figure \#12 below for clarification.


A standing wave field that has a large $E$ field will tend to ionize the air at the surface of the craft, causing it to glow. (E is volts in this case and I is in amps.) Of further interest is that in my previous work I defined mass as the result of quantum standing waves. Therefore, a craft surrounded by such a field may be likened to a very large particle. As such, it may be acted on by David Bohm's information potential and act as a quantum particle subject to non-local action, acted on by remote quantum actions and instantly displaced to other locations in space.

Equation (334) on page 190, (this book, "Electrogravitation As A Unified Field Theory"), is repeated below as equation (336) to show that mass may be directly related to the field characteristics as described for the UFO above.

$$
\mathrm{m}^{\prime \prime} \mathrm{e}=\frac{2 \cdot \Phi_{\mathrm{o}} \cdot \cdot \mathrm{i} \mathrm{LM}}{\mathrm{~V}_{\mathrm{LM}}{ }^{2}} \quad \text { where } \Phi_{\mathrm{o}} \quad \text { has the units of volt } \mathrm{x} \text { time. }
$$

Then, mass is equivalent to volts x time x current all over the square of velocity. More specifically, the square of the magnetic quantum velocity $\mathrm{V}_{\mathrm{LM}}$. We will return to a direct application of this velocity later as we set the standing wave field in motion around the surface of the craft. (In the same plane of rotation as figure 12 shows.)

I ask the reader to imagine that the top and bottom of the craft is now divided into 12 segments and that these segments are equivalent to electromagnetic power transmission waveguides that are capable of coupling to the surface of the craft the waves contained within each waveguide. Further, the power in these waveguides is sequentially switched at the speed of light through a small radius such that the much larger radius of the saucer effectively moves in simulated rotation much faster than the velocity of light. This perimeter velocity will be termed the phase velocity, $\mathrm{V}_{\mathrm{P}}$.

The group velocity $\mathrm{V}_{\mathrm{G}}$ is also termed the group velocity $\mathrm{V}_{\mathrm{LM}}$. The terms phase and group velocity are familiar terms both in the quantum and classical wave theory sense. Page 832 of "Modern University Physics" 1 states the formula derived by de Broglie for phase velocity related to the quantum domain as:

$$
v_{p}=\frac{h}{m \cdot v} \cdot\left(\frac{m \cdot c^{2}}{h}\right)=\frac{c^{2}}{v} \quad \text { where } v \text { is the group velocity. }
$$

The total energy of a particle, $\mathrm{mc}^{2}$, is equivalent to hf and thus the frequency of the associated wave is equal to $f=\mathrm{mc}^{2} / \mathrm{h}$. Also, the de Broglie wavelength of a particle is $\lambda=\mathrm{h} / \mathrm{mv}$ where $\lambda$ is the wavelength of the associated wave. The resultant phase velocity $v_{p}=\lambda f$. In equation (337), $v$ is the velocity of the particle, which must be less than the velocity of light, c. However, the velocity of the associated phase wave does exceed the velocity of light. This is an accepted quantum physics reality.

The following is a direct quote from the above mentioned book. 1 On page 603 it is stated, "a wavefront is the locus of points where the waves have the same phase, and the phase velocity is the velocity of propagation of these surfaces of common phase." On page 833 of the above mentioned book, it is mentioned that Schrodinger considered that it was possible to replace Newtonian trajectories with his wave mechanics. His wave equation is testimony to that belief. His wave equation for a particle is the analogy to Maxwell's equation describing the propagation of light.

1 Modern University Physics by James A. Richards, Jr., Francis Weston Sears, M. Russell Wher, and Mark W. Zemansky. Publisher: Addison-Wesley Publishing Co., Reading, Mass., Palo Alto, and London. Copyright 1960, 2nd printing Mar. 1964.

Phase and group velocity also occurs inside of a waveguide where the axial group velocity travels down the waveguide slower than the velocity of light while the velocity of propagation at the wall of the guide appears to exceed the velocity of light. Figure 13 below is presented to illustrate this concept. $\mathbf{\underline { 2 }}$


The wavefront moves down the guide through distance $G$ which is directly related to the associated group axial velocity $\mathrm{V}_{\mathrm{G}}$ while the wavelength measured across P at the top of the guide is greater than it would be in free space. This is directly associated with the phase velocity $\mathrm{V}_{\mathrm{P}}$. The mathematical expression for these three velocities in the waveguide is expressed by equations 338(a) \& (b) below. $\boldsymbol{2}$
a. $V_{L}=V_{C}=\sqrt{V_{P} \cdot V_{G}}$
and,
b. $\quad \mathrm{c}^{2}=V_{G} \cdot V_{P}$ (Where $\mathrm{V}_{\mathrm{G}}=\mathrm{V}_{\mathrm{LM}}$.)
$\underline{\underline{2}}$ Figure 13 and equation 338b are partial quotes from Air Force Manual 52-8, Vol. Two, "Electronic Circuit Analysis", U. S. Gov. Printing Office, Washington 25, D.C., 15th. January 1963.

Equation (338b) is the same as equation (337) previous which was the statement for a particle concerning its three velocities in quantum space. Therefore, the waveguide case for the electromagnetic wavefront and the quantum particle wavefront must have a very close tie to each other. In fact, it may be possible to harmonize them such that they work together under the action of a properly designed control mechanism.

The waveguides mentioned previously are arranged radially from near the center of the saucer to the outside perimeter where the maximum current nodes are formed. The input to the waveguides is from a waveguide demultiplexer that switches the electromagnetic energy into each waveguide input in ring fashion. Also, the circumference of the demultiplexer perimeter operates very near the velocity of light in free space. There are no moving parts in the demultiplexer. Switching could be done by transverse magnetic fields from port to port sequentially.

The control of the sequencer would most likely be done by a preset programmed computer since rapid adjustment and control may be needed to keep the standing waves at the proper magnitude and phase.

The energy input could come from the antimatter reactor as described by Bob Lazar since the output would be a very fast rise pulse/frequency in the gamma-ray spectrum. A very fast rising electromagnetic photon pulse would allow for the capability of providing a standing wave kicker action into above visible light regions of standing wave frequencies as well as for the fastest demultiplexer speeds possible. (A kicker action is like spinning a bicycle wheel with your hand. The speed is limited to how fast you can move your hand over the circumference of the wheel. A very fast hand motion is equivalent to a fast risetime and thus a faster wheel-spin.)

Figure 14 below is a sketch of the topside of the saucer showing the waveguides placement.

## Figure 14

The transmission lines are shown exposed but are under an outer metal skin that is a ground plane.


Testors S-4 Area "Sport Model" UFO Reproduced As A Sketch Above.
Bob Lazar mentions that antimatter is generated from element 115 and reacted with a gas to provide a complete complete annihilation process. This converts the element 115 to element 116. (This of course is a fusion process.) It is also nearly $100 \%$ efficient. If true, this would be wonderful to say the least. Unfortunately we do not have access on Earth to element 115 as a naturally occurring element. However, we can produce positron emission from certain elements when those elements are bombarded with protons. These emissions could then react with ordinary gaseous matter to provide gamma-ray bursts of energy.

The standing waves coupled to the outside of the craft would build in intensity over time to become a very powerful non-radiating field with the general shape and characteristics shown in figure 12 previous. This field is then set in rotating motion around the perimeter of the saucer that would move at an apparent velocity equal to a phase velocity $\mathrm{V}_{\mathrm{P}}$ that would then generate the group velocity $\mathrm{V}_{\mathrm{LM}}$. This would be accomplished by fanning waveguide demultiplexing as explained previously.

The apparent motion of the intense pulsed current nodes at the perimeter of the craft would generate a very powerful magnetic field in our real space that would have its field perpendicular to the plane of current node rotation, i. e., vertically if the plane of the saucer were horizontal. This would be attributed to the $\mathrm{V}_{\mathrm{LM}}$ wave. It would also generate a magnetic field in phase space. That would be attributed to the phase wave, $\mathrm{V}_{\mathrm{p}}$.

One of Maxwell's findings was that the relationship of the $E$ field to the $B$ field could be stated as $E=c B$, where $c$ is the velocity of light. ( E is in volts/meter and B is in weber/meter ${ }^{2}$.) This can be also shown as $\mathrm{E}^{2}=\mathrm{c}^{2} \mathrm{~B}^{2}$ by squaring both sides. Now $c^{2}=V_{P} \times V_{L M}$ so that we can arrive at an expression for two values of $B$. One in real space and one in imaginary space. Equation (339) below is the result.
Real Imag

$$
\mathrm{E}^{2}=\left(\mathrm{V}_{\mathrm{LM}} \cdot \mathrm{~B}_{\mathrm{LM}}\right) \cdot\left(\mathrm{V}_{\mathrm{P}} \cdot \mathrm{~B}_{\mathrm{P}}\right) \quad \text { (We assume } \mathrm{E} \text { to be controlled.) }
$$

Now, If we hold E in the standing wave to be controlled and 'set' then as $\mathrm{V}_{\mathrm{LM}}$ and $V_{P}$ move away from c , (refer to equation $338(\mathrm{~b}), \mathrm{B}_{\mathrm{LM}}$ will increase and $\mathrm{B}_{\mathrm{P}}$ will decrease. Again, the increase in $B_{L M}$ is dependent on the saucers current node switching rate around its perimeter which is equivalent to phase velocity, $\mathrm{V}_{\mathrm{P}}$.
$\mathrm{B}_{\mathrm{LM}}$ will increase due to the fact that current is charge per unit time. The high charge density at the current nodes being switched faster around the perimeter of the saucer represents a charge velocity $\mathrm{V}_{\mathrm{P}}$ increase and thus a $\mathrm{B}_{\mathrm{LM}}$ field increase due to the higher charge per unit time. As far as the space around the saucer is concerned, it 'sees' the current nodes at the end of the waveguides as regions of high charge density. Further, these regions being switched sequentially around the perimeter is seen as current.

The frequency/switching rate around the perimeter of the saucer is much faster than the frequency related to the standing-wave $\Delta \mathrm{E}$-field frequency. This forms an equivalent phase wave velocity $\mathrm{V}_{\mathrm{P}}$ which will thus have an associated group wave velocity $\mathrm{V}_{\mathrm{G}}$ in the same direction. Note that $\mathrm{V}_{\mathrm{G}}<\mathrm{C}<\mathrm{V}_{\mathrm{P}}$ always.

This $\mathrm{B}_{\mathrm{LM}}$ field forms a torus around the perimeter of the craft with the strongest portion of the field being through the center of the saucer. There is another B field on the surface of the saucer, associated with the voltage standing waves $\Delta \mathrm{E}$ which extend from the corona discharge spike (top center) to the perimeter of the saucer at each switched current node.

This additional B field is parallel to the surface of the saucer and forms circular B field rings that build in intensity as they become closer to the top of the saucer where the changing $E$ field has its maximum potential and rate of change. This second $B$ field is the result of the fact that a changing $E$ field generates a changing $B$ field 90 degrees to that $\Delta E$ field and vis versa. This second $B$ field is also 90 degrees to the $B_{L M}$ field which is perpendicular to the surface of the craft. The second $B$ field is defined as the $\Delta \mathrm{B}$ field.

Equations (337) and (338b) previous present the possibility that there is a strong parallel between the group and phase velocities in waveguides and quantum particles. In fact, it is therefore postulated that space may create a waveguide shape around quantum particles and further that the transfer of quantum energy and information via quantum waves will follow many of the same rules as waves do in a conventional electronic waveguide. Page 39, equation (89) of this book gave the equation for the quantum ohm constant in terms of the derived electrogravitational inductance and capacitance. This formula is repeated below as equation (340).
340) $\quad Z_{Q}=\sqrt{\frac{L_{Q}}{C_{Q}}} \quad$ or, $\quad Z_{Q}=2.581280560 \cdot 10^{044}$. ohm

This equation is a standard transmission line impedance formula that is related to waveguides also. This again strongly suggests that the quantum ohm constant is directly related to waveguide-like parameters and spatial geometry. The quantum ohm is to the wave nature of particles as the free space resistance is to electronics of the waveguide and transmission line theory of today. There exists a direct link between the two which is expressed as equation (341) below.
341) $\quad R_{S}=2 \cdot R_{Q} \cdot \alpha \quad$ where $R_{S}=376.7303129$ ohm $=$ standard constant.

Thus, the free space resistance, $R_{S}$, equals two times the quantum Hall ohm times the widely applicable quantum fine structure constant. Also, a direct link is established between electronic and quantum space by the quantum fine structure constant. Therefore, the phase and group velocities around the perimeter of the saucer form a spatial waveguide for both the quantum and classic waveguide action.

Page 11-16 of the book in reference 2, page 196 previous, contains a very interesting set of waveguide equations that contain expressions that in part strongly resemble the Lorentz transform expression from special relativity. These are shown next as equations (342) and (343).
342) First,

$$
\frac{V_{G}}{V_{C}}=\sin \cdot(\theta)=\sqrt{1-\left(\frac{\lambda}{2 \cdot B}\right)^{2}}
$$

$B$ is the inside wide dimension of the waveguide and $\lambda$ is the wavelength in free space inside the waveguide. $\mathrm{V}_{\mathrm{G}}$ is the group velocity and $\mathrm{V}_{\mathrm{C}}$ is the velocity of light.
343) And also, $\frac{\lambda G}{\lambda}=\frac{1}{\sin \cdot(\theta)}=\frac{1}{\sqrt{1-\left(\frac{\lambda}{2 \cdot B}\right)^{2}}}$

Solving for the $\left(\lambda /\left(2^{*} \mathrm{~B}\right)\right)^{2}$ expression in equation (342) and placing this in equation (343), we arrive at the below equation (344). Note that $\lambda_{G}$ is NOT related directly to the group velocity $\mathrm{V}_{\mathrm{G}}$ but is the actual wavelength in the waveguide and is proportional to the phase velocity $\mathrm{V}_{\mathrm{P}}$. Henceforth, $\lambda_{\mathrm{G}}=\lambda_{\text {Guide }}$.
344) $\quad \frac{\Delta \lambda_{\text {Guide }}}{\lambda_{\mathrm{C}}}=\frac{\mathrm{V}_{\mathrm{C}}}{\Delta \mathrm{V}_{\mathrm{G}}} \quad$ Where $\mathrm{V}_{\mathrm{C}}$ and $\lambda_{\mathrm{C}}$ are constants.

Then, since $\Delta V_{G}=c^{2} / \Delta V_{P}$, as $\Delta V_{P}$ approaches infinity, $\Delta V_{G}$ approaches zero. This causes the wavelength in the guide, $\lambda_{\text {Guide }}$, to approach infinity. The point to all of this is that the effective current length around the perimeter of the UFO increases. This will increase the $\mathrm{B}_{\mathrm{LM}}$ field. This is readily shown by equations (345) and (346) on the next page that express the flux density $\mathrm{B}_{\mathrm{C}}$ for a flat coil of $\Delta \mathrm{N}$ turns which is the equivalent of the current ring around the perimeter of the saucer.

Then;
$\Delta \mathrm{B} C=\frac{\mu_{\mathrm{O}} \cdot \Delta \mathrm{N} \cdot \mathrm{i}_{\mathrm{C}}}{2 \cdot r} \quad$ where, $\Delta \mathrm{N}=\frac{\Delta \lambda \text { Guide }}{2 \cdot \pi \cdot r} \quad$ and $\mathrm{i}_{\mathrm{C}}=$ current in nodes.

$$
\Delta \mathrm{B}_{\mathrm{C}}=\frac{\mu_{\mathrm{O}} \cdot\left(\frac{\Delta \lambda \text { Guide }}{2 \cdot \pi \cdot r}\right) \cdot \mathrm{i}_{\mathrm{c}}}{2 \cdot \mathrm{r}}
$$

which simplifies to:

$$
\Delta \mathrm{B} \mathrm{C}=\mu_{o} \cdot \frac{\Delta \lambda \text { Guide }}{4 \cdot \pi \cdot r^{2}} \cdot \mathrm{i}
$$

( $\Delta \lambda$ is looping perimeter while increasing.)

Then, according to equation (346) above, not only will an extremely large B field be generated as the phase velocity around the perimeter of the saucer approaches infinity, but the equation itself defines the generation of the increasing current around the perimeter as being dependent on the increasing phase velocity, $\Delta \mathrm{V}_{\mathrm{P}}$. This is likened to an acceleration, which may then be related to Newton's force equation, $F=$ Mass $\times$ Acceleration. which by Einstein's equivalence principle is related to $F=G M_{1} M_{2} / r 2$.

Since the field around the saucer resembles that of a very large electron, we may be able to apply David Bohm's Quantum Potential (equation 327 of chapter 11) in such a way as to cause the entire saucer (now a macro quantum particle) to go nearly instantly to a new space location. Then a simple phase change instead of amplitude change may instantly affect where the saucer is spatially. This invokes the hidden energy potential, Q , which is part of the quantum construct of the electron.

Perhaps we can also tap into this vast energy field and use it to power whatever we need. This also may require careful adjustment or Tunguska could happen again. Also, it may be that some of the reported saucer crashes are the result of failures of the saucer field generation mechanism.

The Q potential power source is many orders of magnitude greater than anything fission or fusion could supply, gram for gram. (See equation (376) on page 220 where the power density potential was shown to be in the range of $10^{29}$ watts / meter ${ }^{2}$. This is a very large amount of energy.) It is possible by the action of chaos theory or just uncertainty that there may be Tunguska type explosions going off throughout space due to loss of proper information phase. (Verifiable by gamma ray bursts at random locations in space.) Thus a sudden burst of an uncontrollable amount of energy may occur through the quantum $Q$ potential going haywire for an instant. If so, this could have disastrous results on any scale for affected civilizations.

Since there is suggested by the foregoing theory of saucer field generation a very strong B field, is there evidence through reported sightings of such a magnetic field associated with such craft? The answer is yes. The book, "Project Blue Book", $\underline{\mathbf{3}}$ on page 197 stated the following; "One observer (incident 68) noticed a violent motion of a hand-held compass. If we assume from this that the objects produced a magnetic field, comparable with the Earth's field; namely, 0.1 gauss, and that the observer found that the object subtended an angle $\theta$ at his position, then the ampere-turns of the required electromagnet is given by:

$$
n \cdot \mathrm{i}=\frac{30 \cdot \mathrm{R}}{\theta^{2}} \quad \text { Where } R \text { is the range of the object. }
$$

3 Project Blue Book, Edited by Brad Steiger, Ballantine Books, 9th. printing, August 1990.

For instance, if $R$ is 1 kilometer and the object is 10 meters in diameter, then $n i=1$ billion ampere-turns." Also is quoted just below the above quote, "These figures are a little in excess of what can be conveniently done on the ground." (A real understatement!)

Further, there have been numerous instances of cars stalling due to their electrical systems shutting down when near UFO's. A strong pulsating magnetic field, (pulsating since it is alternating between building in strength and then instantly resetting, etc.), can disrupt electrical circuits, period. (Sunspots are strong evidence for this phenomena). UFO field interference has happened to aircraft and even may have contributed to electrical power grid blackouts. Yet, they may not emanate an r. f. electromagnetic signal due to the fact that the $\Delta E$ and $\Delta B$ fields are standingwaves.

The mechanism of the electrogravitational interaction above is presented as evolving from a sequenced current node that is representative of what has been presented before in figure 9, page 145. However, I will now define the force of attraction as a (+) force while a (-) signed force is now defined as a force of repulsion. This will allow for the mechanism of quantum magnetic induction that will cause a force of attraction, much like a regular magnet is attracted to iron or steel. Thus the vector force in system 2 will be in the same direction as system 1 in figure 9, page 145.

The next page will again present equation (319) of page 180 and a new drawing, figure 15 , that will serve to clarify the electrogravitational mechanism. The equation has a shape that suggests wings on either side of the permeability constant, $\mu_{0}$.

$$
\begin{aligned}
& \text { variable |----------constant newton----------| variable } \\
& \text { weber/meter (amp) (amp) weber/meter }
\end{aligned}
$$

## Figure 15



Electrogravitational Action (Attrraction)
The above drawing shows that parallel currents attract whereby system 1 causes system 2 to align itself exactly as system 1 is aligned. This is induction of information from system 1 to system 2 and the result is attraction between the two systems through the $\mathbf{A}$ vectors of each system and the quantum-force constant currents in $\mathrm{F}_{\mathrm{QK}}$. Next, electrogravitational attraction polarity is redefined on page 207. This will also allow for the simple case of magnetic attraction of a magnet to Iron.

The next figure is redrawn from figure 9 on page 145. It shows the case for two-system attraction for each other by information induction from system 1 to system 2. Then, as a result, all related quantum currents are parallel.

## Figure 16



System 1, rotation is Z into X . (349)

$$
\mathrm{A} 1:=\left(\begin{array}{l}
0 \\
0 \\
1
\end{array}\right) \quad \mathrm{B} 1:=\left(\begin{array}{l}
1 \\
0 \\
0
\end{array}\right)
$$

Vector cross-product of system 1 is:

$$
\begin{equation*}
\text { Sys1 := A1 } \times \text { B1 } \tag{351}
\end{equation*}
$$

$$
\text { Sys1 }=\left(\begin{array}{l}
0 \\
1 \\
0
\end{array}\right)
$$

System 2, rotation is Z into X also.

$$
\text { A2 }:=\left(\begin{array}{l}
0  \tag{350}\\
0 \\
1
\end{array}\right) \quad \text { B2 }:=\left(\begin{array}{l}
1 \\
0 \\
0
\end{array}\right)
$$

Vector cross-product of system 2 is;
(352) Sys2 := A2 $\times$ B2

$$
\text { Sys2 }=\left(\begin{array}{l}
0 \\
1 \\
0
\end{array}\right)
$$

The total product of system 1 and 2 will yield the sign of the unit-scale electrogravitational action as:
$\mathrm{F}_{\mathrm{g} 1}:=$ Sys $1 \cdot$ Sys 2
or, $\quad F_{g 1}=1$
$(+)$ sign $=$ attraction.

So far the area of the saucer has been limited to the upper section and surface. The saucer as described by Bob Lazar also has a central area and a lower section. The central section contained three seats that only persons of small size could sit in and immediately behind each seat was a console that he termed the gravity amplifier. The seats and gravity amplifiers were equally spaced in a triangular arrangement around the bell shaped antimatter reaction chamber on the central floor. Extending from this antimatter reaction chamber is a waveguide that leads directly to the upper section that was just previously considered.

Directly below the central section is the lower section that has 3 cylinders, each of which is connected to its corresponding gravity amplifier console in the central section through a flexible waveguide segment. Inside of each cylinder is 6 ring segments stacked on top of each other where alternate rings have first 6 and then 8 equally spaced knobs of some same purpose. Bob Lazar calls the whole assembly, (central deck consoles and lower segmented cylinders), "gravity amplifier assembles".

They supposedly cause space to warp in Einstein's General Theory fashion to connect points widely separated in normal space together in curved space and then the saucer simply pops out in a new far away point when space returns to normal.

My first objection to this interpretation is that all of space would go along for the ride. Also, the energy that would be required to accomplish this feat would be more than is available from any black hole so far observed. This kind of action in the region of our Earth would undoubtedly cause a local disaster, perhaps not only to our Earth but even to our galaxy. I therefore cannot agree with the proposed engineering mechanics as put forth by Bob Lazar.

I must therefore respectfully suggest that a quantum electronic solution is not only much less destructive of the locale around the saucer, but can provide the maximum force-action concerning the movement of the saucer with a minimum of negative interaction with the local Earth inhabitants. (Not to mention that far less energy is expended to accomplish the desired result.)

The geometrical arrangement of the 6 ring segments stacked on top of each other where alternate rings have first 6 and then 8 equally spaced knobs is interesting. It may be that this arrangement allows for the building of a force field that is fundamental to the construct of all matter. It is the angle of interaction between the hexagon and octagon arrangement of disks as well as the number of each type, namely three, that points to a very fundamental arrangement that also occurs in molecules.

The shape and angles between constuant particles in atoms that make up molecules should influence the shape of the molecules. Put another way, the fundamental nature of particle force fields will make their shape apparent through the molecules that they construct. A good example is the water molecule.

When frozen, the water molecule forms a six molecule ring with the angle between each connection forming 60 degrees. When considered alone, a single atom of Oxygen is connected to two atoms of Hydrogen spaced 120 degrees apart around the atom of Oxygen and the whole forms the molecule of water, $\mathrm{H}_{2} \mathrm{O}$. This is an indicator of a fundamental shape to the particle field of the electron. If a trine is formed between lines drawn from the center of the saucer to each gravity amplifier, the legs of the trine are separated by 120 degrees. Further, the fundamental integer that may be associated with the construction of the saucer is the number three. (Three-hundred sixty degrees divided by three is one hundred twenty degrees.)

Next, if the inside angle of the octagon, ( 45 degrees), is subtracted from the inside angle of the hexagon, ( 60 degrees), we arrive at the difference of 15 degrees. Multiples of this angle by integers allows for angles of $30,45,60$, etc., degrees which likely allows for most angular combinations of molecular configurations. Further, if the appropriate angular phasing is employed between inline stacks of disks in each cylinder in groups of three, a downward projected force field may occure.

Also, if each gravitational field cylinder were to interact with the adjacent gravitational cylinder and be phased properly, a downward and outward vortexed mass-field may be the result. This could even be phased with the overall electrogravitational standing wave field on the top and bottom surface of the saucer to allow for better control and perhaps for a stronger field in both cases. Each of the "pods" that are located around the disks of each cylinder is most likely a waveguide window that beams out a microwave pulse of energy.

The phasing and timing of each pod is also likely to be controlled by the console electronics located at the other end of the waveguide on the main floor. Proper control may allow for a sharp focus of the mass-beam so that crop circles could be accomplished very quickly. (A little more sophisticated than the Earthbound copycats could ever create and a whole lot faster.) The energy in the beam has a microwave component and could leave evidence of such which the pretenders could not duplicate. (Such as darkened roots, and partially cooked stems.)

So there we have it. The saucer is constructed to look and act like a very large particle. Secondly, Its construction implies a profound understanding by its creators of the fundamental shape and nature of the elemental force fields associated with the most basic mobile electric particle, the electron.

What about the occupants who control such a craft? What might their nature be as to their construct? It is doubtful that they are essentially human. They are likely much more in tune with the craft that they operate. It is possible that they are a part of it and it is likewise a part of them. Looking at where they sit, it is possible that they derive energy from their surroundings by induction from the consoles or from the "chairs' that they sat on. This would tend to keep them close to their craft lest they be starved for energy.

I am reminded of the comment by a firsthand witness to the Roswell crash that claimed that at least three 'aliens' were alive and clutching suitcase-like boxes to their chests. These boxes may have been emergency power sources for these beings. Also, the autopsy film related to that crash showed a rather large squarish 'organ' being removed from the upper torso of one of the deceased beings. Might this be a power pack that was recharged by field induction?

The idea of control by consensus comes to mind concerning the operation by three beings of a craft such as this. The mass field generation system could probably deliver quite a punch if need be. It may not be possible to shield against it. This kind of power in the hands of one being could be harmful, if used improperly. We humans, for instance, have a launch by consensus system for launching nuclear weapons.

Evidently, the long range plan is not to harm us, or they would have most certainly done it by now. Judging by recorded history, the saucer phenomena has been around for thousands of years. (Not the least of which is recorded in the book of Ezekiel in the Old Testament.) We are evidently being watched by more than a few of these beings and for more than a little while.

Electrogravitational field generation through carefully controlled standing waves and phase velocities greater than the velocity of light may create a macro quantum particle, a saucer, also at times termed ufo. Utilizing the wavefunction ( $\psi$ ) associated with quantum particles, David Bohm postulated that it was the information in that wavefunction that controlled the location of the particle in space. Further, the wavefunction gated or controlled the particles own nearly unlimited self-energy which provided the energy necessary to instantly move it to a new spatial location. This is a more efficient way of moving anything around than any way we know of today.

The wavefunction related to the saucer could be changed by causing the field around the saucer to become asymmetrical in its energy density. That is, to have a differential in field strength across the plane of the saucer. This is equivalent to causing a phase change related to the macro-particle condition of the saucer. This could be done easily and almost instantaneously. The saucer would then 'jump' to a new position in space.

I feel that we could build such a craft, if we devoted some time and money towards doing so. Perhaps a group of people interested in such a project could be formed and resources could be pooled in the attempt to build humanities first electrogravitational spacecraft. I hope to see it accomplished in the near future.

## The End

by
Jerry E. Bayles

