P.H.I

PHI HARMONIC INTEGRATION

Evidence of water working fluidly to achieve the Golden Mean.

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The purpose of documenting the following data is to provide basic technical principles in analyzing the energetic behavior of water coupled to common power sources. These behaviors are not necessarily isolated to the particular test parameters and therefore it is not required to specifically address the specific parameters in great deal. Moreover, the data is organized in a fashion to maintain common principles that become apparent within the confines of a specific configuration and also from configuration to configuration. Enough will be noted to exemplify this principle.

Not only does it indicate and imply behavior that may move from one technical configuration to another, - but also which exists unto water itself. It is therefore the overall objective to use specific data to convey common bonded principles of energy - and its fundamental behavior, - in which water is an intermediate means to more clearly identify these behaviors.

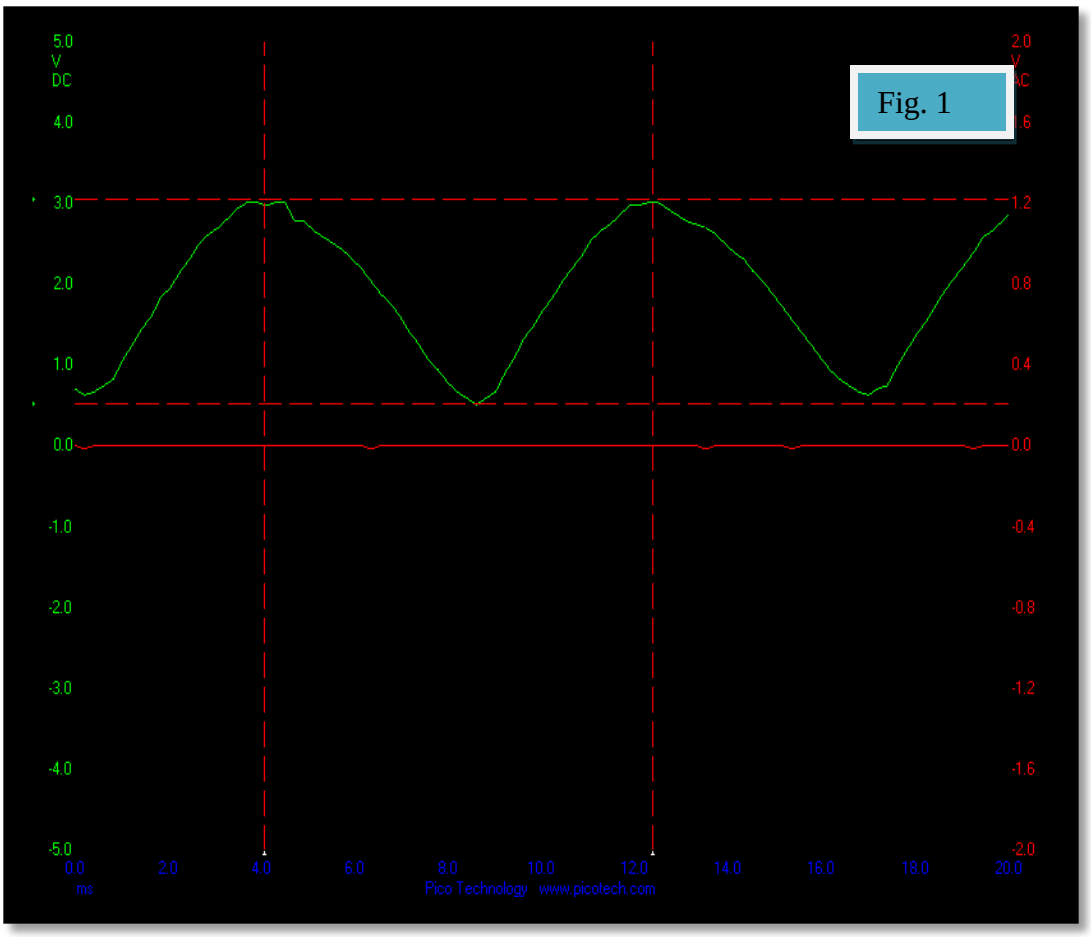
In order for anything to achieve a matter of clarity, a description of movement must be made. The term "energy" has always been a fairly difficult term to exemplify within the boundaries of our current and limited perspectives. The expression of energy quanta is satisfactorily described in certain types of energy systems, but does not lend any credence to the possibilities of its own transmutation as it moves throughout any system which is typically analyzed.

Current methods of analyzing lead us to assume energy rides passively along with its physical counterparts and plays no role in the outcome of the overall efficiency of the system. In other words, if we lose energy, it is simply because "that is what it does." *That is what it does;* - only when we dictate it does so, by the circumstances we place upon it.

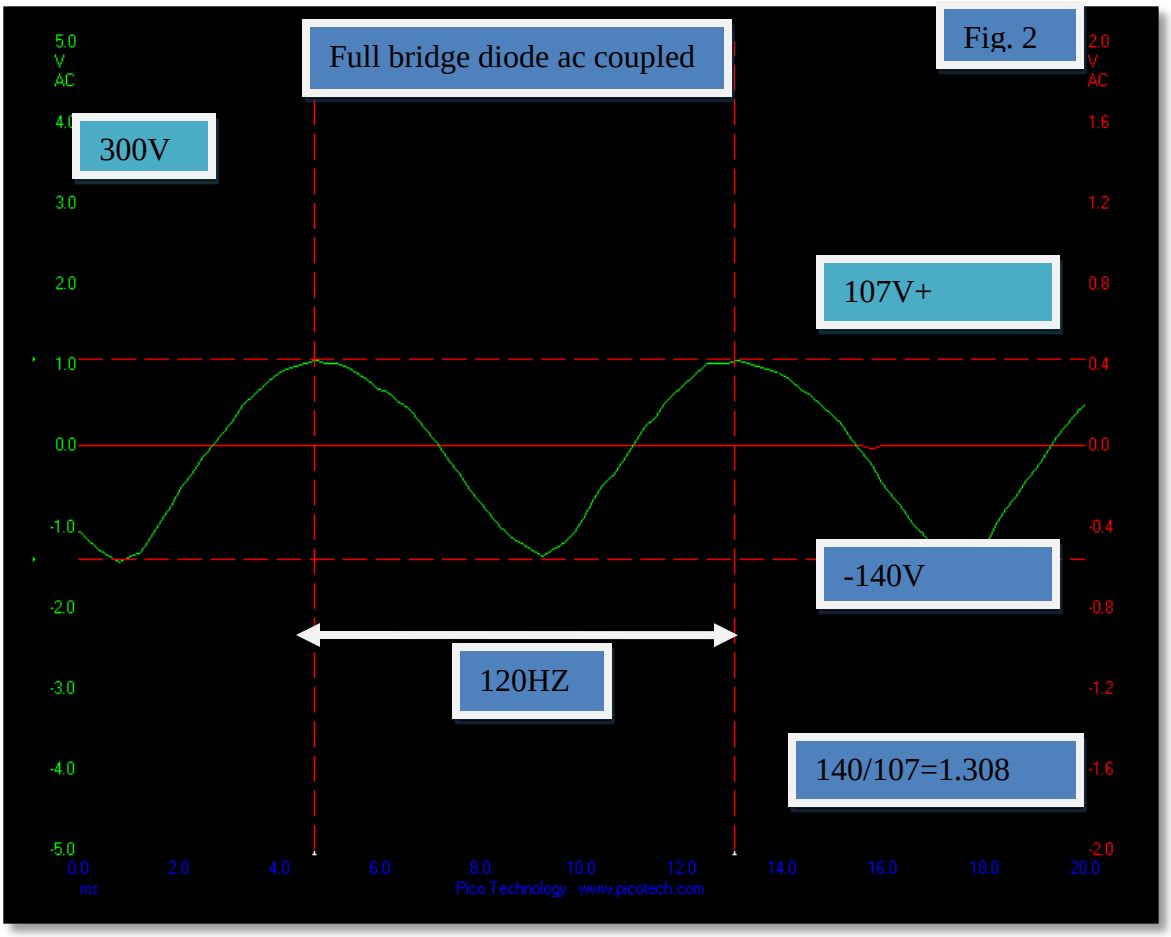
When systems are engineered based on these assumptions, the designed systems tend to support these very assumptions. In some cases, however, it is clear that the behavior of energy in the system being analyzed is behaving quite differently than what is suggested by former modeling. It is in these systems we may find common principle in which additional models can be derived and added to our current incomplete system.

It is not the intention to bring a new and complete understanding of any "new" system, but to use practical data to bolster new ideas on what may be going on and why things may happen the way they do in most all situations.

If this can be done in relatively simple terms, it may lend rise to more complex modeling systems and greatly increased efficiency beyond what was ever thought possible. Ultimately, the purpose of the data is to show basic principles in which many facets of nature operate in, and to provide a doorway for those who may choose to use it. The attempt to do so will be provided by the data itself, which is always left to the interpretation of the observer. If this interpretation is repeatable amongst a variety of observers of all types, then the behavior modeling efforts may provide to be a useful one.



Above we are looking the unloaded voltage of a bridge rectifier connected to a 220VAC power main. It has a peak voltage at the ceiling of 300VDC. This is before the water cell is hooked up to it. I like to scope every situation of every component, unloaded and loaded and then compare the changes, - given everything else equal. Then I take all the curves and integrate them by hand. This gives me the best assessment and holds no assumptions. Any time the curve goes below the zero line, it indicates a change in direction. Since voltage is like pressure, I view it as expansion of a bubble above the zero point (based on some original bubble size), and contraction below the zero point. (It could be equated to the volume of the lungs while comfortably not breathing.) I do not assume anything about the flow of current, as there are two accepted theories in electro-dynamic theory, and they oppose each other. It can be useful to integrate BOTH of those and only say that a particular field has changed direction (referenced to a relative point). I make no assumptions that I know which direction it was going, I just note the change. This will be important as we continue to analyze. It is also useful to scope in both AC and DC couplings and compare those. Anytime the information changes it will tell you more about what is going on, with no presumptions necessary. We see the voltage never makes it back to zero.



Here we are looking at the same curve, only with the scope to allow for changes in direction. If the voltage had only expansion *or* contraction present, you would not see the voltage curves dip below the zero line. This can be verified by taking a pure DC circuit and switching to AC coupling. Nothing happens….it still shows the same curve. In this case, we see a change. There are two leads on a differential scope, and it does not know anything other than its two leads. When there is more pressure in the red lead, the curve is in the positive field and the opposite when the black lead has more pressure than the red, or the red falls below the black, or opposite.
We can see the values of the circuit ceiling and its floor. We can also see that it is biased in the negative field (y axis). I like to compare with ratios, so I take the primary bias and divide it by the passive counterpart. Of course if we take the integral of the upper and lower curves, everything comes out about equal, as the time period of the positive portion is longer in time than the negative portion. We can also see that the full bridge has not rectified the voltage, and in effect it has "frequency" doubled, as the (f) frequency is 120 HZ. The voltage is only rectified relative to its load, which is the scope in DC couple.

The current is 0, indicating an unloaded circuit. The terms "loaded and unloaded" are really not good descriptive terms for an electrical circuit, but I will use them for convention. Those are relativistic terms. These diodes are "loaded" with voltage.

We could say the diode has an oscillation "in itself".

This should give us a good idea on how we would like to do some basic analyzing of curves for the rest of the data and some basic concepts. I can take a look at the ratios knowing how my leads work, and begin to compare parts of a circuit by overlapping them in different conditions and noting relationship and relationship change. I do not assume polarity anywhere within the curves, but do use the "terms" to identify portions of them. I am interested in the relationship, or differences, and *how they are the same in the whole.*

There is a great deal of electro-dynamic modeling that could be done here, but that would require much more sophisticated work. I want to keep it simple. There is no doubt that the water itself has been my greatest electrical and energy flow teacher. You don't need a gas generating cell to study water's electrical interaction properties. Water holds these properties in any situation of energy exchange.

For sake of simplicity, we will only really focus on one particular setup. I will refer to a few significant changes in configuration - after the basic points begin to come clear. This will show that these points remain, even though significant and sometimes drastic changes have been made. I have run many different combinations of water cells, and if you know what you are looking at, you can find these relationships in all of them, along with the other similar behaviors. It is not my intention to sell or prove any theories, just to document the electrical behavior of the water device and water in general, while giving support and understanding of water and how energy flows, - and *how these both* have great overlapping relationship that may help us understand ourselves and the universe we exist, - in a more complete fashion.

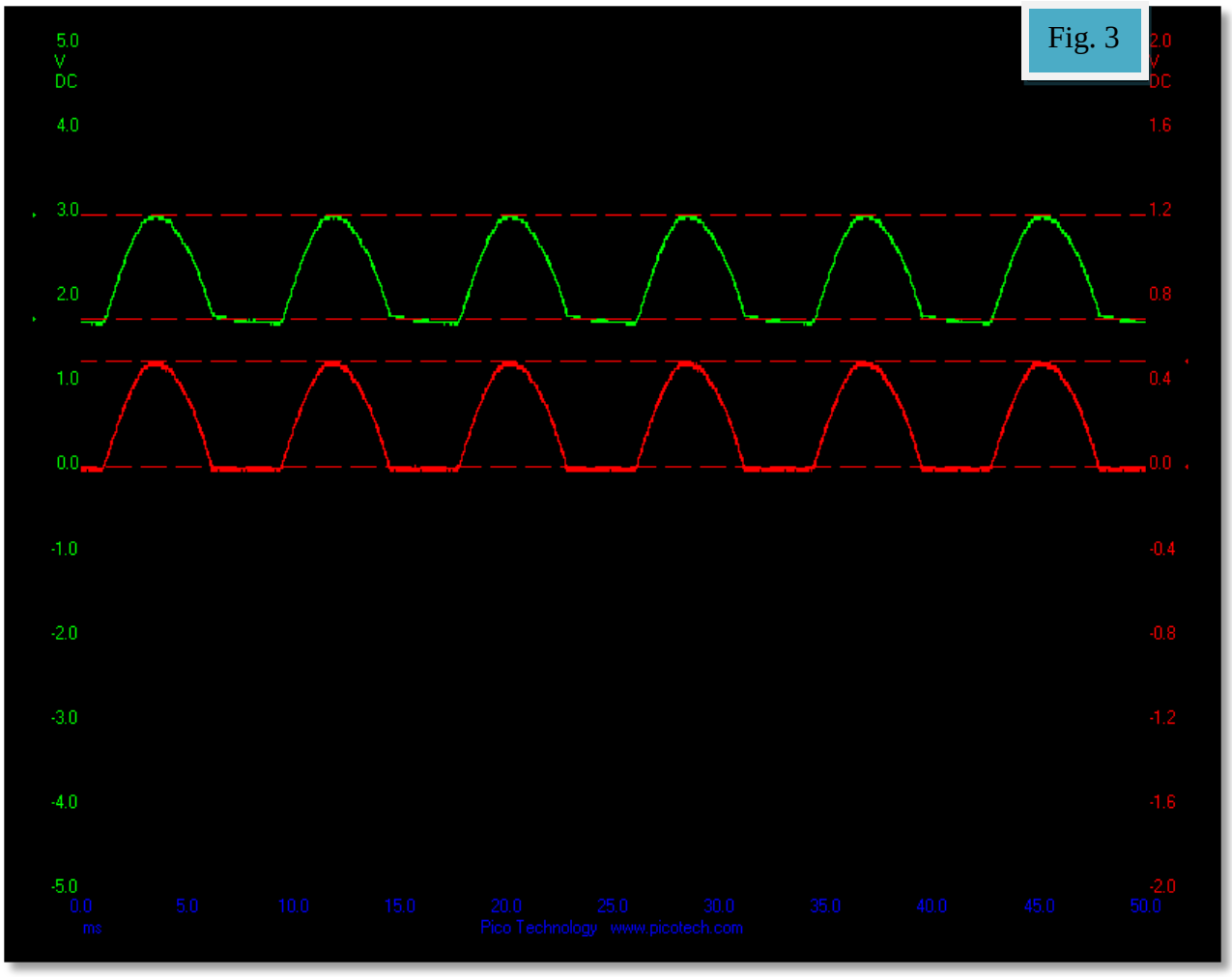
It may also be important to note, that in conventional electrical theory that peak current and peak voltage are determined by the following basic formula:

Peak value / 1.41 = RMS voltage, or (effective average voltage applied throughout a cycle)

The same is true for current.

This means we could also take a measurement of the RMS and multiply it by 1.41 to find out what the peak should be. Most all instrumentation besides an oscilloscope measures the average. The oscilloscope calculates the average by taking the integral of the curve.

(In Fig. 2), you can see we have divided the maximum y axis voltage magnitude by the value of the lesser polarity. It expresses a ratio of 1.308, and is shown in lower right corner. This is an example of what we will be doing throughout the data sets. We will be doing the same thing with the time (x axis) later on in the data, when the methods are more familiar with the reader. I also always take the inverse of the relationship of the "ratio", to see what its "polar opposite" is. ……. 1 / 1.308 = .76

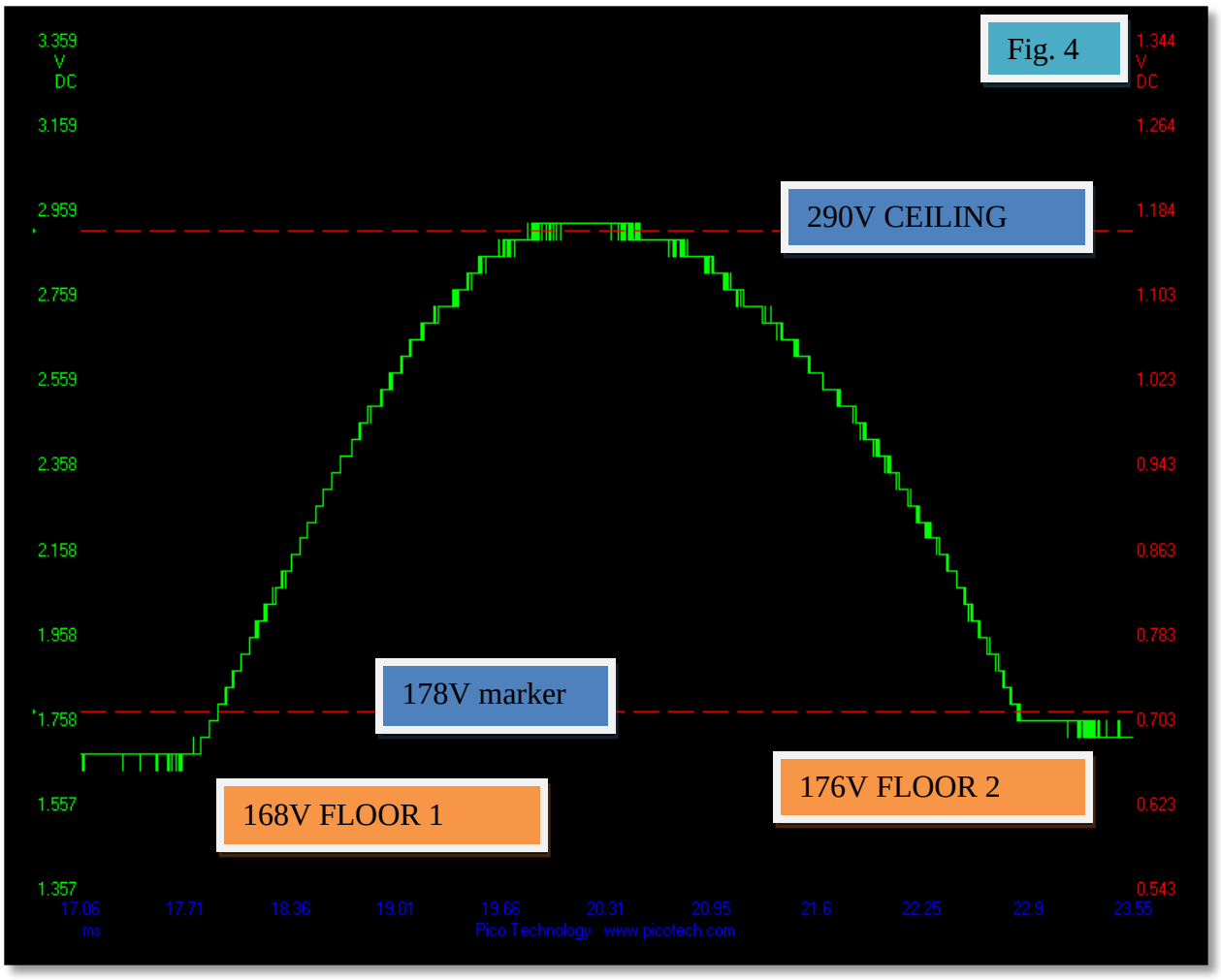


Channel A: Green DC coupled
Description: Voltage channel, PICO differential leads, 0-600V peak, 100:1 Attenuation
Scale: 1.00V=100.00V

Channel B: Red DC coupled
Description: Amperage, PICO inductive clamp, 0-60 amps, 10:1 Attenuation (10mV=1A)
Scale: .1V=10Amps

Main Power: 220VAC RMS
Cell Power: 220VDC RMS, full bridge rectified

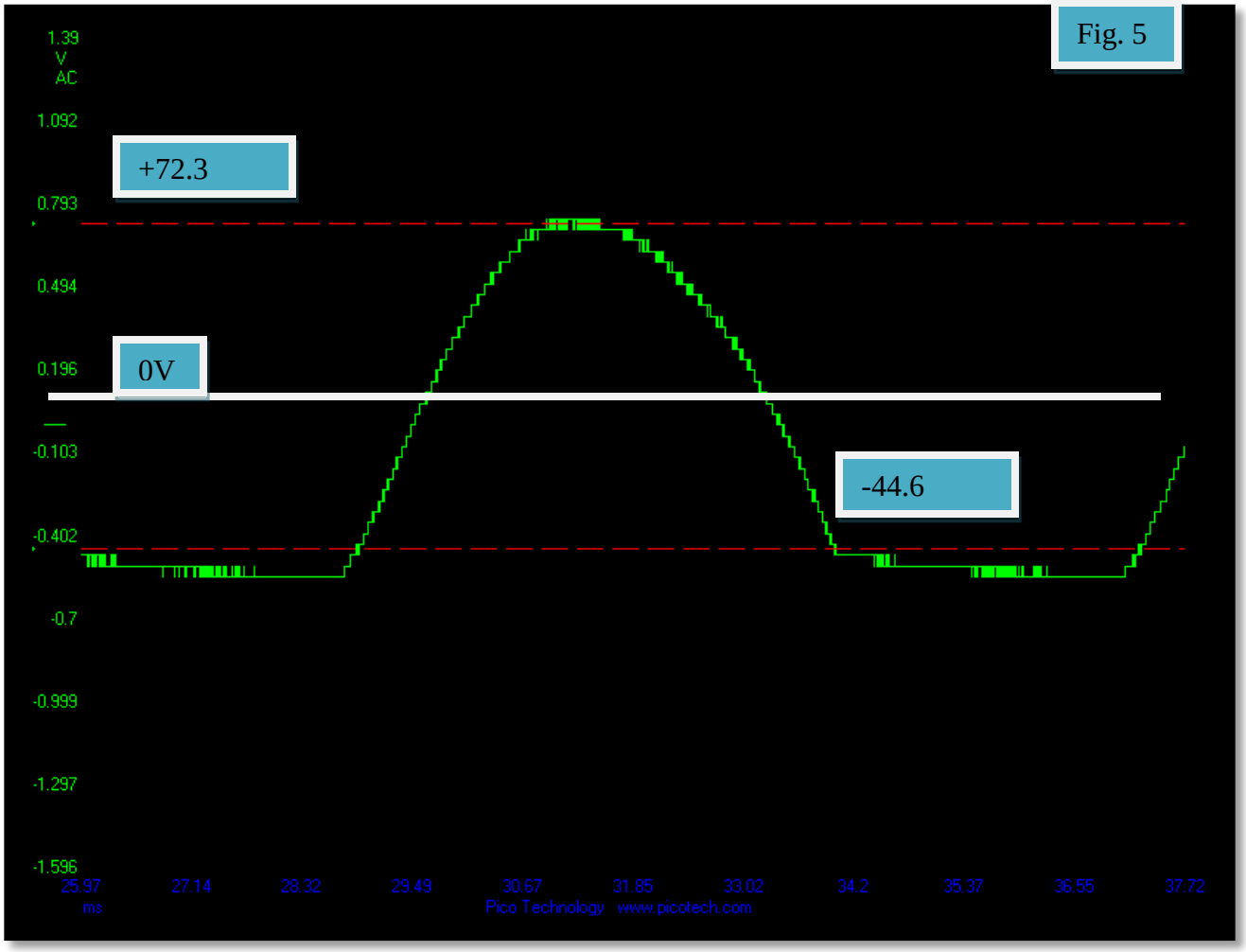
Analysis: This is the standard curve one would see while scoping the across the water cell. At a distance the curve is mostly what we would expect to see. The voltage sinusoids are "chopped" off on the bottom at the voltage required to induce current across the cell - (conventional explanation). One interesting note is the slight downhill "tilt" of flat portion of the curve. There were many things that prompted me to take a deeper look at the seemingly normal voltage curves and address them in more detail than conventional electrical theory would allow for. Now we have a space, or an "off period", from the "raised ground" of the water cell. We are now going to have to zoom in a bit and take a closer look. We also need to loosely define some points.



Here we a zoomed in on a single voltage cycle in the exact same curve and same settings as the above curve (fig. 3). We would normally assume that the rigid "stair stepping" of the curve is from poor resolution, or maybe a product of something in the circuit. We would be correct in the latter. This occurs when we couple the water cell to the circuit, and it is worth noting that this did not occur in the diode scoping before we coupled with the water cell. (under the same scope settings) We cannot ignore the diode all together, because it is part of the circuit. We need to look at some other things for now, and we will get to the "stair steps" a little later. .

The two voltage markers have values indicated in the blue boxes. Since there are many oscillations in the stair steps themselves, here I took the average, or the mid-point, before the major change occurs, which would be longer "flats" that represent the top and bottom/s of the curve. Later, I had found a way to work these figures to near exact proportion, using that very proportion from very discernable data points on the curve that delineate major transition. I am only interested in the motion of things, not static definitions. For now we are just getting started. I want to compare the ratio of these figures. We will tighten up these figures as we understand more of what is happening. V (291/178) = 1.63

Remember how I said, "I like to look at all the information." We should see what the voltage curve looks like in AC coupling.



You will notice the voltage is changing polarity across the cell (the white line is the zero line). I have marked the exact same point in relation to the curve as in DC mode, so we no longer have both positive value voltages. We also can notice the curve is biased in the positive field in voltage (y) magnitude. I am ultimately checking the positive bias (y) ratio, as we did earlier on the diode in Fig. 2 (which was negative biased). I am going to round the figures to keep it simple, until we progress further.

72 /44 = 1.63

We also have a total voltage across this sweep of 116.9 V from floor 1, as delineated in (Fig. 4). I would like to see the ratio of the maximum positive volts to the total volts in the sweep.

117/72 = 1.625

If we take the difference between floor one and floor two and subtract it from the total sweep in Fig. 4, we get this: 168-176 = -8 + 117 = 109

Let us check the ratio of this with Floor 2 (Fig. 4): 176/109 = 1.615

(Before we dig much deeper into this, it would be a good idea to introduce the Fibonacci sequence and its corresponding Golden Mean. The Golden Mean is 1.618. The reader should familiarize themselves with *how the Fibonacci sequence works* on their own, before they go any further.)

I can show some interesting and simple calculations using the Golden Mean.

GOLDEN MEAN RELATION TO BEATS OR RYTHMS:

1 / 1.618 = .618

1 - .618 = .382 …… .618 / .382 = .618

2.618 / 1.618 = 1.618

1.618 x 1.618 = 2.618

This math expresses the polar invariance of PHI. Also implied is the natural doubling sequence through multiplication, and the resistance to division.

As far as counter-rotating rhythms are concerned - with the only uniqueness *in beat*, the verbal expression of "three inside of two" and "two inside of three": 1.382 + 1.618 = 3

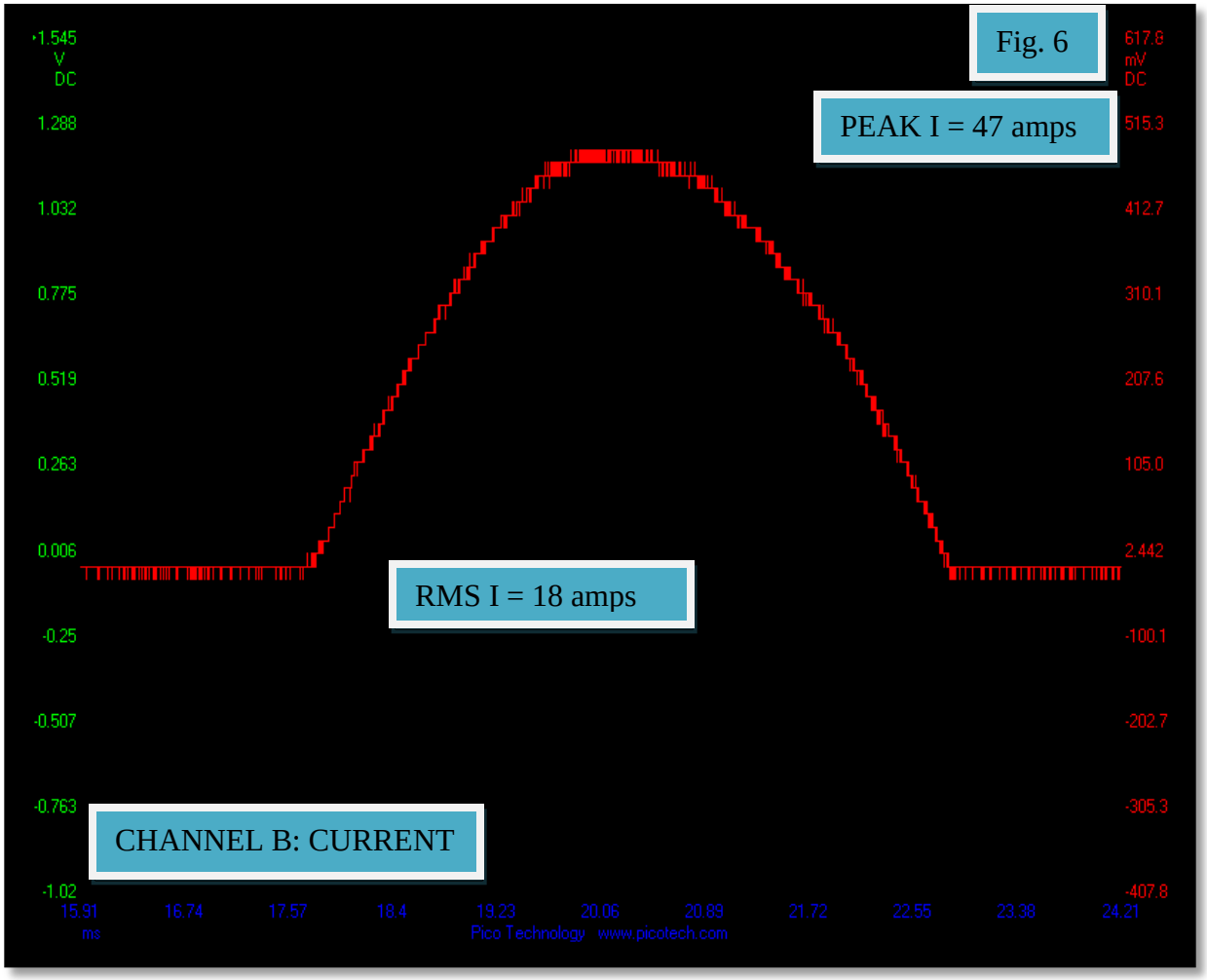
These are concepts that can only be understood through application.

We can see the entire voltage curve, after the water gets hold of it - is hovering right around ratios of the golden mean, in voltage quanta in the AC/DC coupling modes. It is also interesting to note that an inductive meter indicates both AC and DC amperage and voltage of the AC/DC type can be measured. I knew the water cell was doing something special when I began to note greater AC currents indicated - as it was "supposed" to be a pure DC circuit. I had seen this in previous experience from running highly efficient electrical circuits.

Before we look at the Floor section in greater detail, let us see if we can discover the Phi Ratio in the current or amperage. That is what we are looking for; - a simple way to understand how energy flows. The amperage I am referring to is the "red" curve on Channel 2., In (Fig. 3).

Again, I must stress if you are not familiar with electricity it is ok. All we are looking at is trends and ratios of a curve. It is no different than blood pressure, cylinder pressure in an engine, or maybe even breathing. The voltage is the change in pressure that induces the air flow, or the

blood flow, or water flow, or whatever suits your fancy. I strongly encourage one not to lose interest in this because of its technical unfamiliarity. I can assure you; - it is very familiar to all of us! Try to find a common analog for something that you are passionate about. It works for artists too! It gets quite a bit more interesting than just a static ratio! And remember, if it wasn't for the vacuum the lungs create, we would not be able to breathe! Fundamental energy fields always arrive through this method! Through the "vacuum".

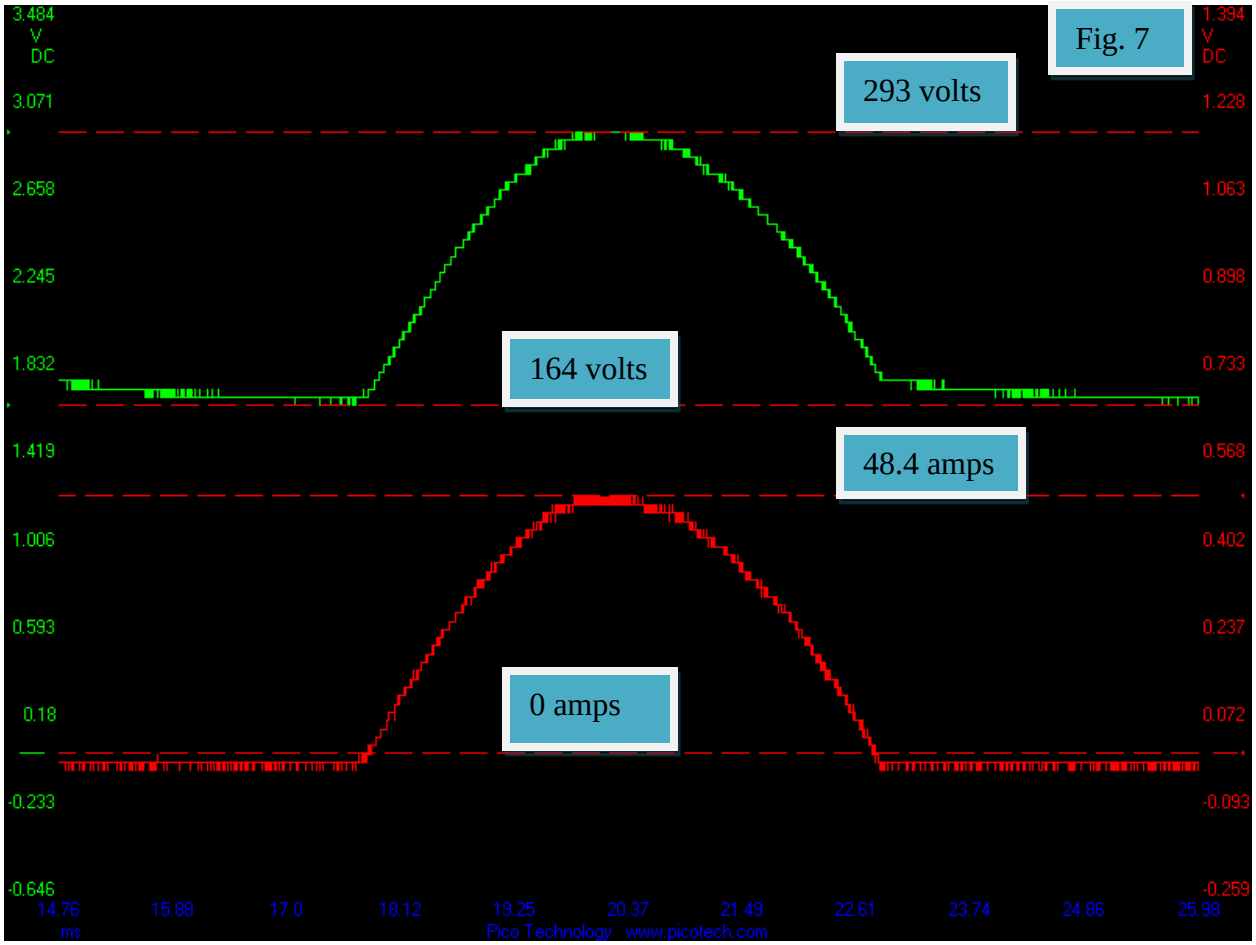


Here we can look at some of the ratios again.

47 / 18 = 2.611 *or Phi squared*

47 – 18 = 29 ……. 47 / 29 = 1.62

Since we were able to find the approximate PHI ratio in the voltage and current independently within each of its own curves, it would be interesting to see if there was a PHI ratio between current and voltage. This would really be interesting, as the units of voltage and current should be somewhat arbitrary to one another. They have mathematical relationship through resistance, but the units themselves do not possess any delineated unification. If this were to be the case, we would start to see a relationship that was invariant to units. This would introduce a new concept into engineering that would not be specific to electrical engineering in particular. Let us see.



An interesting note here is how the current drops "one step" below the zero line. You can re-zero it on the PICO inductive clamp, but as soon as the cell goes off during a duty cycle, it shifts back down on re-start. I chose to try and integrate voltage and current total sweep (y) magnitudes, from zero with the current and the maximum positive field sweep in voltage. We can look at current in AC coupling mode from a totally different cell configuration later on, to give example of PHI in a totally different configuration, both chemically and electrically. (Fig. 18)

293V-164V = 129V ……. This is the total maximum change in voltage

Peak current = 48.4

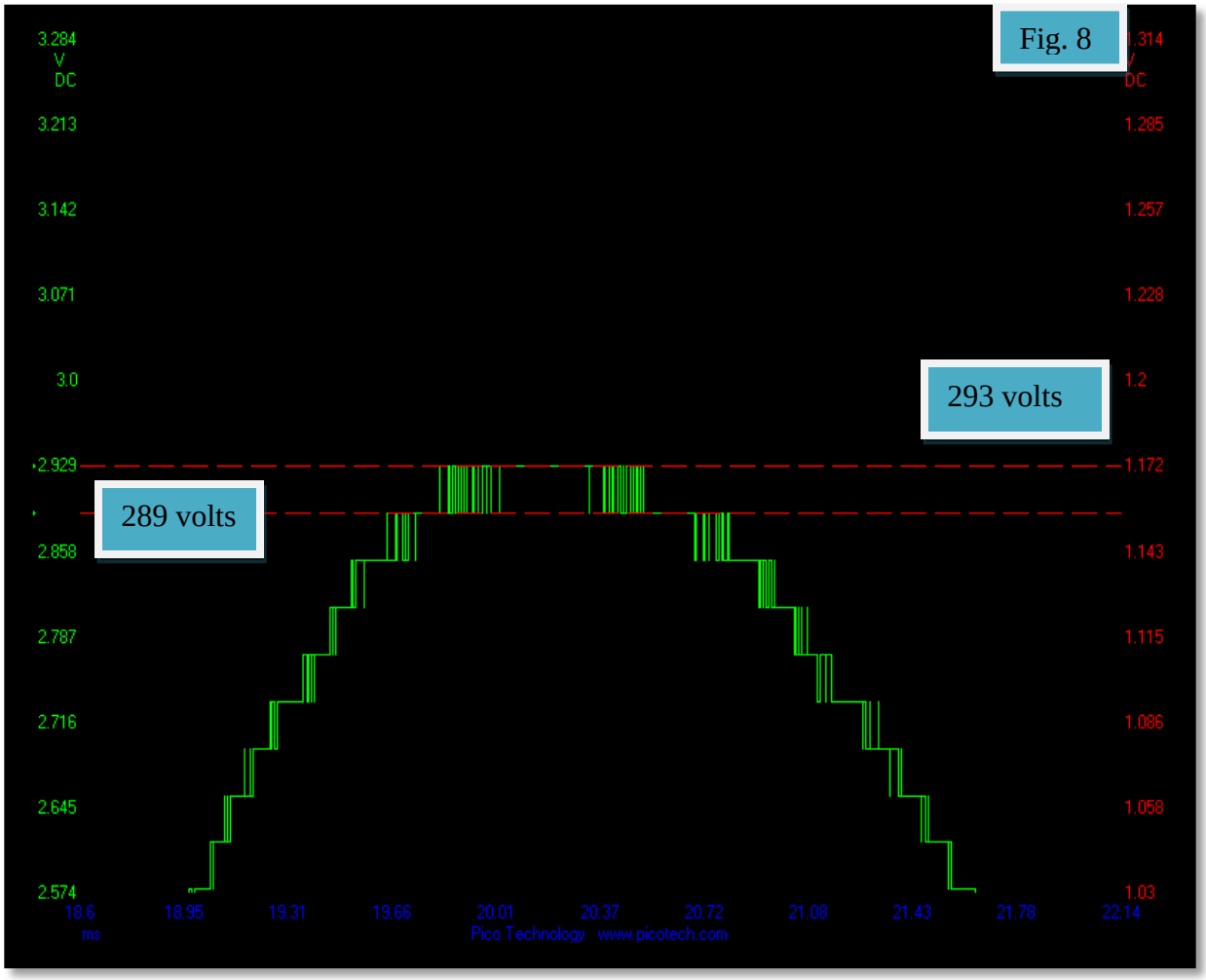
129V – 48.4 amps = 80.6

129V / 80.6 = 1.60

If we take the total change in current from below the zero line, we get: 49.9 amps

129 – 50 = 79 …….. 129 / 79 = 1.63

Rather than “rounding” things of, we may be able to use this pattern we are seeing to see which figures may fit into near exact PHI ratios, by using the PHI ratio itself. Let us a take a closer look at the voltage curve that we were previously approximating from the middle point of the major transition areas. Here we are going to zoom in on the approximations and calculate a PHI relationship *within* those steps, and then compare to see if we can more closely come up with a pure PHI relationship with the values of peak and the transition prior to floor 2 voltages.



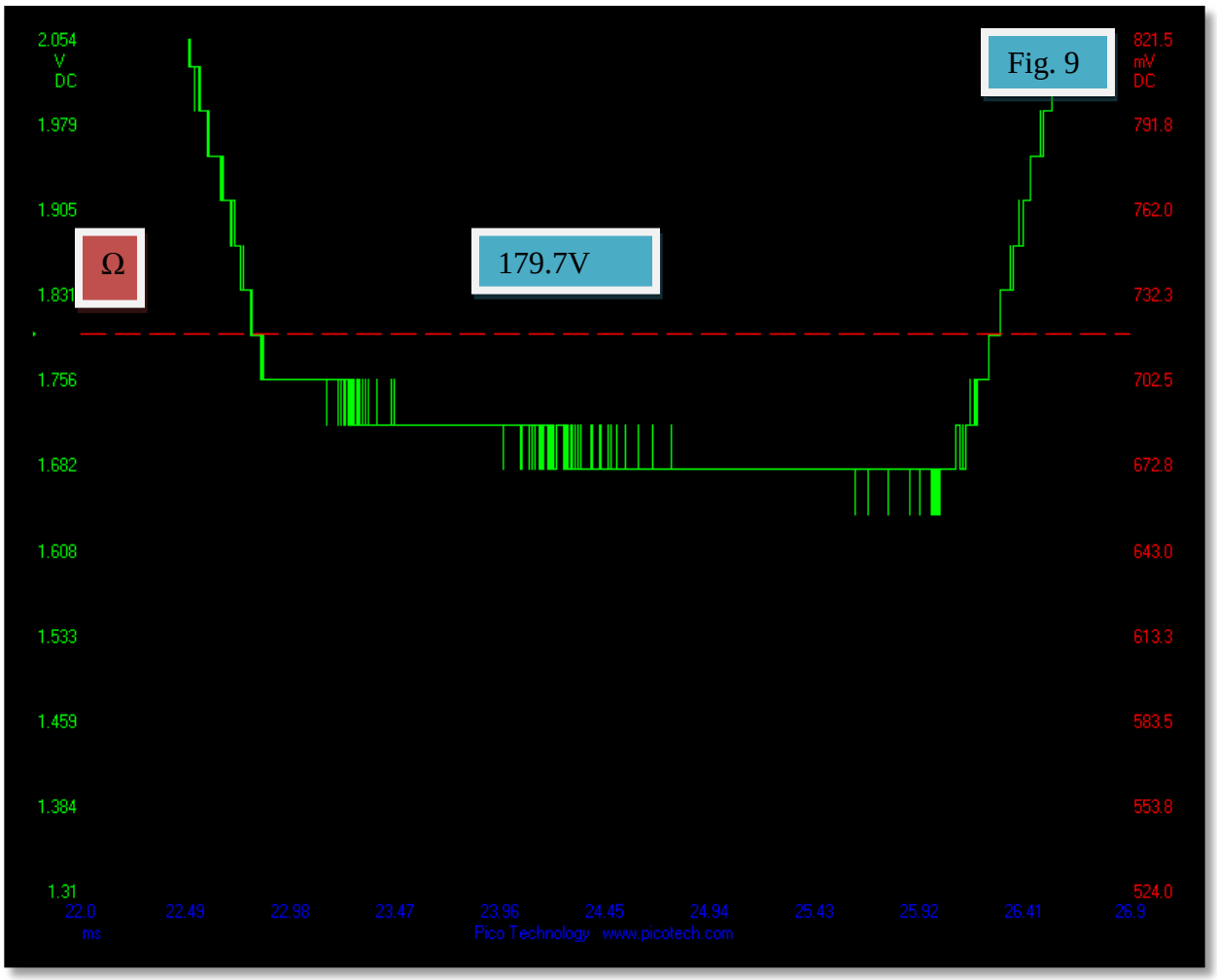
Here we have zoomed in on the peak of the voltage curve that we have been working with. The total change of the voltage is 3.97 volts in the peak area oscillations.

3.9 volts / 1.618 = 2.41 volts

293 volts – 2.41 volts = 290.59

If we divide this figure by PHI, we should get an exact point on the curve, within a very low margin of error.

290.59 / 1.618 = 179.598 …….this should equate to a specific voltage point. Let us see.

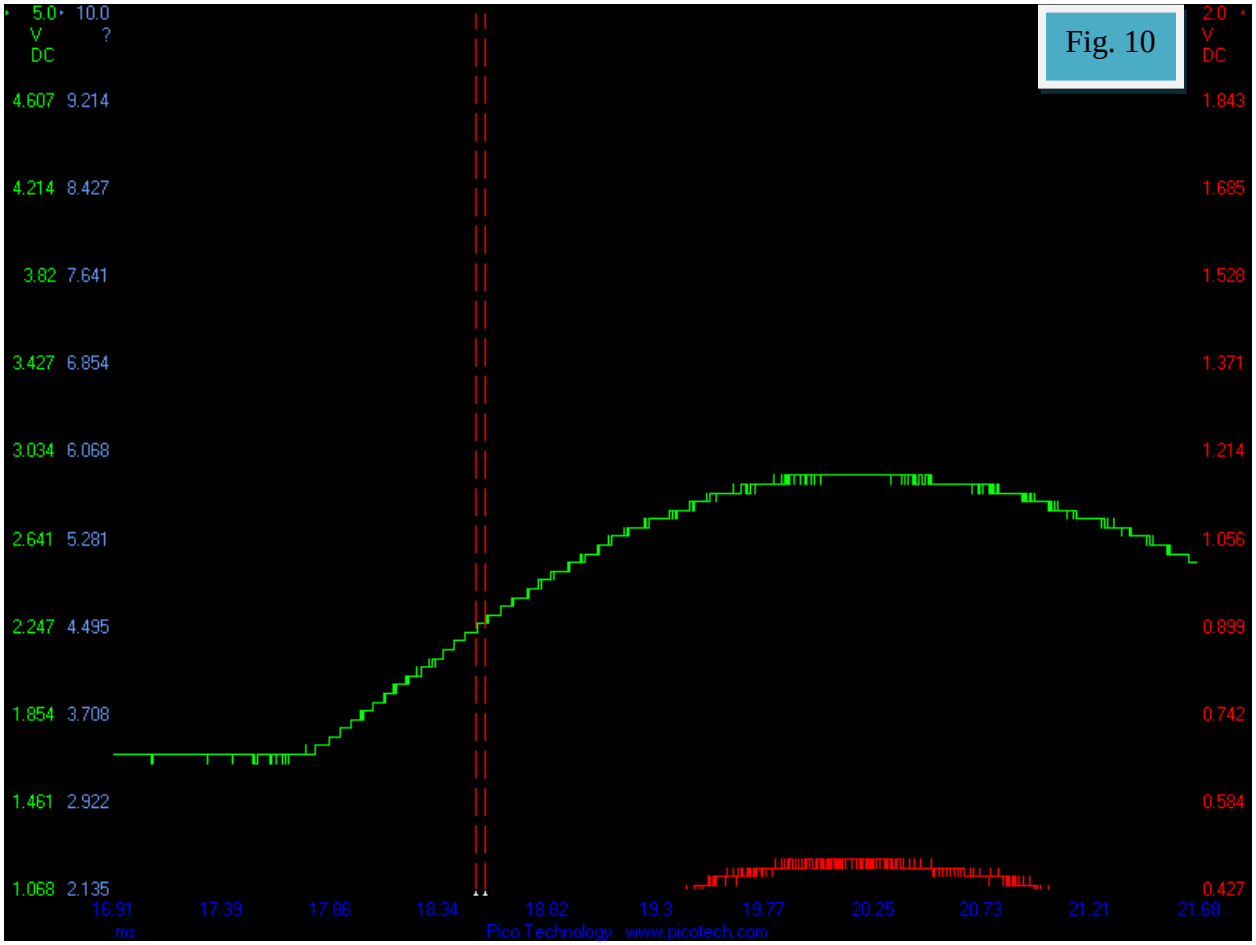


Here we zoomed in on the lower section of the curve. I am using software that has a marking accuracy of one tenth of a volt. The marker indicates, when placed precisely on the first step before the major transition: a value of 179.7 volts! Notice how the first step marks the beginning and end of a transition of major change. Also notice that the last step of the descending voltage curve equals the third step of the ascending curve.

Here we can begin to see that this entire system is operating under PHI. We might wonder where this comes from, because none of the poly-phase main power system, nor all its lines and transformers is designed with obvious PHI proportions. This would have to be something very wonderful indeed!

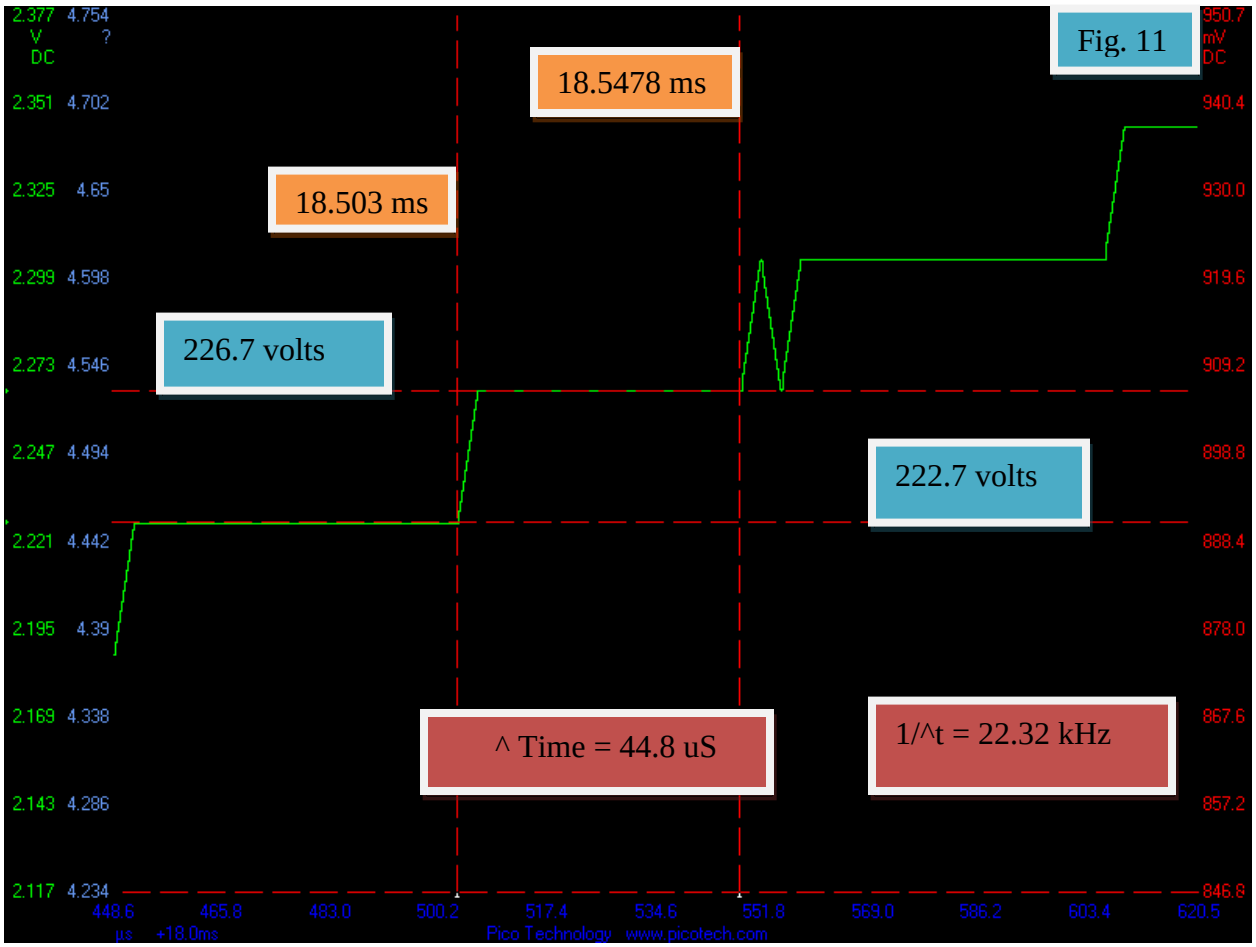
Since we have seen some unit invariant behavior from PHI, we might decide to check and see if it was derived out of time, or rhythm itself. Let us zoom in on one of the "stair steps" at a "random" point on this same voltage curve.

Fig. 10: STAIR STEPS AND TIME



Here, I just picked a “random” step from the middle of the voltage inclination curve. I wanted to see if I had discovered a unified invariant relationship, and for this to be the case, it must have significant relationship with time itself.

We are going to need to zoom in quite a bit. Let us see in the next zoom section.



Here we see a similar voltage change of 3.89 volts. We want to see if each one of these "little stair steps" has a correlation to time and the whole voltage curve.

It is not quite as simple to equate time, but it begins to show how we can use PHI to understand and design systems. We can analyze how frequencies are "off" and find where they need to be; by viewing a system where they are "on".

Here it goes:

Delta time = 44.8uS …… 44.8uS x 1.618 = 72.16

The software calculates a DC average of this voltage curve of 219.1 DCV. This is also recorded by live instruments and two of them are in accordance with each other and the software.

1. If we use our peak PHI voltage of 291V:

   291 – 72 = 219V

2. 22.32 kHz/ 3.9 volts = 5.72 + 22.32(f) = 28.04

   28.04 X 1.618 = 45.37 (time)

Since the voltage steps throughout the curve are primarily 3.9 volts, we can say that the water is altering time to maintain a certain relationship to the overall voltages applied to it. We will elaborate on the concept of (why) at the close, - for now we just want to look at the concept derived from the data. Up until now, I have loosely been equating numbers through simple process straight from the data. From the above, we could derive one of the many equations of the data observed from any system or engine. Let us assign the units:

Delta Time x phi = tv'

Vpeak – tv' = rms volts

If the water had to construct perfect rhythm and phasing with what we gave it, how would it do this? How would it maintain the wave form we gave it, while organizing all of its internal wave components into common rhythm? Let us find out.

We are feeding the water cell a peak sinusoidal voltage of 300 volts. This is in accordance with the 220RMS x 1.41 = peak voltage, within range of the voltage drops we have in the system and across the diode. 220vrms x 1.41 = 310V

Let us say that the way we designed the cell required 2 volts per cell internal and we had 90 individual cells within a whole cell. This would require about 180V to achieve best efficiency. The voltage is not varied as much as time, in the sideband stair stepping, (except for major transitions), so the water is behaving like an adjustable resonant LC circuit. With 90 cells and 4 volts per cell, this would equate to 360 volts total, if all of these were summed. Only thing is, the water does not show an increase in 60 peak volts. But what if the water was storing it in a: negative field? What if - unlike when we pressurize things, - (where we increase the temperature and see system losses by the square), we used this voltage in "suction" and it increased by the square? We would have a total potential stored of 60 squared, or 3600 volts potential. If one were to "short" any two of the adjacent cells in a water cell together, they would see what I mean. It does not have a "harmful effect", but none the less you can literally see the potential. It is not 2V.

All electrical engineers and many others know that a RLC circuit when in tune with the inductor doubles the voltage (no load). So, since the (water in-between two plates/electrodes) fits the definition for a capacitor, this is possible from a technical standpoint, while incorporating conventional theory.

Notice how if this were the case, that "the "72" numeric value in (Fig. 11)" calculated from a very small time frame in the total curve would have a number of relationships. Let us review them.

1. Peak voltage – 72 = RMS voltage (calculated and measured, in all voltage curves)

2. Peak *positive* AC voltage in (Fig. 5)

3. And in the summed total voltage of an RLC circuit in series, which is what the water cell is in relation to the peak voltage present when line power is coupled to the cell.

   90 capacitors x 4 volts = 360 volts

   360 volts – 72 volts = 288 volts (refer to (Fig. 8) and the step prior and after the peak, or maximum ceiling).

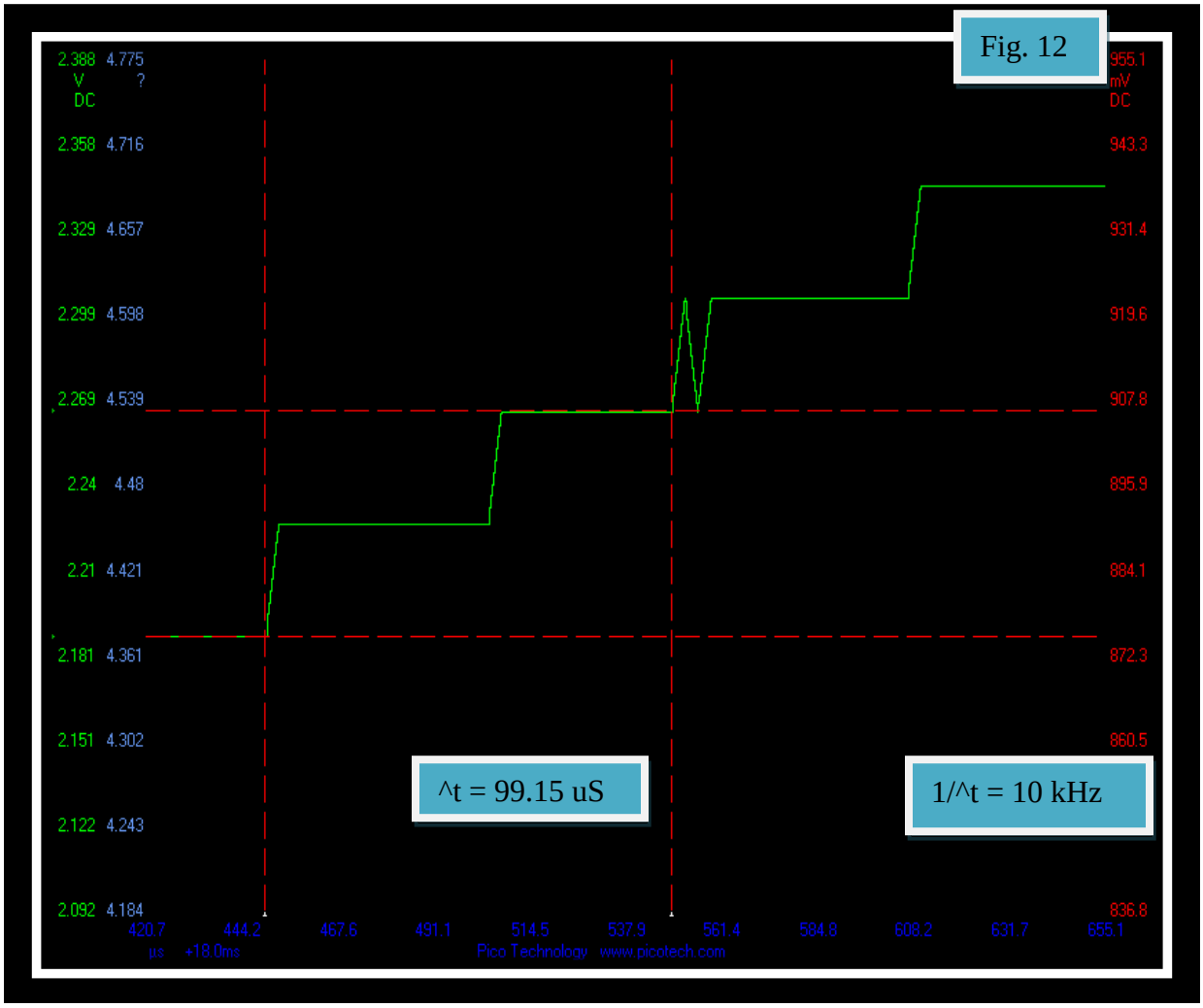
Again, I could use more exact figures to show nearly exact relationship, but that is not the point. The first step before and after the major transition of the "peak voltage line." gives us an idea of how to use data prior to a transition to tune a whole system. This is clearly what the water is doing. It does not refuse the input information, nor try and force it into a new direction. It works with the input and integrates it into its own process and then *ouputs* more than was *inputted.*

This is made possible by the "self-aligning of the internal components" of the water cell, to work together as one, while functioning as a whole unit, given the inputs. The normal disorganization or resistance is wholly or partially reduced, according to what we have told it to do. The disorganization that is present is due to the fact we are forcing a condition of current upon the cell. Current is the measurement of average waste in the electrical circuit. However, the water ignores a portion of our command and works with it, to provide energy - that was before, somewhat unexplainable. The water allows the waste we engineer upon it to still exist. Current is wholly unnecessary to achieve the desired results we are looking for from the water. It is the "easy method"; - as it were.

It is because of this, which I am focusing on basic principles of energy relationship and flow, and am choosing not to derive all the equations that would begin to allow for engineering of such a system. The math is so relatively simple (geometry) - that someone who did not understand it in principle could begin to implore these effects without understanding what they are doing. I am just going to cite relationships of the data, which begins to show the principles in which we might do so. These are universal principles as related to the formation of all matter. We can learn from the water and what it is doing by simply observing it. I can share my observations. These shared observations can be used to help loosely define the principles in which we may begin to responsibly copy the portion of nature that *is* the primary force. All conventional engineering to date implores the copy of the initiating natural principles, with near total disregard for primary forces of nature under which it operates, - namely efficiency through abundance. I spoke of this fairly clear in the preface.

I can say when we are dealing with the time function; we can begin to see logarithmic sequences begin to open up. I will elaborate on the principles of this in my closing remarks. For now we need to look at a few more important examples, and continue to study the many calculations that the water does not necessarily do, but already knows. It is the physical property and energetic

properties we place upon it that appears to slow it down. For now, let us take another look at some time relationships.



Here we are looking at the same zoom as (Fig. 11), only we are going to introduce the principle of overlap. We are going to integrate the information we analyzed in Fig.11 with the prior "stair step" in the same curve. Let us try a different perspective. I am not going to elaborate as much, but just continue to point out more relationships. You can draw your own conclusions.

Let us try a tri- nary sequence I spoke of in the preface.

1.382 + 1.618 = 3.000

45 uSec. (From Fig. 11) x 1.618 = 72

99 uSec. (Fig. 12) / 1.382 = 72

99 + 45 = 144 ……. 144/2 = 72

45 x 2 = 90 …….99 / 90 = 1.1 …… or if we want to be more exact……..

44.6 uS x 2 = 89.2 …….. 99.15/89.2 = 1.11

This is quite a nice tri-nary sequence, with 3 ones as an "answer", and the "answer" is also the bi-nary version of the decimal version of PHI!

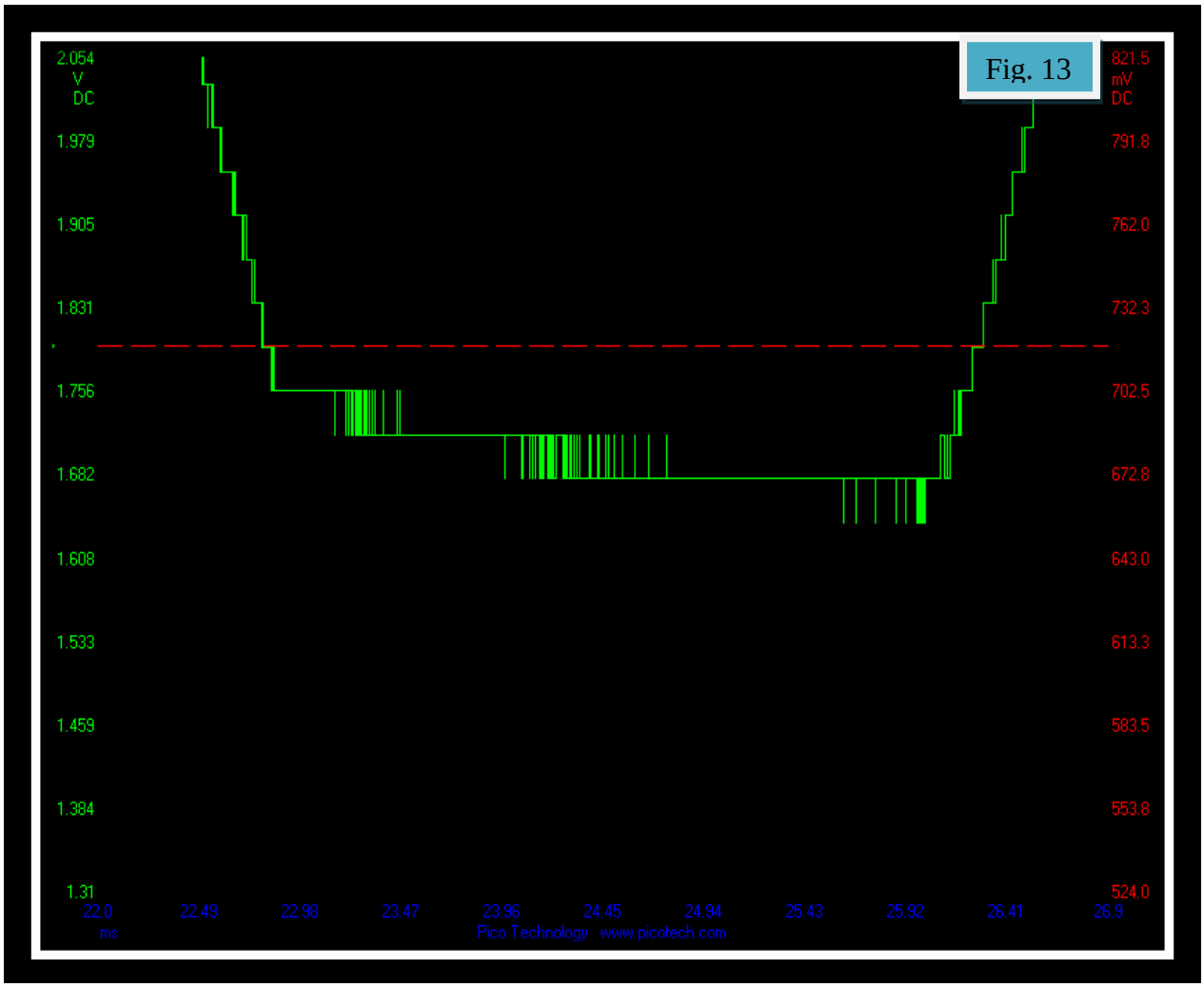
This represents three inside of two, and is precisely the clue Tesla left us when he designed the 60 Hz poly-phase system. It also starts to incorporate and express "hyper-dimensional geometry" and folding of 3D structure into its 2D form and the inverse. The reader can choose to integrate many specific fields that are currently being explored, and this introductory model may help these come to understandable and useful means, in a responsible manner.

The reader can find many fields of research that may have been unusable due to their unique complexity. These can be integrated and understood better when you can see relationships that actually can develop from them. Quantum mechanics, sub quantum mechanics, relativity and all its forms, torsion mechanics, sacred geometry, fractal geometry, and even ancient civilization's works, - can be incorporated into one, through the common relationships.

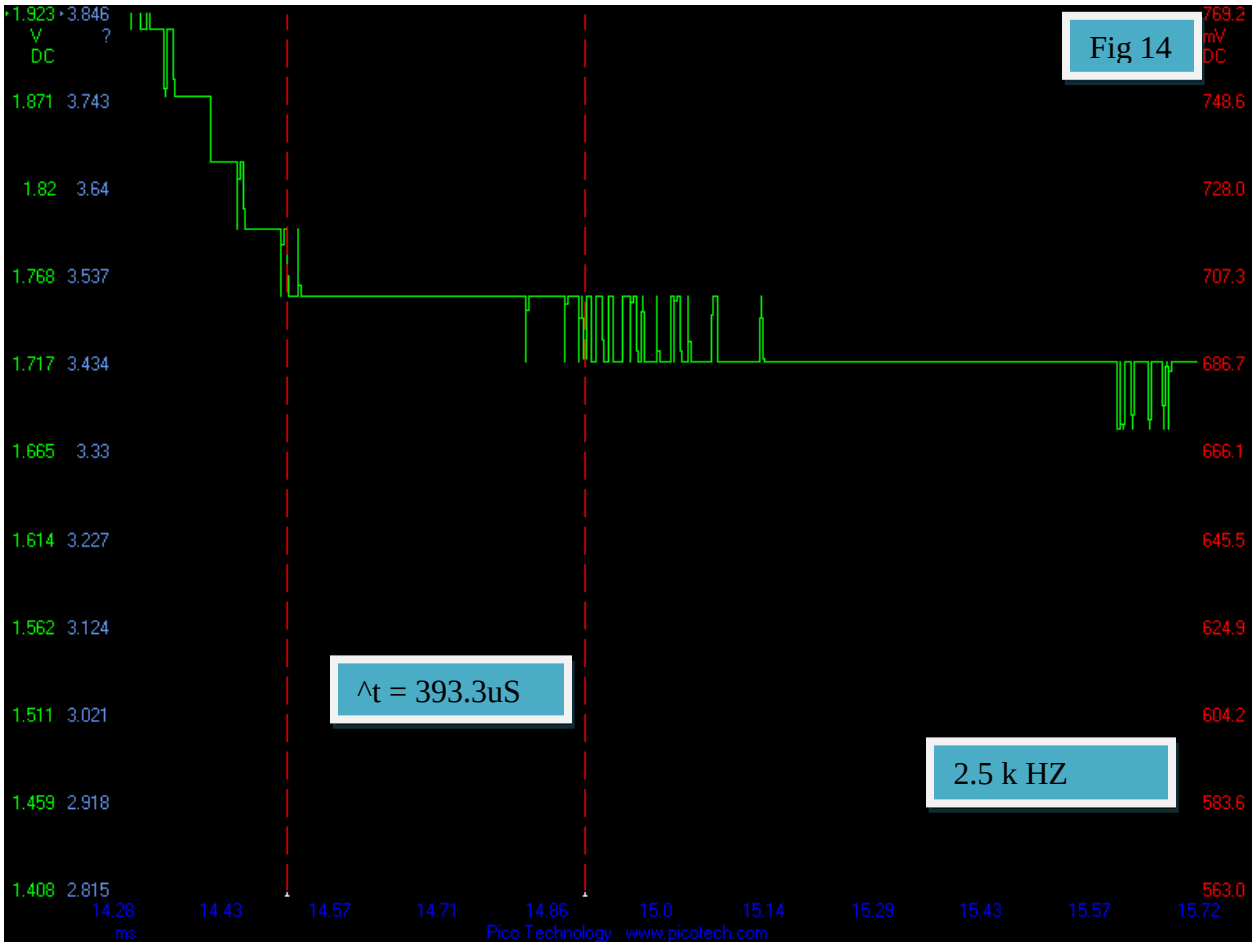
This type of work is something I am interested in, but it would delay my findings here, which I suspect show much of the basic principle I intend to convey. To put it more bluntly: To bring harmony into all aspects of our intentions, which certainly include engineering. Engineering in its fundamental sense deals with the "organization of energy flow through the rhythm of time." Every specified engineering field, though very inclusive in a micro-sense, fails to include the asymmetrical dynamic flow of energy, - which is fundamentally why engineering exists to begin with. Engineers typically do not know what it is they are doing from a fundamental level, so it is no wonder why most all of our designs reflect this, and only operate with efficiencies dictated by the self-implored systems that are currently used.

Let us look at another example of the presence of binary Phi in the next figure.

Remember the "tilt" in the circuit floor I described in Fig. 3, ……..well now it is time to come back to it.



Here is the basic zoom of the "tilt" from the original curve in (Fig. 3). We can see three distinct steps within the tilt, and three steps of difference in the "transition steps" that we previously used in analysis. We also can see oscillations occurring in these three longer steps, as we can also see them in some of the "stair steps" in the rest of the curve. I would suspect that these have PHI relationship also, but the scope would need to be faster to properly delineate them, and I think we have shown enough. No matter how fast a scope or high resolution, if we found certain proportions kept showing up and always had certain relationships with time, it would be insane to waste time trying to make more and more accurate measuring devices to continue to show the same thing over and over again! We have enough here. Let us zoom in.



Here we are looking at the first segment. You can see a period where the floor and the ceiling of this section "disappear". I would consider this to be the overlap. I have marked the beginning and the end of the discernable "straight line" portion. Let us zoom in on the next two portions and we will integrate them all together for another tri-nary sequence.

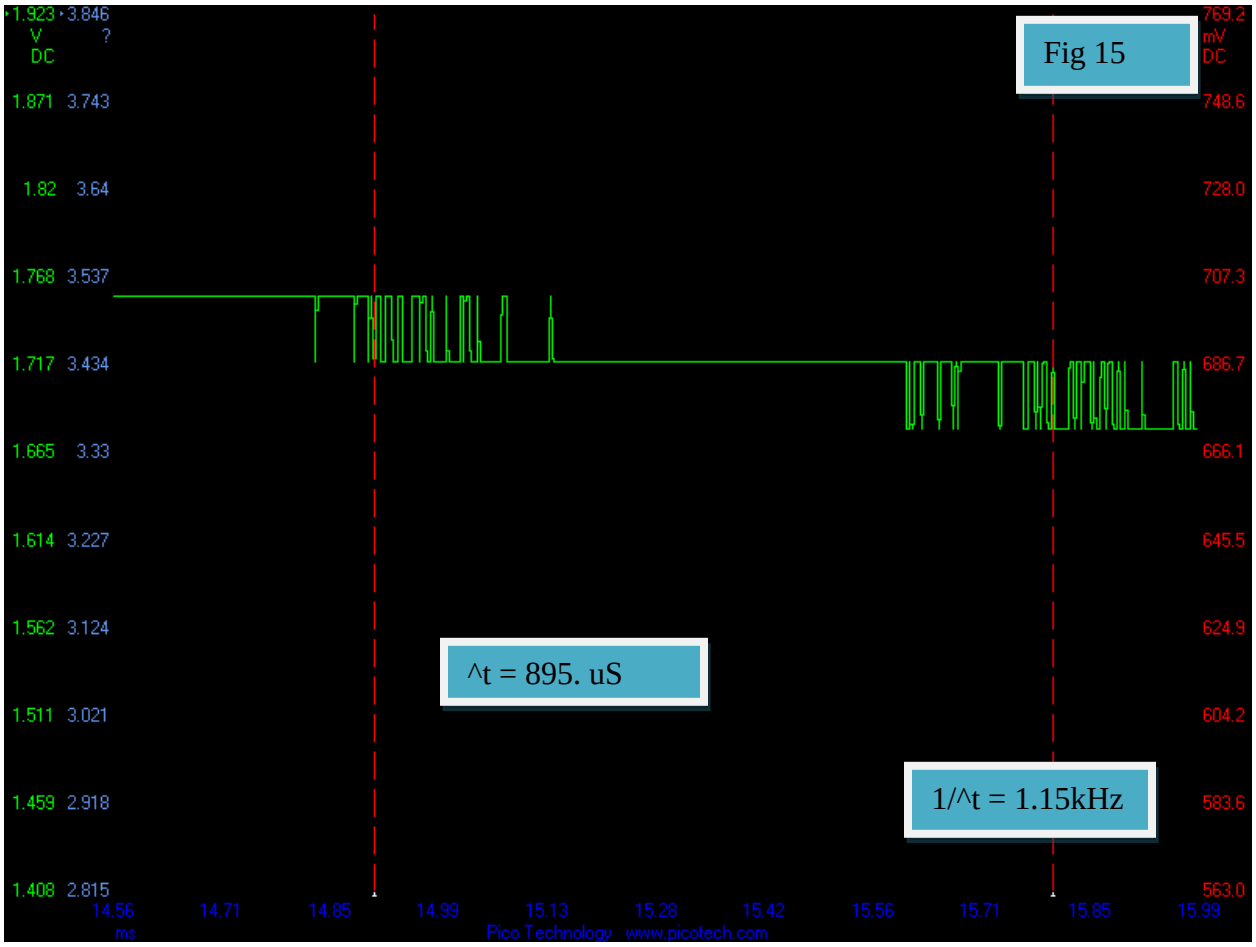
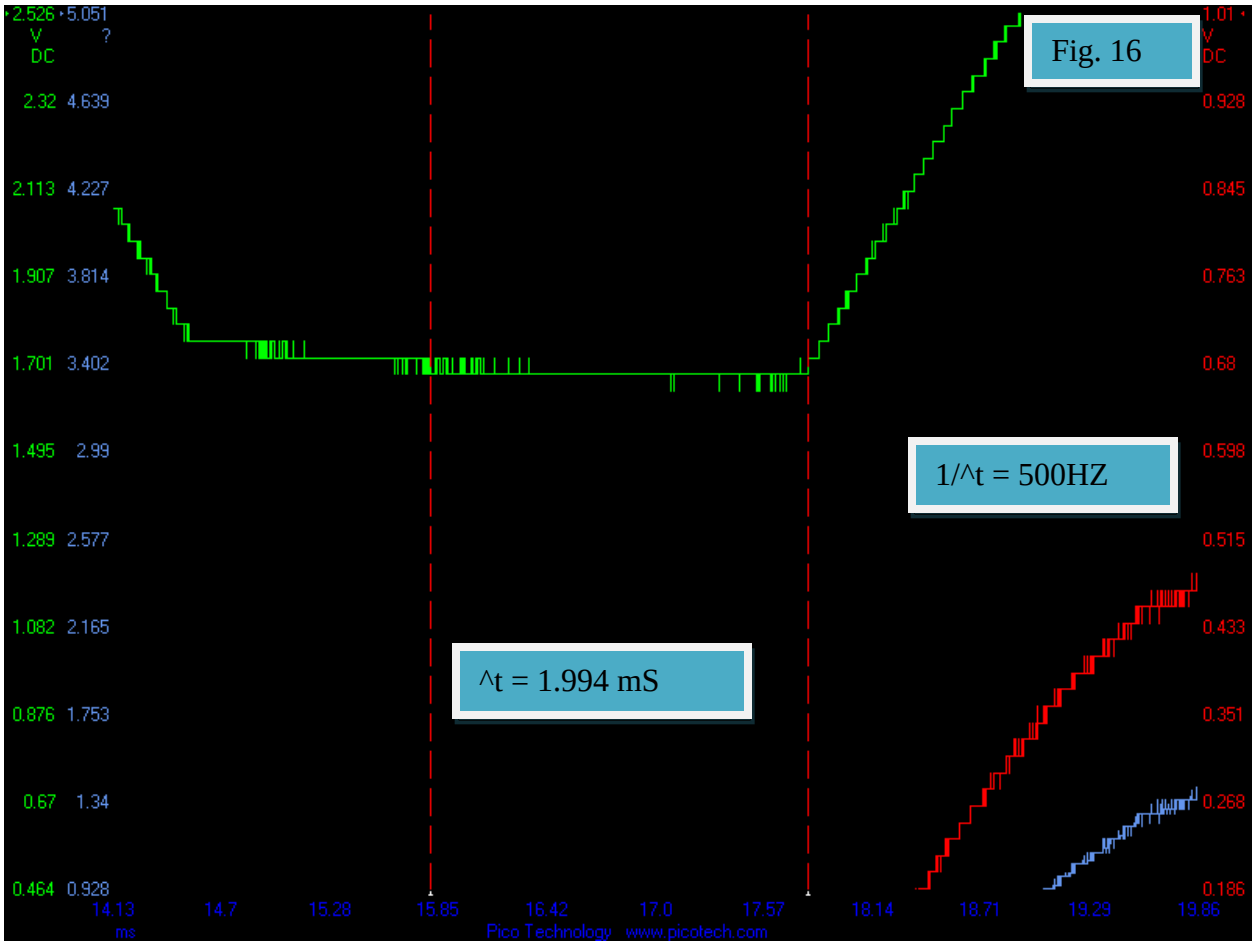


Fig 15
^t = 895. uS
1/^t = 1.15kHz
1.923 3.846
V ?
DC
1.871 3.743
1.82 3.64
1.768 3.537
1.717 3.434
1.665 3.33
1.614 3.227
1.562 3.124
1.511 3.021
1.459 2.918
1.408 2.815
769.2 mV DC
748.6
728.0
707.3
686.7
666.1
645.5
624.9
604.2
583.6
563.0
14.56 14.71 14.85 14.99 15.13 15.28 15.42 15.56 15.71 15.85 15.99
ms
Pico Technology www.picotech.com



We can integrate all these time values into a trinary sequence of relationship.

Fig. 14 393.3 uS ……. 2.5 kHz ……...A
Fig. 15 895.5 uS ……. 1.15 kHz …….B
Fig. 16 1994 uS …….. 500HZ ……C

Let us look at the rate of growth, and remember, we are not picking arbitrary points on the curve to make these figures work. We are working from very discernable points that preface very significant transitions.

B / A = 2.20 Time B – Time A = freq C

C / B = 2.30 Time C – Time B = freq B

2.2 = binary PHI x 2 Time (A+B/2) + C (time) x (1.11) = Freq. A

Of course there is some margin of error, but it is not intended to be precise (as indicated by the Fibonacci sequence of non-solution), and as seen earlier, can be broken down by taking the PHI relationship within the identifiable overlap period, and the figures can become very precise. I do not feel the need to continue to do this. Accurate or repeatable is a better description.

ANTI-PARALLELL/LONGITUDINAL PULSE/QUARTER WAVE:

Let us take a look at the anti-parallel relationship of voltage and current, and see what the water has done in this view.

This curve is useful, and is obviously a representation of PHI. The split indicates the asymmetry present throughout the entire circuit and the principles of overlap. It represents the quarter wave function of the voltage and current.

The marker indicates a change of exactly 10 Volts and a period of exactly 10HZ, which would be equivoque to 600 RPM on the main line generator. It is marked at the 2.618 out of Three in the steps. I am not going to elaborate much more in these sections.

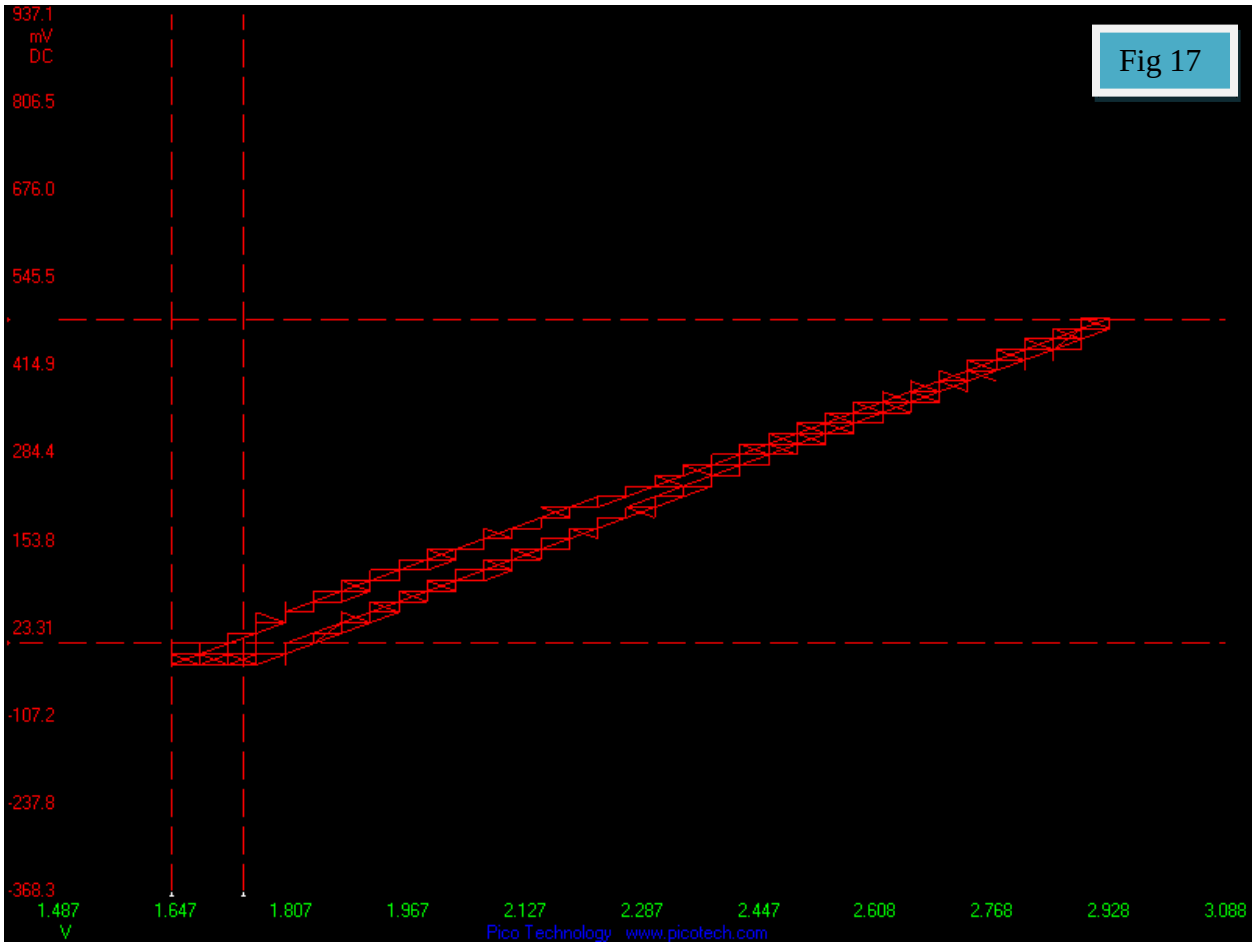
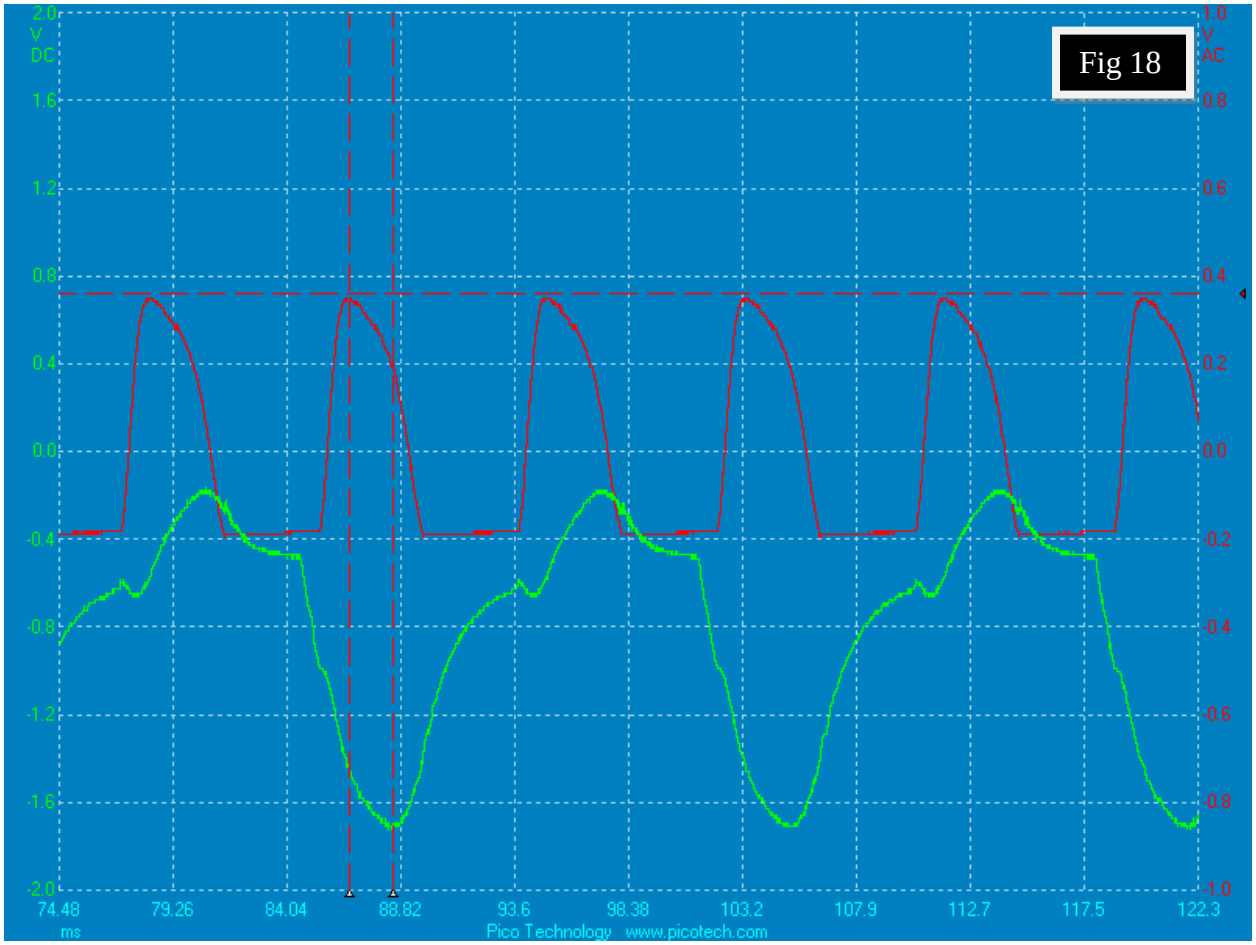
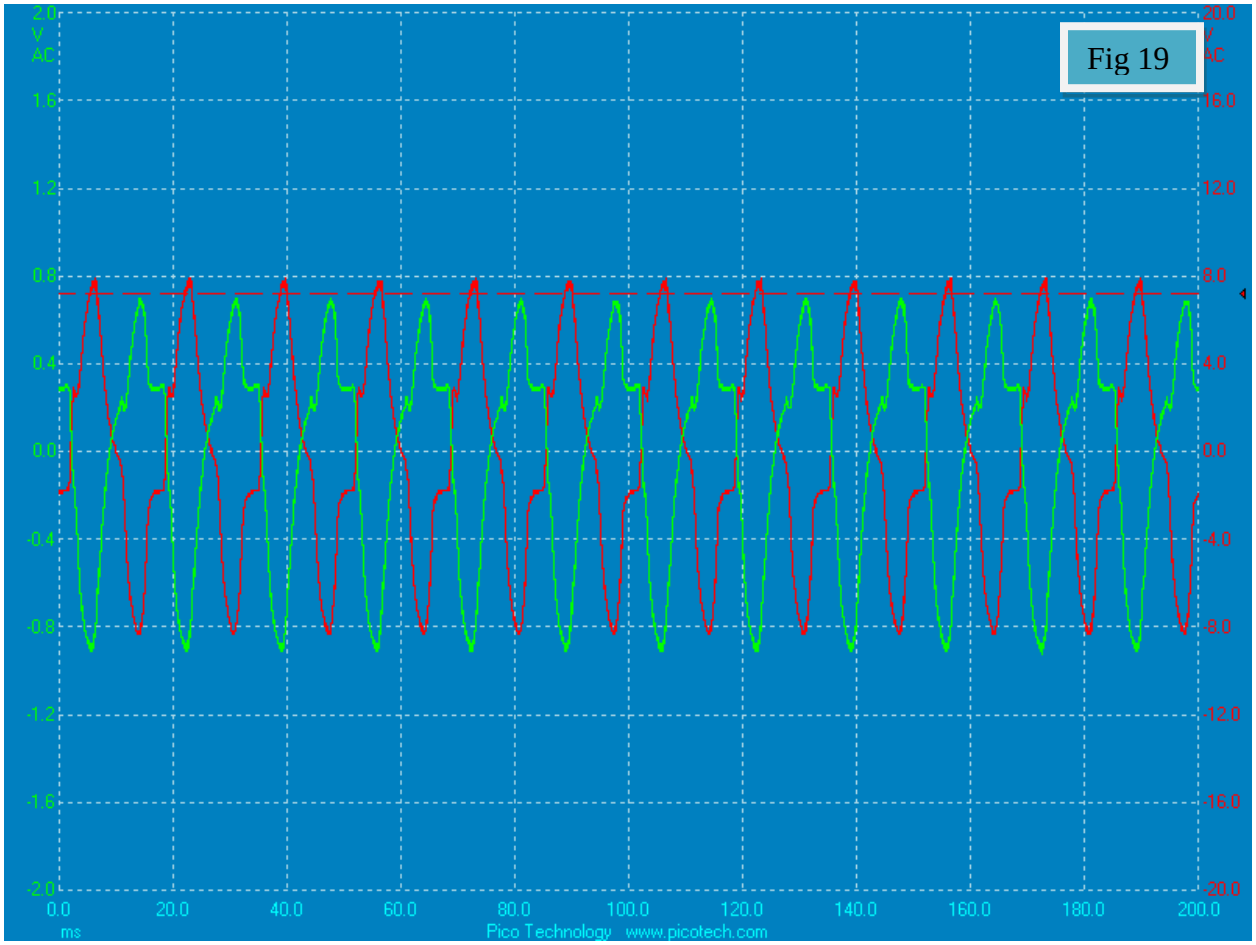


Fig 17



Here is a curve from a completely different water chemistry and cell configuration. It has "passive electronic components" in the circuit. The current is scoped in AC couple, as indicated by the red channel. The scope settings are the same described in (Fig 3). The green curve is the voltage of the negative side of the cell, and has a DC average of – 80VDC, which can be measured by conventional meters. The RMS current value x 2.618 is exactly the peak current. The current shows that there is a field change by alternating, but does not necessarily indicate a change in direction of "electron flow", which in my opinion needs to be addressed in Electro-dynamic theory. This may be a good way to begin to address it with direct evidence. Notice how the current and voltage are out of phase. They are out of Phase by 39 degrees. The "average curve" in Fig 3 indicates "as a whole" - things are in phase. This curve was presented to give a deeper look at what the inside of the cell is doing, and re-enforce how PHI was present in very different configurations of voltage and chemistry.

Conditions: 180V RMS, 12.5 lbs KOH to 50 lbs H2O



Here we are looking at both sides of the cell, independently, - at the same time. We can see the cell does the exact opposite on one side "as it does by the other". It basically makes a mirror image of whatever you feed it, and then gives some new stuff in addition for an output. Notice how both sides of the cell are moving in together at the peaks and out together, from peak to peak. This is akin to "breathing energy". There is also clear phase shifting going on, as two cycles of repetition average to be 120HZ, as in (Fig. 3), but each cycle is respectively ~ 100HZ and 140 HZ. It shifts time against a monstrous line power circuit to give us an output average similar to what we fed it. The center of the water sees two fields coming to its own geometric center and to each geometric center of each of the 90 cells. This is why the water gas initially forms out of the center of the water. The water decides "what comes in" and "how it comes in" by harmonizing all the parameters it was given, including the design of the cell itself, while working with our ignorance. If we maintain the ignorance for too long, it will shut the process down, just like it does in a thermal nuclear reactor.

This curve may give us a better idea of what resonance is. The organizing flow that organizes itself always predominates over the "pushing on the string" method of applied positive voltage. The water is informing us of our mistakes in trying to achieve greater efficiencies. The water cell puts the entire electrical circuit in a degree of "suction", in which our former entropy value begins to decrease in magnitude. Therefore, the water is part of the source of energy we are using and explains the increased outputs that are not predicted by mainstream science.

Here is another "anti-parallel voltage-voltage curve" of the "inside of the cell."

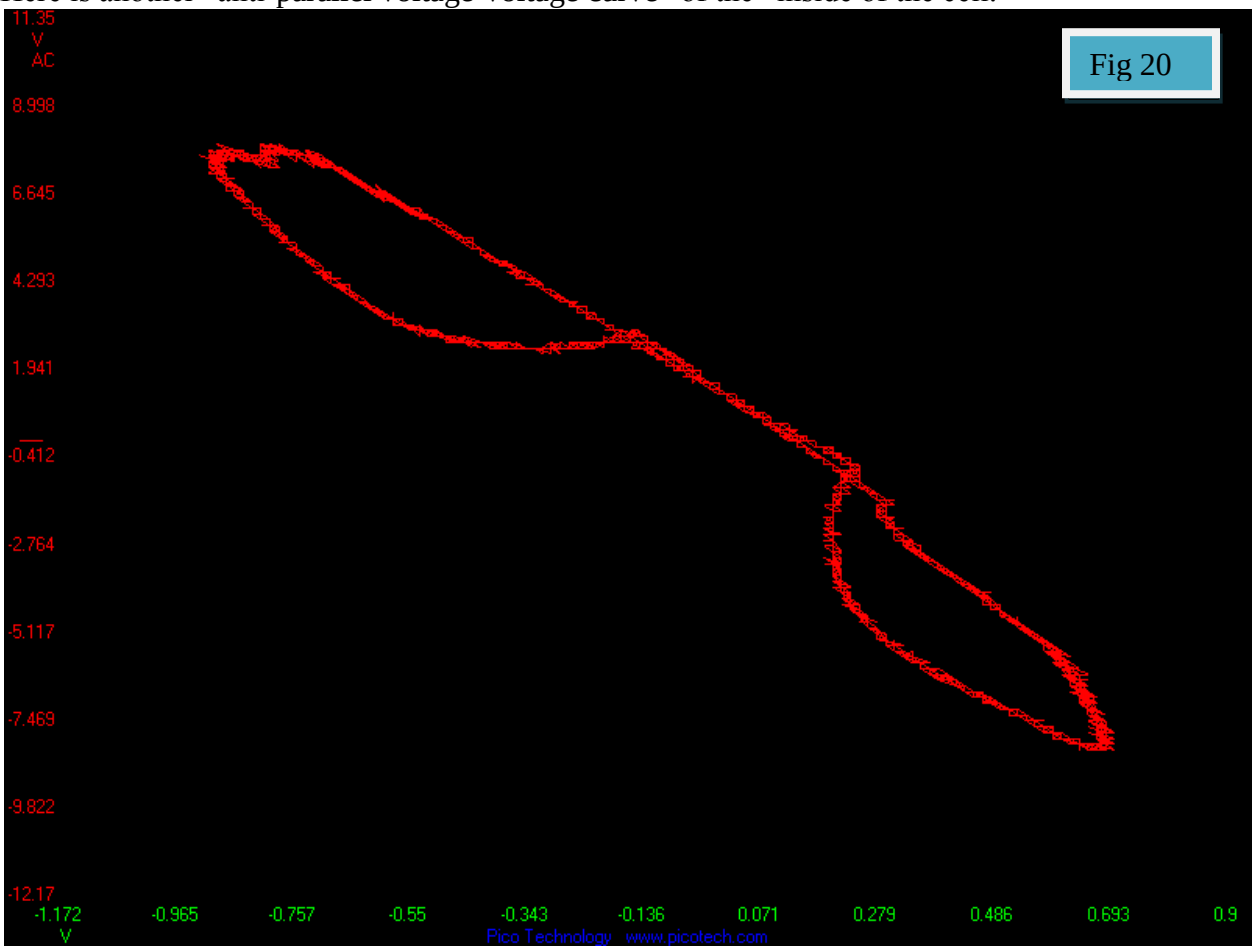


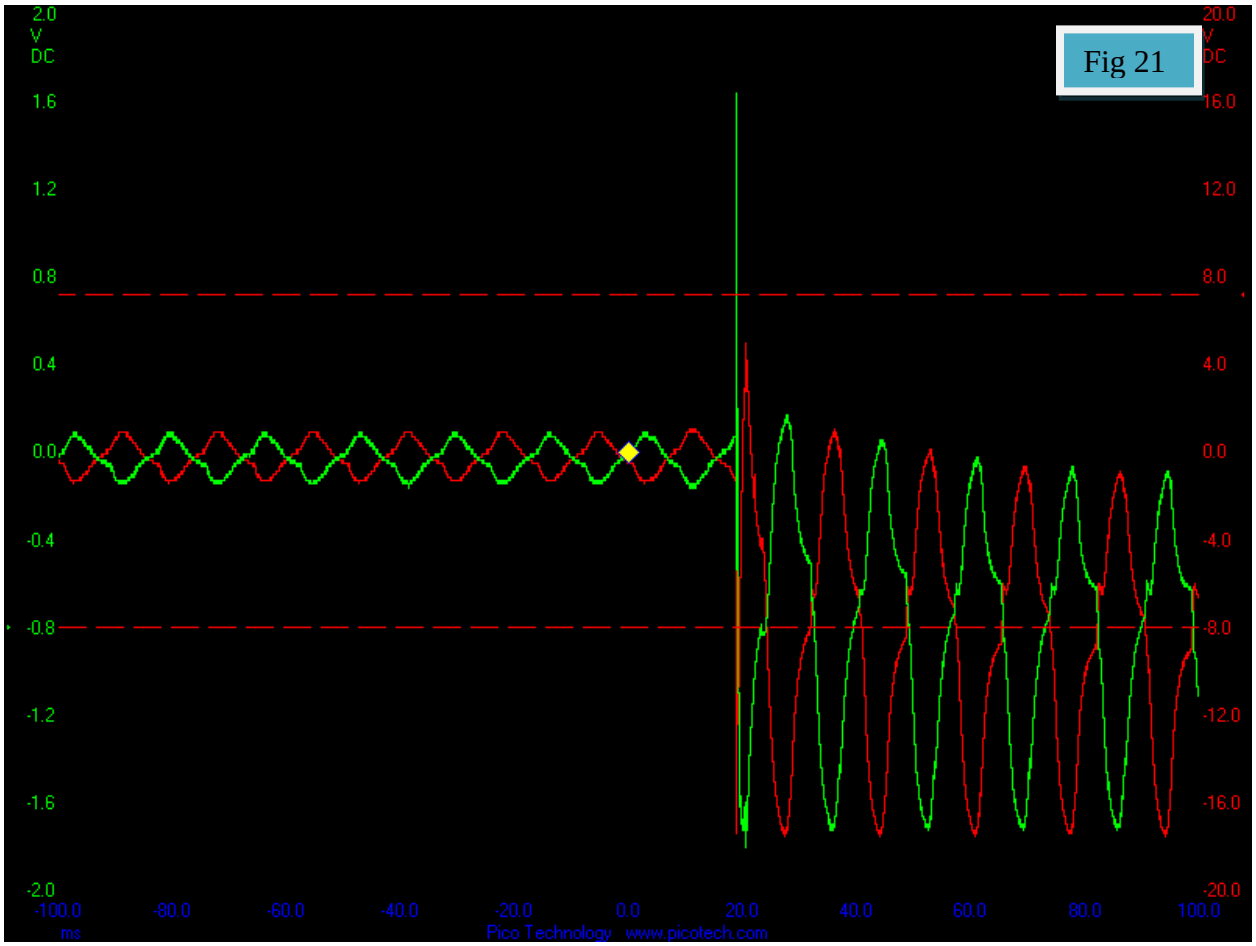
Fig 20

This information can be analyzed in great detail, but is beyond the intention of this work.

We can achieve a better practical understanding of what a "capacitor is". This can explain how a capacitor can store charge without having to be "showered in electrons" *or* "forced with current". Many cutting edge researches have realized you can charge capacitors without electron flow, or current, as it were.

It can also show us that water is a "fluid capacitor"……quite literally……. and is self tuning to the main generator frequency we command upon it, and all of the ambient frequencies also.

Here is a look at a start up duty cycle sequence. The spectral curve (not shown) dips about -20dB, (over the typical main line "noise") - lowering the whole noise threshold and has signatures that indicate musical scalar relationships.



You can see the peaks dipping down below the zero point. It always achieves this in six cycles. (when looking at one or both sides individually). It takes twelve steps when looking at the average. Phasing (time) is self- adjusted continually in this period. The cell is "off" prior to the spike. There are all sorts of the same relationships within each of the curves. The cell basically

reads the first quarter of the incoming wave, and then knows what to do from there, adjusting over a period of six cycles until a stable system is achieved, and the output product is greater than the input. This is an inherent function of the water for all of life, and energy itself.

From analyzing hundreds of curves, I had always suspected that the water was "scanning" the first quarter wave voltage of whatever was applied to it, - and as long as no major changes were made, it would calculate the steady state wave form that would arrive within the next five and one half sequences, and remain so until significant changes occurred. It was rather obvious by the behavior, - that this was stored in the memory of the water.

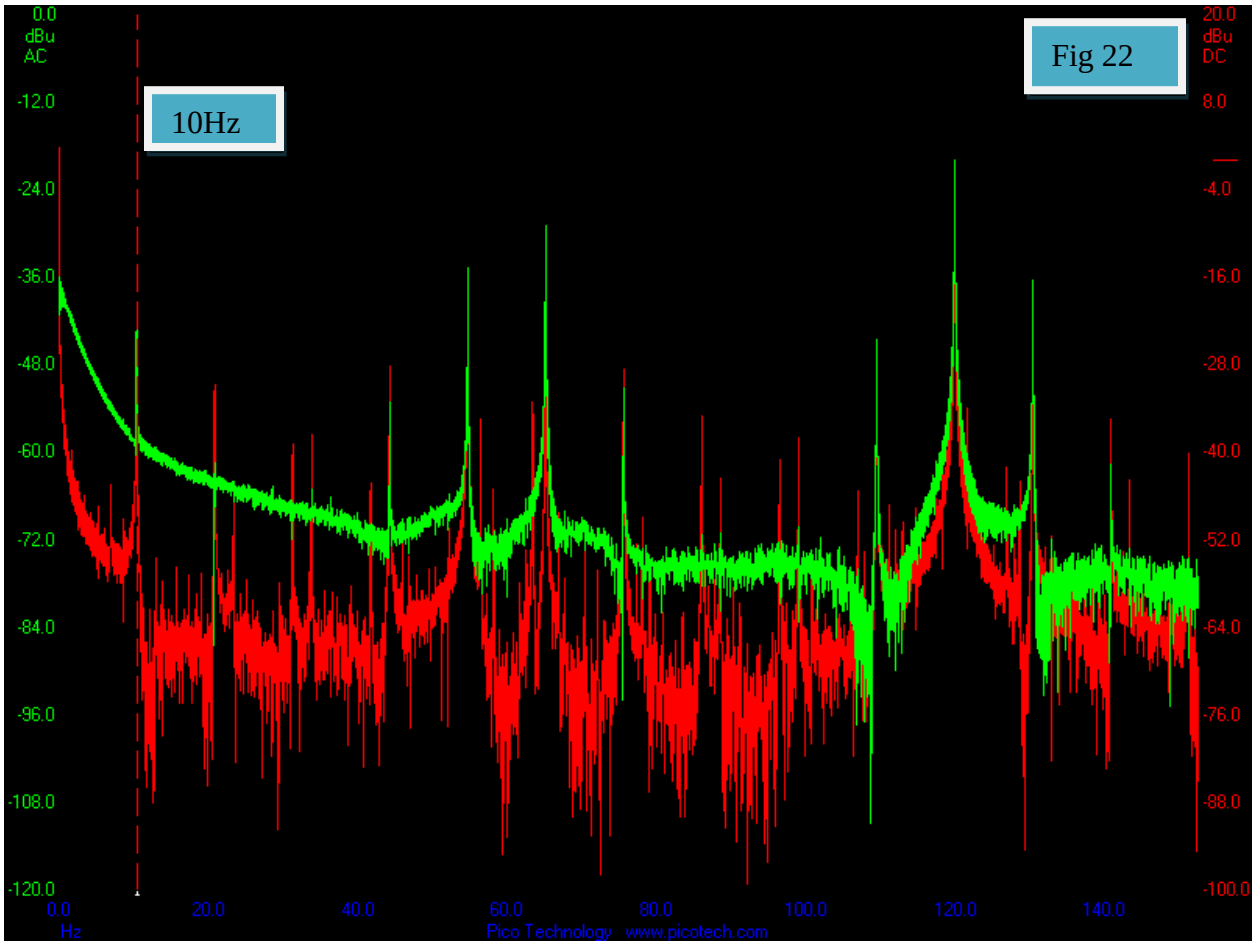
Below is a spectral curve indicating the 10 HZ figure that can be calculated using a specific formula involving the 1/^t function of the computer software in the anti parallel curves. It is as follows:

8 x PHI = 12.944

12.944 x 1/^t (in the current voltage anti-parallel curve) = resonant quarter wave product, in this case it is 10HZ.

12.944 x 775.8 mill hertz = 10.041 Hz ….. The 775.8 milliHz is from (Fig. 17), but is not shown.

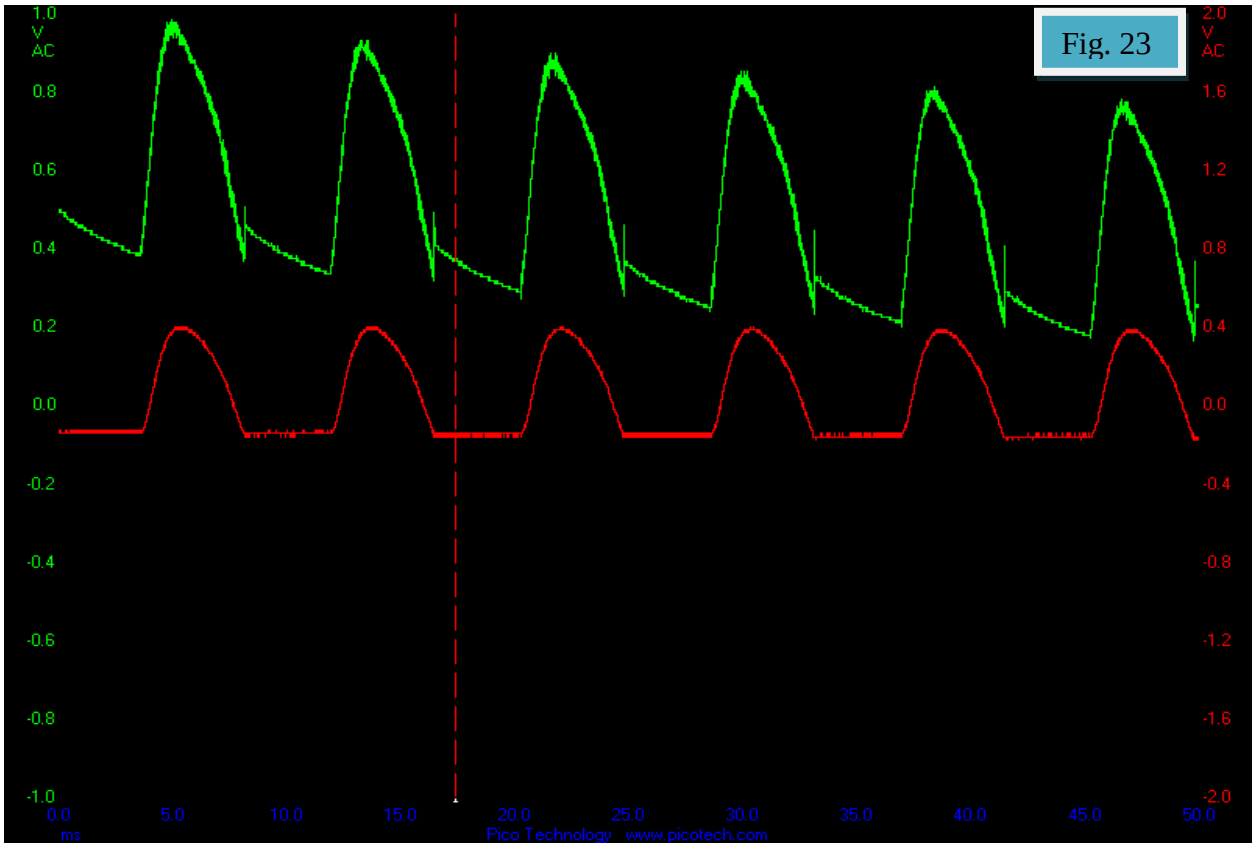
There are many others things in the spectral curves worth mentioning, but are beyond the basic intention.



.

The normal noise level for the circuit is around the -48 dBu range. The mean taken over a wide band spectral reading is significantly lower when then cell is in the circuit. The marker is on the 10Hz in which there is a "near simultaneous polarity in sound". The current responds with an abrupt change in red. The standard reference spectral curve without the cell attached is rather boring, and has a "higher" mean dBu value, by + 20, on the average.

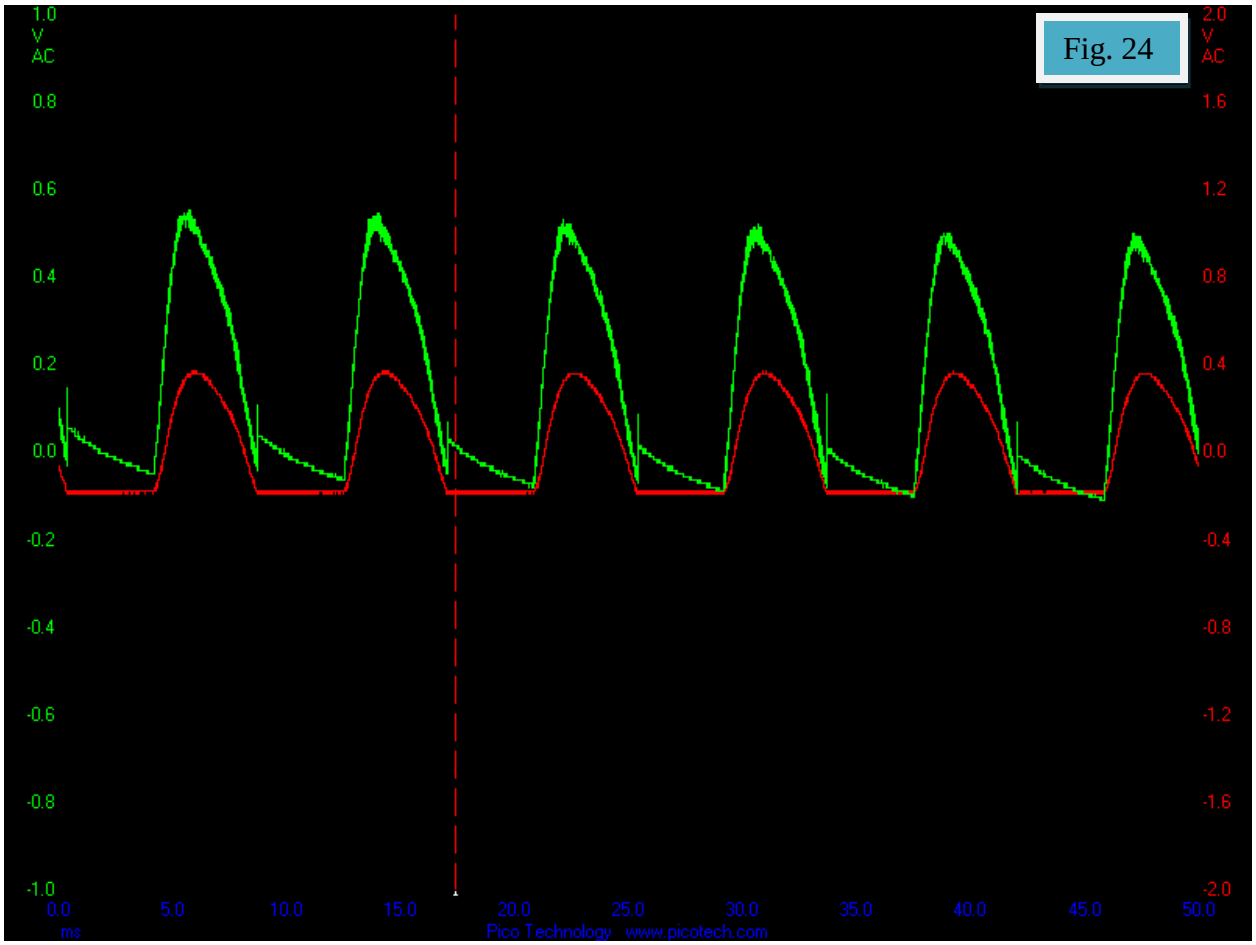
NEXT FIGURE: 23. WHOLE CURVE DESCENSION



(Fig. 23) Here is another dissension pattern that occurs during a start up. The "whole curve" patterns take twice and long as the each side of the cell does to reach its "home" or steady state in the circuit.

On the 13th cycle, it is exactly where it will "ride" from there on out. You can see the step before the final step where the whole curve reaches its final "ground". This supports the Bedini – Bearden view of re-gauging or re-grounding in electrical circuits. (Fig. 24)

Notice how the current is steady during the 12 step process.



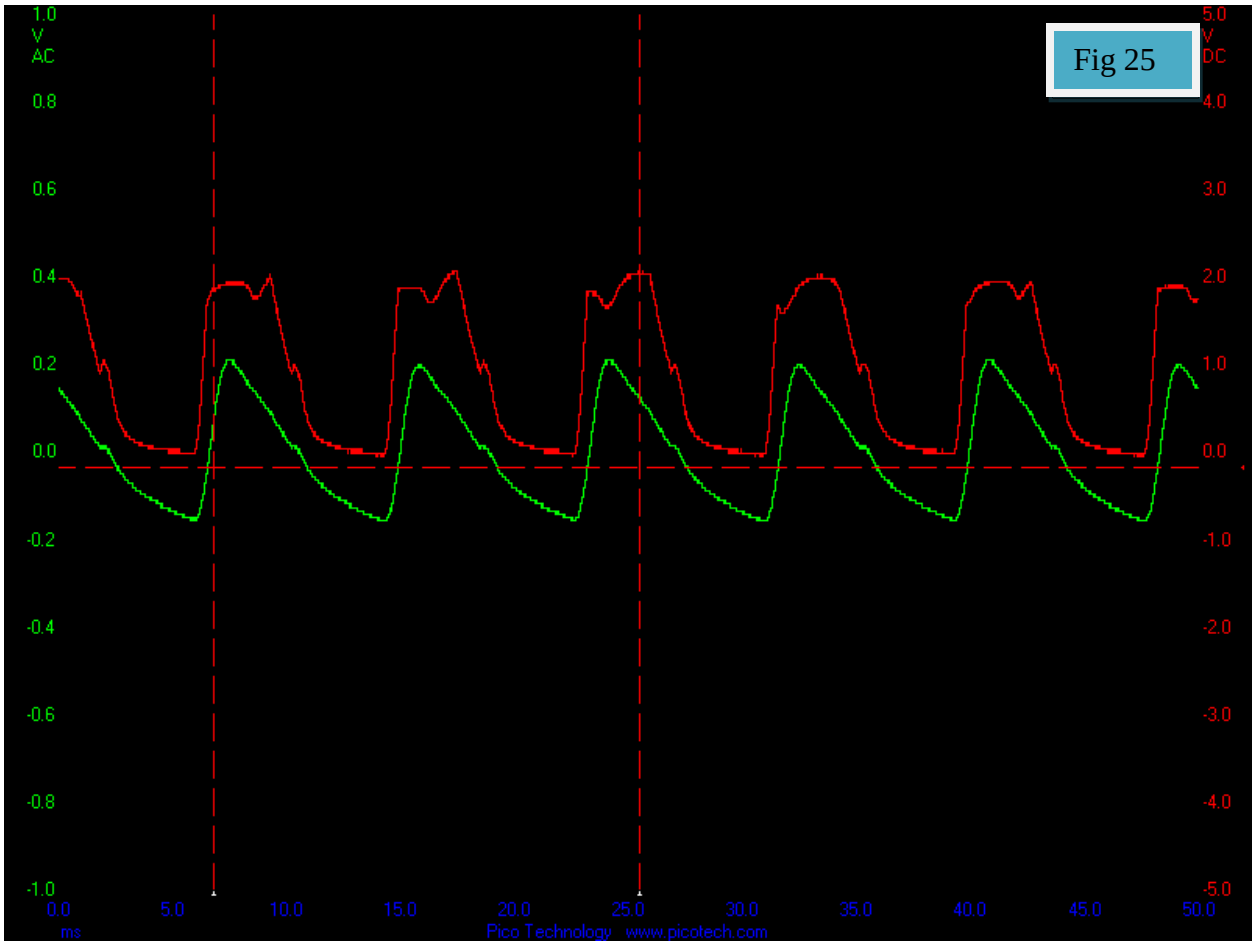
This is the contiguous screen snap from the above mentioned, and shows the twelve steps of the whole curve to reach a home. This would indicate a 5HZ quarter wave, which is then doubled to 10 HZ when it reaches steady state, and that frequency can always be detected. The low frequency quarter wave is caused by the "shifting of the entire curve." It basically signifies the coupling or tuning of one side of the cell to another, unto its own geometric and gravitational center.

Much more would need to be discussed on the topic of re-gauging to explore this further. It is beyond the intent.

I can say that the whole circuit is behaving similar to the "tilt", in which three screen shots "notch" down in the (y) axis at very specific integrals. It is basically a larger "fractal" version of the "tilt" in both time and voltage. The third "screen shot" is not shown, because it is basically "steady state" at a notched value at a specific increment of (y), which is lower and shows oscillation across its own ground, at the PHI ratio similar to the steady state curve in (Fig. 5).

Fig. 25: THE LEARNING PROCESS

This was always one of my favorite things to watch as I tested different cell configurations and combinations. The water - while it was "learning the new circuit". New combinations or new water in the cell would result in dynamic patterns on the scoping screen. The curves would aggressively "whip around" and snake with inside themselves, sometimes for hours before they stabilized. I used to think the water was confused and in this state would make more of itself into gas form. I was wrong. Measurements verified production was poor until the water learned and stabilized the circuit. I could not figure out why it took so long for the water to "learn". What I found was, the water was actually altering the metallurgy of the electrodes, and this process sometimes took hours. This process includes changing the color hue of the plates as a whole, and varies the intensity of this original color change, and or relationship between the positive and negative electrodes on all of the ninety capacitors inside the cell. Once the water learned, these same curves are steady and smooth, like in (Fig. 3). The PHI relationship is not universally present ……..yet.



If I were to change the cell many times in configuration and return to this configuration, it would have to learn again, but it would learn much faster upon return. Eventually the plate chemistry becomes an average of all you have placed upon the water, and it works with this average. The H2 side of the plates turns gold, and the O2 side turns black. Both the voltage and current wave forms will be slightly asymmetrical sinusoids after an hour or two from here. The water even sorts out inductor "scribble patterns."

CLOSING:

Condensation of greater information can come over time. I suspected there was a simple way to display the simple principles, without getting to complex. This information can be integrated into all systems, and the results should be reviewed from the simplest methods (such as geometric scaling of structure) and its relationships to time and all forms of frequency known to human kind. This way it can be seen, if the principles can be identified before whole systems are designed and the matter becomes too complex. This will be necessary to integrate alterations to all our current systems that exist, from road building and other so called "static structures", to dynamic electrical systems and their so called "static or passive components". The capacitor in an electrical system is termed a "passive" component, which in reality is actually the opposite of the truth. This form of modeling will begin to dispel these truths.

All system design can then be equated to the creation of a “musical symphony” and will begin to release the creative aspects in engineering that are currently severely suppressed. The engineer or engineers will become the conductors of this symphony, and learn to take responsibility for the overall piece they have created, without being subject to static laws of narrow pre-conception.

It is obvious, that if certain components such as water are used, a new form of engineering will rise. The concept of “Bio-Technical” engineering, in which the system is self-tuning and aware, - within the parameters the system is given. The conductors or engineers of these harmonious systems must be aware and responsible with their designs. These systems are capable of generating efficiencies and performance co-efficients beyond what is considered possible by the rigid science we currently engineer with as a whole.

It is obvious that human-kind is approaching this understanding, - as evident by all the independent experimentation that people are doing of their own accord. The world is filled with peoples taking their own initiative to experiment and learn, and many of them do not have “programmed” rigid science to hold them back. This work will be of use for those who choose to explore it diligently, and relate it to their own passions and things that excite them into the creativity - that is necessary to go beyond the limitations that are placed before us.

All the wonderful properties of the “raised octave water” produced in this process can be researched by the reader, which is in it what inspired me to record and share this data. We are about 70% water and so is the earth we exist with.

It brings opportunity to all who choose it, to come to a fundamental and useful understanding of Nature and how it moves in its fundamental sense. The human body, the trees, the Earth and the solar system in which it resides and beyond - all follow this dynamic pattern and have overlapping relationship through it. Whether humankind chooses to incorporate it into its outward consciousness remains the only question.

There is no limitation to what particular field these principles can be applied to, from agriculture to human health, and all others, unless that is what we choose.

THE BEGINNING AND THE END