Blood Alterations V : Sources of Current

carnicominstitute.org/blood-alterations-v-sources-of-current/

3 years ago

This paper is Part Five of a Six Part Series.

This research series was foreseen to consist of five papers, but the need for an additional paper arises. Dramatic transformation of human blood samples can occur as a result of the application of electrical current to the blood. This situation occurs in combination with the existence of a unique microbial life form within blood that has been researched extensively by Carnicom Institute. A question that deserves inquiry is:

What are feasible *sources* of current that might be available to transform the blood in the manner seen?

With only an initial review, there are more than a dozen potential sources of electrical current to consider. These might include, for example:

- 1. The human body itself.
- 2. Motion of a conductor (human body) within a magnetic field.
- 3. An artificial lower "ionospheric" layer combined with electromagnetic propagation.
- 4. The application of an electromagnetic wave to a human body.
- 5. Cyclotronic resonance.
- 6. Ground wave propagation of an electromagnetic field.
- 7. Tropospheric "Ionospheric" Ducting Propagation
- 8. Ambient ELF electromagnetic fields, by all evidence artificial in origin.
- 9. Motion of a magnetic field (human body) within a conductive environment.

10. Direct laboratory evidence of electromagnetic influence upon cross-domain bacteria (CDB) microbial cultures.

- 11. Ionospheric heater ionosphere technology (e.g., HAARP).
- 12. Satellite propagation of an electromagnetic field.

13. Modern devices and technology that now permeate our environment, such as cell phones and wireless EMF.

14. Electromagnetic modification of human biology (e.g., "vaccine" technology, pharmaeceutical injections, biological experimentation-modification, genetic modification, etc.).

This list easily spawns new and complex areas of bioelectric research. It is assured that this list is not comprehensive. What can be done here is to offer a few opening thoughts on these topics.

1. The Human Body:

The human body is a power source in itself. Estimates of the intrinsic electrical power of the human being appear to range between 80 and 2000 watts. The 80 watt magnitude appears to correspond with a basal metabolism rate, and values of 1000-2000 watts appear to be possible for short periods of time under extreme or high level athletics. These are some fairly significant magnitudes here to consider.

It is beneficial to gain some perspective on a few parameters of electricity. Power is the product of voltage and current. Power is in watts, voltage is in volts and current is in amps. Voltage can be considered as the the "pressure" (water analogs are often helpful) of the electric flow, and current is the flow of electrons (analogous to water current flow) per unit of time. The combination of water flow and water pressure can, from an intuitive sense, be understood as the power of the river you sense, again from a water analog. Power in watts is the same conceptual idea; the product (i.e., combination of) of volts (pressure) and amps (current) gives us the power (watts) of the electrical force involved. Many different combinations might occur in nature, e.g., 40 volts and 2 amps would give us 80 watts, as well as 10 volts and 8 amps would give us the same power level of 80 watts.

Recall the magnitude of the current levels that transform the blood sample analyzed in this report. The current level demonstrated to produce the change (i.e., protein generation, denaturation, transformation, etc.) is on the level of 1-2 milliamps(mA). This is a small number (2/1000 of amp). In the earlier papers the level of harmful and lethal current levels was discussed, and it also is surprisingly low. Milliamps, millivolts, and milliwatts now become expected magnitudes, lower than volts and watts that know the body to be capable of.

A factor affecting current levels in the body is concentration. The blood sample examined electrochemically within this report series was diluted in water by a factor in the neighborhood of 100. This means that the current levels required to produce blood change may actually be much lower than the 1-2 mA recorded, and it may be on the order of .01 - .02 mA, or 10-20 uA (microamps). Also, lower currents for proportionally extended times can easily produce the

same net effect. These are very low current levels and we can surmise that electromagnetic forces exterior to the body may not be required. The forces required to transform blood may already be within the inherent electrical nature of the body, external sources might not be needed. This is actually in accordance with the data collected, as blood transformed and described in the paper, <u>Altered Blood I : Coagulation</u> shows unusual blood character from the onset.

Understanding that power levels themselves can fluctuate quite a bit within the human body as indicated by the range above (80 -2000 watts), we can also see that power changes in the body from physical activity levels alone could easily produce current changes on the order required to transform the blood sample as it has been recorded to take place. This is a statement worthy of very careful consideration as well as admittedly very disconcerting. We must allow the evidence to run its course, and then confront the truth which results.

It is unfruitful to attempt to oversimplify or generalize the electrical nature of the body; it will eventually create a block of understanding in the interpretation of physical impact. It does seem helpful to at least make an electrical distinction between the nature of skin (a protective barrier) and the internal organ structure. Skin in general is a relatively high resistance structure, or organ, that helps protect us against the dangers of higher conductivity levels in the interior of the body. Current in the interior of the body is of much greater hazard. There is also a great deal of variation in conductivity within the organs themselves, with the brain and the heart being considerably more conductive than other parts of the body.

There is a wealth of information that has developed over recent decades about the electrical nature of the human being. Research papers abound, and the formal papers lag the rapid changes that are occurring in our surrounding electromagnetic world, many of which are undisclosed. The results reported in this research series were not anticipated. The global lay population is behind the curve in comprehending the biological change that now exists and is embedded within us. The unusual electromagnetic impact that we now see will challenge us in severe ways. I advocate an immediate effort to understand what now besets us.

2. Motion Of A Conductor (Human Body) Within A Magnetic Field (Motional EMF):

The following video clearly presents a discussion on this topic:



Source : Step by Step Science

In our case, the human being is considered as the conductor. The strength of the magnetic field and the velocity of the conductor are considered as variables depending upon circumstances we wish to consider.

A written form of an example situation is summarized as follows:

Example Case: Electromotive Force in a Straight Conductor Moving in a Uniform Magnetic Field:

If a straight conductor of length *l* is moving with velocity *v* through a uniform magnetic field *B* such that the angle between *B* and *v* is θ , then the electromotive force (ϵ) induced in the conductor is $\epsilon = lvB(\theta)$.sin

The induced electromotive force (often written "emf" for short) is equal to the potential difference induced across a wire moving through a uniform magnetic field.

In this equation, *l* is the length of the dimension of the conductor along which emf is induced.

source : https://www.nagwa.com/en/explainers/792152624193/

As a numerical example of application, a 1.75 meter conductor moving perpendicular to the earth's magnetic field at 60 miles per hour would lead to an induced EMF of approximately 2.5 mV; a small but measurable quantity (I = 1.75 meters, B = 5E-5T, v = 26.8 m/sec leads to V = $1.75m \times 5E-5T \times 26.8m/sec = 2.34 mV$).

3. An artificial lower "ionospheric" layer combined with electromagnetic propagation:

This scenario is comprised of both a hypothesis and known physics. Many of us are familiar, at least to some extent, with the propagation of radio frequency energy to distant points across the globe in conjunction with the ionosphere. This is a known phenomenon used to great advantage in communication as well as more in more advanced systems, such as military and surveillance applications (e.g, HAARP). In a more general sense we can describe this as the propagation of electromagnetic energy through an ionized gas (plasma), and this thesis has been at the forefront of Carnicom Institute research for decades in association with the global aerosol operations in place.

A study of the aerosol operations and how they relate to the question of propagating electromagnetic (EM) energy directly to the human body is in place. The method here considers an "artificial" ionospheric type layer positioned much more closely to the earth's surface, namely, at the altitudes of aircraft known to be capable of creating such a layer. The problem is complex to consider, and a simplified model has been created to simulate some of the factors involved. The model is for investigation only, and although not intended for the general reader, it is available at the following location:

Low Level Ionosphere Propagation Model (https://carnicominstitute.org/javascript/low_level_ionosphere_01/index.html)

The objective of this model is to determine if it is feasible that a EM signal at sufficient current levels can be propagated remotely to a target region using a reflective artificially created "ionosphere" at relatively low altitudes (e.g., 7 - 15 miles above the earth's surface). Use of the model under suitable conditions does indicate this is feasible.

Additional study will need to be done to model the EM current levels that are actually transferable inside the body. Preliminary circuit modeling of the human body has begun; this process is under additional study at this time.

An additional paper that may of interest to readers is:

The Plasma Frequency : Radar Applications (Nov 2001)

4. The application of an electromagnetic wave to a human body:

There are many ways in which this question could be approached. One method is with circuit modeling, under review, as mentioned above. Another method is to inquire what types of EM frequencies penetrate the body and to what depth. For the time being, let us confine ourselves to radio frequency waves, and they will then have immediate relevance to the model that has just previously been referenced, i.e., the use of an artificially constructed ionospheric layer to to target energy to a specific location.

Fortunately, there is some information readily available to assist with this question. The following reference paper is of immediate value:

Investigation of RF Transmission Properties of Human Tissues (source : Advances In Radio Science – https://www.advances-in-radio-science.net/

In this paper we learn that a radio frequency that is very effective at penetrating and being absorbed by the human body matches on par with that predicted to be effective in the "artificial ionosphere" model and scenario developed above. This frequency is on the order of 50 – 100 Mhz. There may be a certain level of coincidence in the level of matching of frequency known to be effective, but it continues to support the notion that such EM propagation of energy into the human body is feasible under the model developed. As described in the research paper above, a wide range of frequencies can have substantive effect, but the reference point of ~60 MHz is certainly worth considering upfront. The model value of ~60 MHz was not selected randomly. It was arrived at in combination with the other input variables to create sufficient electron density within the artificial "lower layer" such as to mimic the electron density that is known to be representative of effective ionospheric propagation.

There are a variety of sources that help us to understand that radio frequency energy can effectively propagate into the human body, and that certain frequency ranges will be more effective than others. This energy would effectively also be able to increase the current levels within the body.

Recall that the current levels that are sufficient to produce the blood transformation are surprisingly low, on the order of just a milliamp or two. As also mentioned, the magnitude required may actually be in the micro amp range, due to concentration effects of the blood not yet studied. Considering this, there is another reference that adds a great deal of both interest and complexity to our research question. This is the book titled "Electromagnetism and Life", by Robert Becker, MD. Dr. Becker is quite well known in the field as a pioneer in the effect of electricity and electromagnetics in the body. His work was instrumental in Carnicom Institute research of years past, especially on the topic of cyclotronic resonance and ions that are critical to human metabolism and health.

Dr. Becker gives us a good sense of scale as to what levels of EM we should be considering as having an effect upon the human body. These levels are extraordinarily weak, and they cast the model development above as a most crude and obvious example of EM influence upon the

human body. By his work, it is fairly obvious that is not difficult to produce detrimental EM impact upon the human body, and in this case I postulate that it involves microbial mechanisms that have not yet even been considered.

Dr. Becker states in his chapter "Mechanisms of Biological Effects of Electromagnetic Energy" that:

"The most fertile ground for understanding the physical basis of EMF-induced biological effects involves those processes that we have lumped together in Type 5. They are quantum mechanical and classical processes and include, for example, superconductivity, Hall effect, converse piezoelectric effect, cooperative dipole-interactions, Bose-Einstein condensation, and plasma oscillations. Type-5 sensitivities as low as 10⁻⁹ uW/cm2 and 10⁻⁹ gauss, and, therefore, are theoretically capable of serving as the underlying physical mechanism for any EMF-induced biological effect."

I would say that we have our work ahead cut out for us, and Dr. Becker is giving us a lead that we need to follow. The model above may serve only as a coarse example of the actual forces that may be deployed unwittingly upon the citizenry.

Let's continue to put Dr. Becker's concerns into perspective, with the use of the model developed above. It does not seem difficult in any fashion to create a current level that that should pique interest in the likelihood of increasing current in the human body. Many different scenarios have been examined, and in conjunction with the concern levels expressed by Becker, shows no real difficulty to match those concerns.

Co-author Andrew Marino has provided a chapter within the book titled "Health Risks Due to Artificial Electromagnetic Energy in the Environment". This chapter is replete with study after study of biological effects known to occur with relatively low level EMF fields. The current level to produce a transformation of the blood is already known to be quite low, and it may well be much lower than that already measured. A practical question exists; this is whether the ambient EMF soup that we find ourselves living in is already sufficient to induce the blood transformation witnessed to exist. It should not come as any surprise to us if so.

5. Cyclotronic resonance:

This topic will not be developed from scratch at this point, as it has arisen on several previous occasions within Carnicom Institute research. Examples and cases of the interest in cyclotronic resonance are listed as follows:

- 1. *Potassium Interference Is Expected*, (Sep 2005)
- 2. Direction of ELF-VLF Energy Is Verified (Mar 2003)
- 3. Multiples Shift to 6 Hertz (Mar 2003)
- 4. <u>ELF Disruption and Countermeasures</u> (Nov 2002)
- 5. <u>A Direct Connection : The Human Antenna II</u> (Mar 2003)
- 6. <u>The Earth Is The Antenna</u> (Mar 2003)
- 7. <u>ELF & The Human Antenna</u> (Jan 2003)

6. Ground wave propagation of an electromagnetic field:

The classic representation of ground wave propagation is shown immediately below. The factors affecting ground wave propagation can, however, become quite a bit more interesting and complex. Ground wave propagation is generally regarded as operating at a frequency below 1Mhz. The frequency used is important, and this range alone spans the Extremely Low Frequency (ELF), Very Low Frequency (VLF) and Medium Frequency (MF) bands, each with its own characteristics. Antenna sizes also are important within any system configuration, and the lower frequencies will require larger antennas (both transmitting and receiving) than higher frequencies. This will have an important bearing on the portability and directional nature of the system that is used.

Much has been written on this site about ELF propagation and human biology. Long distances for communication and biological impact are core themes in those papers. ELF frequencies are used for global submarine communication, for example, and the human body electromagnetic system is largely operating in this same ELF range.



Source : researchgate.com

The image that follows shows that a more realistic representation of propagation shows that the case is not so simple that the EM wave simply follows the earth's surface, as was shown above. It is generally stated that ground wave signals attenuate rapidly, and this would imply that they can not be used to span long distances. However, the importance of the frequency of transmission is important, as has been mentioned regarding ELF uses above. Long wavelengths (low frequencies) will travel further than short wavelengths (high frequencies).

We see below that what the signal is reflecting from, e.g., the ground, or atmosphere above, will be very important as to how that wave will be absorbed or propagated and how far it will travel. It would now be very wise to consider the presence of a "low-level" artificial "ionospheric" layer as has been pointedly introduced above. This would undoubtedly have the beneficial effect of reflecting or containing the EM energy in a more confined corridor along the surface of the earth. This means, by all expectations, that the propagation of energy would be more successful for longer ranges than without this layer.

It may well be that "ground wave" propagation is no longer as it has been portrayed. The exploitation of an low level artificially created conductive layer offers many EM propagation possibilities.



source : electronicsforu.com

7. Tropospheric – "Ionospheric" Ducting Propagation:

It is not just "reflection" from the low level artificial "ionosphere" that should be considered in EM propagation; it is conduction through the layer itself. There is a phenomenon in propagation called "ducting", i.e, the confinement of EM energy within a layer, or tube, so to speak. "Tropospheric ducting" is one such example that is more commonly known.

I would suggest that the *substitution* of a conductive low level artificial "ionosphere" for the traditional troposphere [note: *not* the stratosphere – please see "<u>A Clash of Evidence</u> <u>– The Realities of Solar Radiation Management (SRM)</u>", (Apr 2016]) would provide for an obvious enhancement of EM propagation on local, regional, and global scales, and that "ducting" of the signal is expected.

In this case, the "artificial" plasma layer itself serves as the primary conduit for electron flow.

There is good reason to know that this scenario is both possible and achievable. Three references are provided to substantiate this phenomenon. Note that "whistler" propagation reaches its maximum at approximately 3 – 5 kHz. Also note that studies involving ducting propagation in the ionosphere are associated with HAARP (High Active Auroral Research Program) activity, a close cousin to the propagation methods that are discussed within this paper. Note also the reference to the "artificial generation" of the waves in conjunction with HAARP. Numerous other references describe the existence of this propagation mode.

"A <u>radio wave propagation</u> technique that allows the transmission of UHF and VHF electromagnetic waves through the region near the tropospheric [see comments above – CEC] layer of the atmosphere is known as **duct propagation**. Basically in duct propagation, despite being reflected from the ionosphere or gliding over the surface of the earth, the waves propagate from an end to another by undergoing successive refraction from the troposphere. Duct propagation is sometimes referred as **super refraction**. It allows the propagation of the signals beyond the horizon. This means that, unlike surface wave propagation, it permits the signal transmission without assuring the need for having a line of sight distance between the two antennas."

Source : https://electronicsdesk.com/duct-propagation.html

Whistler Propagation in Ionospheric Density Ducts, Journal of Geophysical Research, Oct 2013.

"On 16 October 2009, the Detection of Electromagnetic Emissions Transmitted from Earthquake Regions (DEMETER) satellite observed VLF whistler wave activity coincident with an ionospheric heating experiment conducted at HAARP. At the same time, density measurements by DEMETER indicate the presence of multiple field-aligned enhancements. Using an electron MHD model, we show that the distribution of VLF power observed by DEMETER is consistent with the propagation of whistlers from the heating region inside the observed density enhancements. We also discuss other interesting features of this event, including coupling of the lower hybrid and whistler modes, whistler trapping in artificial density ducts, and the interference of whistlers waves from two adjacent ducts".

Source : https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2013JA019445

Propagation of Whistler Mode Waves through the Ionosphere, Journal of Geophysical Research, Aug 2012.

"We present results from numerical studies of whistler mode wave propagation in the Earth's ionosphere when artificially created plasma ducts are present. Using realistic density profiles from the SAMI2 ionospheric code, we solve the two-dimensional electron magnetohydrodynamics equations to study the trans-ionospheric propagation of artificially generated whistler waves at HAARP latitudes (L = 4.9). Both ducted and non-ducted propagation is considered, but only ducted whistlers are able to propagate without a significant reduction in wave amplitude. The conditions necessary for the trapping of waves in both high-and low-density ducts are discussed with particular attention paid to the practical accessibility of these parameter regimes".

8. Ambient ELF electromagnetic fields, by all evidence artificial in origin:

The topic of ELF EMF propagation is prominent within Carnicom Institute research. Dozens of papers on this topic have been written on this topic; a partial sampling follows:

1. ELF Frequency Identification (Nov 2002)

- 2. ELF 2005 : Positive Identification (May 2005)
- 3. Direction of ELF-VLF Energy Identified (Mar 2003)
- 4. ELF-VLF Audio Files : A Contribution (Mar 2003)
- 5. ELF Verified in Utah (Mar 2003)
- 6. Positive ELF Spectrum Identification (Mar 2003)
- 7. <u>A Third Pattern Observed : Very Low Frequency Pulse Switching</u> (Mar 2003)
- 8. Chaco Canyon National Park : 10 Second ELF Pulse Observed (Feb 2003)
- 9. A Connection : ELF Satellites HAARP Aerosols (Feb 2003)
- 10. ELF at 10,500 Feet (Feb 2003)
- 11. ELF in Bandalier National Monument (Jan 2003)
- 12. ELF Circuit Design (Jan 2003)
- 13. <u>ELF & The Human Antenna</u> (Jan 2003)
- 14. ELF Disruption and Countermeasures (Nov 2002)
- 15. ELF Radiation is Confirmed (Nov 2002)
- 16. ELF Evidence Surfaces (Nov 2002)
- 17. LF Frequency Monitoring Begins (Nov 2002)

9. Motion of a magnetic field (human body) within a conductive environment.

The basic principle involved is expressed as follows:

Magnetic fields can be used to make electricity

"The properties of magnets are used to make electricity. Moving magnetic fields pull and push electrons. Metals such as copper and aluminum have electrons that are loosely held. Moving a magnet around a coil of wire, or moving a coil of wire around a magnet, pushes the electrons in the wire and creates an electrical current."

Source: U.S. Energy Information Administration

Separate from the issue of magnitude, it is to be acknowledged that the human body does generate a magnetic field. This topic can be pursued further as in the following discussion (link provided):

How strong is the magnetic field produced by the human body?

Source: physics.stackexchange.com

The magnitude of the field may now be subject to additional influence that has not been traditionally considered. Please refer to item 14(a) in this report. If the magnitude of the magnetic field of the human body is altered to the level of reports available, this would undoubtedly affect the magnitude of the effects from that field.

The point here is that we must consider at all times the interaction between the electrical and magnetic fields, as they are manifested simultaneously into a combined field. Once again, we have our work cut out ahead of us, and the pathway from a mathematical and physical approach is given to us with the work of Maxwell:

Maxwell's Equations:

$$\oint \mathbf{E} \cdot d\mathbf{A} = \frac{q_{enc}}{\varepsilon_0}$$

$$\oint \mathbf{B} \cdot d\mathbf{A} = 0$$

$$\oint \mathbf{E} \cdot d\mathbf{s} = -\frac{d\Phi_B}{dt}$$

$$\oint \mathbf{B} \cdot d\mathbf{s} = \mu_0 \varepsilon_0 \frac{d\Phi_E}{dt} + \mu_0 i_{enc}$$

A more complete description of Maxwell's equations for electromagnetics is found at:

https://simple.wikipedia.org/wiki/Maxwell%27s_equations

Maxwell's equations describe the relationships of interaction between the electrical and magnetic fields. We are undoubtedly in complex territory ahead here, as the electromagnetic nature of the human body is itself in infancy. The interaction of the body with surrounding electromagnetic fields, known or unknown, disclosed or undisclosed, consensual or non-consensual is certainly beyond lay grasp at this point. It is more than fair to combine your intuition with your knowledge base to begin asking the questions that deserve answers.

What is in grasp at this point is direct scientific observation with honest and impartial analysis. I would suggest that the discussion under Item 14 of this report is a good place to start. Items 1-13 of this report may be worthwhile as well.

10. Direct laboratory evidence of electromagnetic influence upon cross-domain bacteria (CDB) microbial cultures.

There is a body of laboratory study on electromagnetic effects upon the cross-domain bacteria (CDB) that is recorded but is unpublished in research format. This work took place in 2014 and is recorded solely within the Carnicom Institute laboratory notebooks that are available on this site.

The studies appear to be centered within Volume 5 of the laboratory notebooks and the electromagnetic aspect of the work begins at the onset of April 2014. This work continues to mid June of the same year before it shifts to include additional CDB culture work.

The primary motive of that work was twofold, first to determine if the ambient ELF field at a fundamental of 4 Hz discovered in previous years remained in effect. The second goal was to establish if electromagnetic fields had any observable effect upon CDB cultures that were under development. The answer was yes in both cases.

One of the events which took place at the time this work evolved, coincidentally or otherwise, was a personnel disturbance within Carnicom Institute that effectively interrupted the work flow that was in place. As such, the work never matured into the format of research papers and remains as a set of personal notes of discovery. It can be reasonably concluded that the individual responsible for this interruption did have at least historic ties with intelligence operations. In retrospect, the importance of the work that was underway is only confirmed further with the subjects of this report series.

Six points of note, as a minimum, did result from that work segment:

1. The existence of the 4 Hz ambient ELF field was again confirmed, several years after publication of the original research and discoveries.

2. An additional ambient EM signal as approximately 78 kHz was observed on a continuous basis. No source of that field was identified, however, potential sources and propagation characteristics of that frequency range were studied in some detail. Furthermore, this particular frequency was incorporated into the EM studies upon CDB culture growth and progress.

3. In general, the applied EMF fields did have a significant and observable effect upon culture growth. The effects were primarily of growth enhancement vs. growth impairment. A fairly wide range of frequencies was studied.

4. The EMF fields did affect CDB culture growth and, along with culture medium variations, led to the research paper titled, *The New Biology*, released in Jan 2014 through Nov 2015.

5. The work combining electromagnetic study with culture growth would have continued at a deeper level if the interruption referred to had not taken place.

6. The work underway at that time is fully deserving of additional and continued study.

11. Ionospheric heater – ionosphere technology (e.g., HAARP).

The existence of the High Active Auroral Research Program (HAARP) and technology has been probed repeatedly within the history of Carnicom Institute research. An introduction to some of related topics can be found within the following papers:

- 1. <u>A Connection : ELF Satellites HAARP Aerosols</u> (Feb 2003)
- 2. VLF Pulses and HAARP (Mar 2003)
- 3. Radiation and HAARP Implications (Nov 2000)
- 4. Conductivity: The Air, The Water, and The Land (Apr 2005)
- 5. Preliminary Findings (Dec 2003)
- 6. Research Trends and Appeals (Dec 2003)
- 7. The October Solar Storm (Oct 2003)
- 8. Magnetics, Aerosols and VLF (Apr 2003)
- 9. An Inquiry Into Power (Apr 2003)
- 10. <u>VLF Pulses Return</u> (Apr 2003)
- 11. Direction of ELF-VLF Energy Verified (Mar 2003)
- 12. ELF Verified in Utah (Mar 2003)
- 13. The Earth is the Antenna (Mar 2003)
- 14. ELF and the Human Antenna (Jan 2003)
- 15. ELF Evidence Surfaces (Nov 2002)

16. <u>A Question of Alfven</u> (Nov 2002)

17. Predicting the Operations : Sunspots and Humidity (Sep 2002)

12. Satellite propagation of an electromagnetic field.

It comes as no surprise that satellites can be used to deliver electromagnetic energy. of benefit to mankind or otherwise. Satellites have the clear advantage of altitude and line of sight to the target. If technology is at the level of providing global communication, positioning, commercial power(emerging), and weaponry, it is a certainty that direct delivery of electromagnetic energy by satellite is is here to stay. The target is likely to have little to no option of avoidance. The fact that the "Space Force" now exists as a formal branch of the U.S. military complex establishes awareness at the level needed here. Some readers may also wish to <u>become aware</u> of the increasingly blurred lines of the 1967 Outer Space Treaty <u>here</u>.

13. Modern devices and technology that now permeate our environment, such as cell phones and wireless EMF.

An example of generating current by this means is simple to convey. It is also likely to instill a greater awareness of the methods opened to review in this report.

An electromagnetic field strength meter is available and it is being used for some testing. The artificial ionosphere simulation described in this report imparts a greater understanding of the term "power density" and the associated units of milliwatts per square meter that can be both measured and modeled.

The background, or ambient, power density has been measured in three different environments with the following results:

1. Remote rural NW U.S. mountain site with low level solar power generation available. Background power density reading is 4 milliwatts / sq. meter.

2. Trailhead in NW U.S. rural mountain/river valley area with light duty single power line adjacent. Background power density reading is 4 mW/m^2.

3. Small residence in rural NW U.S river valley connected to electrical grid. Electronic devices in vicinity at approx. 2-3 ft. distance from meter, including cell phone (4G operation) and mobile hotspot operation. Background power density reading is 5-6 mW/m².

It is commonly stated that two of the strongest defenses against excessive electromagnetic exposure are that of decreasing exposure time and increasing distance from the source. The truth of these axioms, especially with respect to distance, can be demonstrated quite easily with the field strength meter. The results can still be quite surprising and extraordinary to us.

Now it is time for the eye opener. The distance from the cell phone to the meter was decreased from approximately 3 ft. to within an inch of the phone and the field strength measured along the path. The initial ambient field strength at a distance of 3 feet was approximately 5-6 mW/m^2 as referenced above An exponential increase was clearly evident with thousands of mW/m^2 coming into play rapidly within a foot or so of the cellular phone. Immediately adjacent to the cell phone, as if the phone were held next to a human head or ear, the power density was on the order of 100,000 mW/m^2.

This is an astonishing value in comparison to the magnitudes that are being considered as likely to affect human health, including blood transformation. If we are looking for sources that are likely to increase current flow in the human body, and we are, we likely need to look no further than the ubiquitous cell phone held up to the nearest ear. It is also established that the human brain and heart are two of the, if not the, most conductive organs of the human body. Awareness of the proximity of an active phone to the human body is less obvious, but likely as important to consider. Distance and duration are indeed the hot points of this discussion.

Many people are instinctively, intuitively and experientially aware of this increased risk level with wireless high frequency technology, some more than others. I would purport that there remain many with no awareness of this field strength, let alone the serious ramifications detailed in this report series.

In summary we need not look far for a source of increased current, usually in ignorance held close to the human brain, affecting a mass of the general population.

14. Electromagnetic modification of human biology (e.g., "vaccine" technology, pharmaeceutical injections, biological experimentation-modification, genetic modification, etc.).

We may consider this topic as a hypothesis, but I think a well founded one.

The human health situation is now known to be dire irrespective of and preceding the "vaccination' issue and era that is now imposed. Nevertheless, if the situation is compounded further with overt (or covert, for that matter) modification of human health and biology, we remain obligated to pursue that truth.

To cut to the point, the immediate question is this:

Is the current agenda and regime of "vaccinations" delivered under duress to the global population altering the electromagnetic nature of the human being? There is good cause and reason to think that it is. There is now information and evidence to even predict that it should be so. The process unfolding here requires current flow in human blood, and that level looks to be quite low. Only additional proper research will answer this question directly, and Carnicom Institute may or may not have the opportunity to do so. If not, Carnicom Institute establishes the case that a direct answer to the question is required. I have no assurance that the answer will be provided within our lifetime without more direct engagement. I would propose that such electromagnetic and electrochemical change has likely occurred, and that the results of this change will connect directly to the disclosures within this report series.

If the "vaccine" regime does alter the human electromagnetics, I expect that the injections will only compound the unfolding health tsunami. We can expect that added symptoms will further corroborate the history of Carnicom Institute research. This appears to be exactly the case.

One sign of a problem is if a well documented observation or legitimate question receives curt marginalization, or if it receives further inquiry. We must consider the following reports and topics that continue to repeat and/or increase with no proper scientific address. Any scientific response to these reports appears thus far inadequate and incomplete.

a) increased magnetism reports, especially at injection sites

b) clotting and cardiovascular issues

c) unexplained "sudden death" increase

d) insurance reports on mortality increase

e) mortician reports of unusual arterial or vascular growths

f) electrically conductive compounds within the "vacccine" (e.g., graphene oxide report redundancy)

g) laboratory analysis of any samples associated with the above reports, even if incomplete.

h) media and "expert" aspersions marginalize questions or reports vs. proper scientific and journalistic conduct.

i) censorship and/or restriction of access to information on any of the topics above.

We could spend some time examining the credibility of each of these topics, and it would be of good form and necessary to do so.

At the very least we must admit to a pattern in place and good cause to justify the inquiry. At this point, I suspect that the campaign to "induct" the population into unsubstantiated and untested health "therapies" modifies human electromagnetics. It is entirely reasonable to question if such change is sufficient to transform human blood.

The scientific and journalism professions exist to confirm or refute this proposal; we each bear responsibility to ensure that this process takes place. As stated, the time available to do so is no longer at your option.

Please distribute and preserve this report globally. Thank you.

Clifford E Carnicom Oct 06 2022

Born Clifford Bruce Stewart, Jan 19 1953