

This six part article provided background and implications of field effect technology in the range of human brainwaves (Extremely Low Frequency). This historic article by Bob Beck set the stage for countless experimenters to actually build and use "Technology for The New Age"!

ELF WAVES AND EEG ENTRAINMENT A PSYCHOTRONIC WARFARE POSSIBILITY

Adapted from a Tape Recording of a 35 mm Slide Presentation By Bob Beck
at the 1978 United States Psychotronic Association Conference In Atlanta, GA
Published in the Jan-Feb 1980 *Journal of Borderland Research*

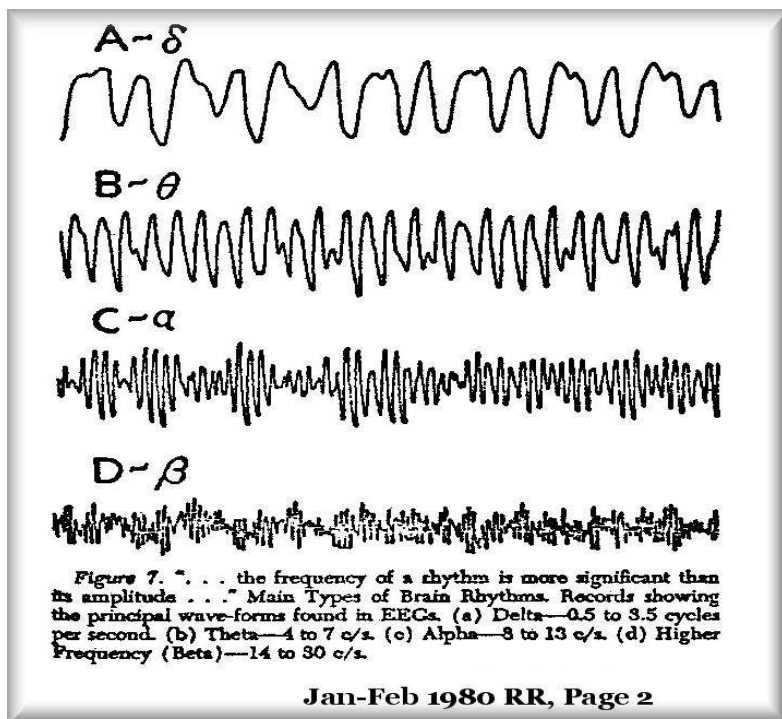
In 1952, a German physicist named W.O. Schumann, playing around with math as physicists are prone to do, postulated that the earth - being a good conductor - was surrounded a good dielectric called air and around this is another layer of a good conductor known as the ionosphere, the Heaviside Layer, and that this constitutes a potentially resonant system. All of you Boy Scouts know that your compass points to the North Pole because the earth itself is a magnet with a North and South Pole. Now that means that any energy trapped in this earth-ionosphere cavity -- like lightning storms, etc. -- will cause it to ring like a bell. But the surprise was that this signal frequency was the identical spectrum of human brain waves. I see we are getting some nods out there. Those of you who are up on your current physics know about this. It was irresistible to me to build an apparatus to measure the Earth's brain wave, and at the same time measure the Witch Doctor's brain waves, to see if there was correlation; which we did.

THE PSYCHO-MAGNETIC COMPONENT

The fourth or fifth generation system is right here on the floor in front of you today. Now this publication, which is the 'Journal of Research' of the National Bureau of Standards, Division of Radio Propagation, Volume 66, page number three, May-June 1962, tells one of the early efforts where a government study, granted to Drs. Koch and Pitchum at the University of Rhode Island, had made recordings of the earth's brain wave, and those of you who know anything about Encephalography could almost diagnose the patient by these little squiggles. They look identical to human brain waves ! Below, typical human brain waves from W. Grey Walter's "The Living Brain", page 87.

"Were you taking this reading off the apparatus yourself?" asked a member of the audience.

We're reading the Magnetic H Wave which is the psycho-active component, replied Beck. Any radio propagation wave has three components; the E Wave which can be picked up by an antenna, the Electro-Static Component; the Magnetic Component, the vector is 90° at right angles to it -- we'll get into it a bit later. It's a good question."



Okay. So we built apparatus to test the thesis: Are there certain people walking among us today -- perhaps one person in three thousand -- who by dint of heredity, or training, meditation, or whatever it might be, is able to tune in to this magnetic component, which is down around one micro-gauss, one millionth of a gauss.

THE "ENTRAINMENT" OF PSYCHIC HEALERS

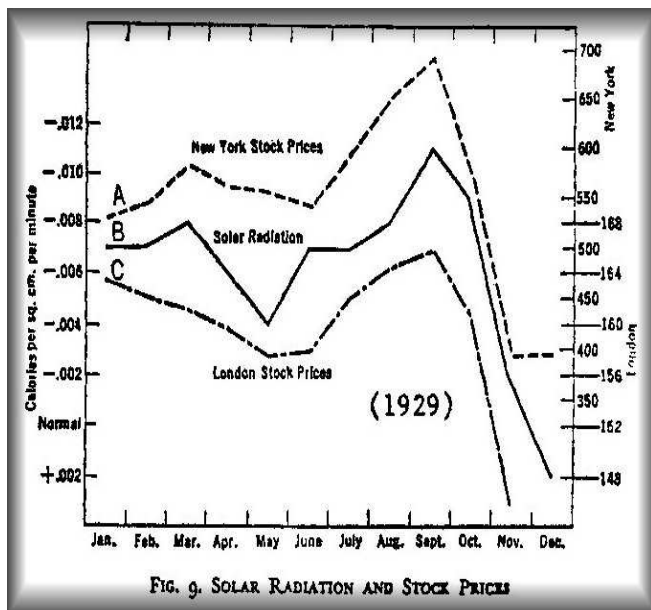
Somehow they latch on to this cosmic carrier of information, transduce it into paranormal "seeing" ability -- after Carlos Castaneda and his maybe-mythical Don Juan -- could this be the 'drummer*' to which these psychics, healers, dowsers, etc., were entrained? The tentative answer to this is, YES!. And we'll see how this has been developed into a weapon of war...

Now, the brain wave spectra, of even Dr. Hieronymous here, whom we measured at about noon today -- seems to center around that magic number of 7.8 to 8.0 Hertz (cycles per second). In other words we now have an objective test to see whether that person is tuning in to a paranormal state of consciousness, or whether he is getting disincarnate, making it up while he goes along, garbage.

If we look at these curves (referring to a slide on the screen) at 8 Hertz, 7.8 Hertz, there is a tremendous node in the earth's brain wave. There's another one at about 14 Hertz, etc. Amazing! The same numbers which you get at the Alpha-Beta border, the Alpha wave, Beta, etc. Man is a bio-cosmic resonator. Let's get past this a little bit. Now what are some of the factors which can alter human moods if this thesis is correct? Sun spot activity. Recall how solar flare activity totally disrupts radio communication on this planet? It also changes the frequency of the Schumann wave. Lunar tides. The same gravity forces that cause tides in our oceans de-tune the earth ionosphere cavity slightly, changing its frequency. How about this as a solution for 'moon madness'. A lot of previously anecdotal, but very well documented data, is going to seem to fit this model of why is man sensitive to these cosmic events? Here are some photographs of solar flare activity. The Earth, drawn to the same scale as some of these tremendous bursts of energy, is this little dot right here. Tremendous bursts of energy from outer space alter the Earth's ionosphere cavity therefore changing the frequency slightly; therefore it can retune our nervous systems, electro-magnetically.

SOLAR RADIATION AND STOCK PRICES

We don't have Mr. Beck's film strip but we do have a battered copy of the classic in this field, Dewey and Dakin's "Cycles, the Science of Prediction", published in 1947 by Henry Holt & Co., New York. Below is a reproduction of chart 9, page 144:

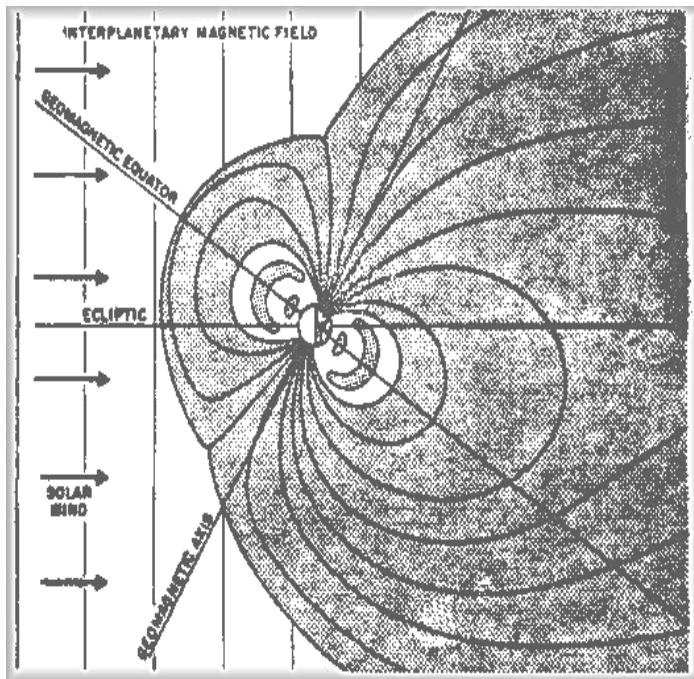


On page 142 Dewey and Dakin write; "... in 1934, two Harvard research workers, Carlos Garcia-Mata and Felix Shaffner, reexamined the Jevons studies (on crop cycles) and checked them; they ended with the conclusion that sunspot phenomena showed no correlation with agricultural production, but- the solar phenomena showed a remarkable correlation with industrial production, business activity, and with stock market prices. Since this particular outcome of this studies apparently left them a little surprised and aghast, the two students threw up their hands and passed the problem over to the biologists and the psychologists."

Biologists and Psychologists (at Harvard) apparently weren't particularly interested, we might add, but Russian physicists were! They later proved in their own way that the 4th Kingdom in Nature, the human kingdom, reacts immediately to the Magnetic changes of the Sun, and offered this knowledge for the practical and tactical use of the Military Maniacs in Moscow.

LOCKED IN THE MAGNETIC EMBRACE OF THE SUN

Again, continues Mr Beck, that little dot on the solar flare is the size of the earth. Now we went go into the physics of the H Layer and the I Layer, etc., but basically the ionized particles that are emitted by the sunspot activity eventually arrive at Earth, are trapped at the North and South Geomagnetic Poles, and cause all sorts of electromagnetic anomalies right here, where we live, our own little space ship.



The inner magnetosphere, the solar winds, the outer magnetosphere: some of the things that we are familiar with that are triggered by this energy coming in from the Sun are the Northern Lights, the Aurora Borealis. These reveal the tremendous amount of energy that comes in and ionizes the rare gasses, creating the luminescence, Nature's light show. Earth's magnetosphere is caused by interactions of the Solar Wind, Geomagnetic Field, and trapped particles such as those in the Van Allen regions. Sunward side of the magnetosphere is pressed in toward Earth by the Solar Wind, while the magnetosphere's "tail" presumably extends past the orbit of the Moon. *From Ben Bova's paperback book: The Fourth State of Matter.*

What if the ancient people realized that on certain days of the year, the solstices, the equinoxes, etc.; these frequencies change; and what if the priesthood decided to build observatories like Stonehenge and the ones all over Central and South America, Europe, England, to predict these so the people could be either freed or implanted all over again??

I don't know the answer to that. It is a totally hypothetical question. But it was terribly important to them to predict these seasons and for reasons beyond the usual ones given, which were usually agriculture, etc. This next slide is titled: "The Influence of Planetary Position on Solar Activity". The top curve is the disposition of Jupiter, Earth, Venus and Mercury relative to the Sun. The lower curve is sunspot activity. One to one correlation. Now, how about an electro-magnetic basis for Astrology? As the positions of these planets create gravity tides, and influence sunspot activity, it cannot help but change the frequencies in which we are bathed daily, which are occult.

YESTERDAY'S MAGICK IS TODAY'S SCIENCE!

Now, let's think about this word 'occult'. It comes from the same root as occluded. That means hidden. You probably realize that half of Europe in the Middle Ages died every few years because of Bubonic plague, Black Plague, etc., because Von Leeuwenhoek hadn't invented his Little microscope and looked into a drop of water. People like Pasteur had not yet decided that this was not the work of demons and devils but bacteria

and microbes, and fungus ,etc.

All these things had been occult prior to the invention of instruments that would reveal them to man's consciousness so he could potentially deal with them. If you don't believe in the germ theory of disease then apply this model to whether you get good wine or bad wine from France in certain years. But these mysterious (magnetic) forces had been occult prior to 1952 when the predictable effect of these electro-magnetic influences had been discovered by a physicist, and in 1962 when they had been actually observed. Clyde Tombaugh observed the planet Pluto years after it's presence had been predicted by its permutation of arcs.

Now for some of the figures you'll get out of your medical and physical textbooks: Why does man, a bio-cosmic resonator, function in the manner of your nervous system acting as a receiver? A brilliant researcher predicted about ten years ago, that 8 Hertz would be the psycho physiological frequency for an altered state of consciousness. These come from standard medical reference plates.

Now man is unique in that the RNA in his brain has a dielectric constant K of 140,000. How many engineers **are** in here? Do you realize the significance of that figure? That one little cell, out of billions and billions in your cerebral cortex, can approach the liquid crystal boundaries, a quantum transducer that will respond to coherent energies in the neighborhood of one hundredth of a micro-gauss.

Now you'd have to be an engineer to follow that last thing and if you did you'd probably fall over dead. This has not been suspected until fairly recently. It means that we are not \$2.40 worth of minerals and water --as I learned when I was in the third grade. We are incredibly complex bio-cosmic transducers; and the things that we have been calling mind, or occult, or what have you, are today surrendering to scientific research on a rational basis. It means that we have within us probably one of the most sensitive, quadruple-conversion, super heterodyne receivers that's ever been developed; and that we can respond to energy levels that almost appear paranormal.

PREDICTION OF ATTEMPTED GLOBAL MANIPULATION

In fact some of the paperwork that came out of the secret files, and was declassified and hand delivered to me, pointed out that our own Central Intelligence Agency three years ago had given a research grant to Garret Air Research Corporation, El Segundo, California; in which Dr. Ed Wortz, one of my buddies in biofeedback research and Dr. Jed Erkins, had predicted the exact mechanism by which the Soviets are manipulating -- or can manipulate us globally. From this very data, that Man, as a bio-cosmic transducer, can respond to things which had previously been called ESP (Extra Sensory Perception) with known, physical mechanisms. That's what it means. That's part of it along with the translation (from the Russian).

This was about a second or third generation Schumann detector. At that time there was one of these at the University of Rhode Island, another at the National Bureau of Standards in Colorado, and a third one was in the trunk of my 1970 Chevy, heh , heh. But this was the-basis of some of the research that we were doing. And like we did with Dr. Hieronymous and Tom Bearden, - and a few others today, we can now carry a little tape recorder and a little box about this big, the size of a king-sized pack age of cigarettes, into the field and make Schumann resonance measurements, brain-wave measurements; put them on a C-60 cassette, take them back to a lab and do analysis that would have been considered previously impossible, even with equipment that weighed hundreds and hundreds of pounds. So now we have the equipment to which the occult is beginning to surrender its secrets... This was about our fourth or fifth generation Schumann detector. The wrist watch in the picture will give you an idea of the size of it. Now we can go out into the field and do some real research without benefit of a government grant. I know the colleges and universities that were working on this. We saw the amounts that went to the University of Rhode Island, hell, that would have kept me going for the next hundred years! Well, this is a do-it-yourself project . It

was rather primitive but we did begin getting the results. This coil (another picture) oh, there's Dr. Bluejoy, Dr. Candless and some of us looking for a site for his Health Ranch, based on magnetic anomaly standing lines that would be beneficial for human habitation. How many thousands of years have the Chinese practitioners, using their own bodies as a transducer, been practicing Kung Schwei? Etc? What is propitious for human habitation?"

THE "SECRETS" OF THE OCCULT

Yes, they will yield to the determined investigator, but what is his or her motive? Suppose it's only scientific curiosity? Or even lower on the scale of incentive, to sell the secret to the highest bidder? The CIA in America and the KGB in Russia? Their squalid morals are a matter of public record. In past ages such investigations were conducted in the strict privacy of temple priest hoods or occult Lodges, and the investigator was an Initiate, sworn to a certain code of behavior. If he or she violated the code the penalty was death. Now we have scientists publicly investigating the Power of the Mind, and publishing abroad the mechanics of the manifestation of that Power in the emotional and physical worlds! Will the Ever- Present Creator have to initiate the whole human race to assure compliance to His Law? Yes, the initiation process began with World War I and is still continuing... (WAR IN IRAQ!) This is like Carlos Castaneda's 'Place of Power'. Now the chap in the center had come over from India to observe some of our work. There is Dr. Jack Zimmerman and Family; and some of the heavy heads in the Los Angeles area. This was about five years ago; and again it's in a primitive state of research, but I think we can turn you onto it as time goes on. (another slide) This is Oracle Rock in New Mexico.

CENSORSHIP: CIA? KGB? OR IMPECUNIOUS STUDENTS?

Now, an interesting thing developed. A.S. Pressman, Department of Physics, Moscow University, did this open literature survey of the work on magnetics and life a number of years ago. Then suddenly most of these references -- or rather the critical ones in Soviet literature -- went underground. Is this trying to tell us some thing? At the time I did my own literature search, in which I found 182 references in the open literature -- to the effects of Extremely Low Frequency Electro-static and Electro-magnetic fields on human performance, mood, etc. At that time all of these things were in the open literature. Now one of my students went around to the bio-med library at UCLA not long ago and he found a number of these had been sliced out of the text with a razor blade! That leads us to two conclusions: #1, Were the kids too broke to put: a dime in the Xerox machine? Or had some of these been removed? (To-be continued in the next Journal of Borderland Science)

ELF WAVES AND EEG ENTRAINMENT A PSYCHOTRONIC WARFARE POSSIBILITY

Part II

May-June 1980 Round Robin, Page 16

Adapted From a Tape Recording of a 35 mm Slide Presentation By Bob Beck
at the 1978 United States Psychotronic Association Conference In Atlanta, GA

Continued From the Jan-Feb 1980 *Journal of Borderland Research*.

Is there censorship of literature on Extreme Low Frequency waves and Electroencephalograph Entrainment? Apparently. Mr Beck told his Conference audience that in the early days of ELF wave research he found 182 references to the effects of ELF Electro-Static and Electro-magnetic fields on human performance, moods, etc, but later when he sent one of his students to the bio-medical library of the University of California at Los Angeles to look up some of these references, the student found that many had been sliced out of the text with a razor blade!

(Next Slide)

How about the relationship between the Mean Annual Magnetic Activity and the number of Sunspots? Again, man is a bio-cosmic transducer. We know we live on a planet that has fairly well predicted (7, 21, 11, etc.) cycles. What about this curve of magnetic storms, that's the top one, and mortality from nervous and cardiovascular diseases?

A guy with a 25-watt transmitter—with the Luxembourg effect (which means a circularly polarized antenna aimed at the ionosphere), with a few Hertz frequency difference from a 50,000 watt broadcast transmitter can mood-manipulate an area of about 200 square miles. Dangerous? Hell yes! How about comparison with daily periodic changes and the earth's electric E and magnetic H fields, and rhythms of living organisms? Circadian rhythms? All of these graphs which you are going to see for the next few minutes, incidentally, are from medically accepted literature, from the medical journals themselves. The dielectric constant of water, the magic transducer. (To Tom Bearden) "I'll give you a copy of this in print, Tom, you don't need notes".

Okay. Here's another one, a paper generated in the *Radio Science Journal o/Research* of the National Bureau of Standards. Again take a look at where the magic number appears to be. That's an 8.0 under the power distribution curve, the same Figure that we were finding in the heads of the psychics, the medicine men, the witch doctors, the Christian Mystics — they're all the same!

Why is the north Atlantic Treaty Organization, Advanced Study Institute on Low Frequency Magnetic Radiation, generating paper work by the bushel until about 12 years ago? Here's some of their findings. Let's skip some of the technical part of it. We don't want to intrude on the time of the next speaker.

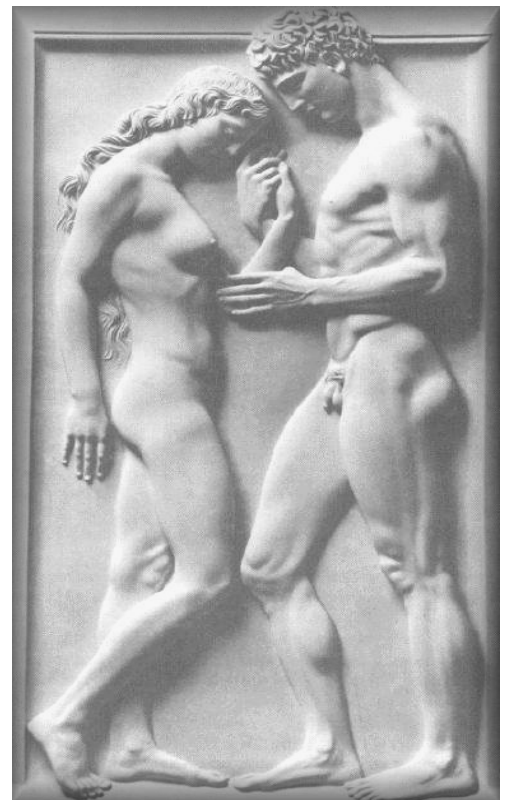
THAT MAGIC, OCCULT NUMBER, 7.8 Hertz

Any of you people know Dr. Ed Maxey, Stanton Maxey, in Florida? Okay. About the time I was playing with it he did a interesting very experiment. He took a little coil, a few turns of wire, put it on the floor underneath the operating table -- what do you call those damn things that they have in the Electroencephalographic room? Where they check for epilepsy, etc? He found that by turning this thing on at certain frequencies a large percentage of the people tested had brain wave entrainment. Entrainment simply means that their brain wave - the firing of their neurons—latches on to this magnetic field coming from this little coil putting out micro-gauss. You can't even measure things this low unless you have highly sophisticated equipment. It is occult. It is invisible. It's tasteless, odorless, etc. This is in a paper that he presented to a geophysical society meeting not too long ago. He too came up with the magic number that I have, 7.8 Hertz. He found that exactly four seconds after this field went on, the subject's brain waves would lock on exactly, on frequency and phase.

"How about this for a covert, manipulative tool?" "7.8?" asked a member of the audience. "7.8 is the number he used", replied Beck. "We've refined that down to three decimal places".

MAN-WOMAN - - THE BIO-COSMIC TRANSDUCER

A lot of people, a few years ago, began looking at the possibility that Man is a Bio-Cosmic Transducer; not only a transmitter, but a receiver; and that somehow his brain waves can lock on and modulate this (the earth's) field, and this might be the medium for ESP.



Some good work that was being done at UCLA (University of California Los Angeles) in their brain research group. Dr. W. R. Adey was on another government grant sponsored by the Office of Naval Research, into the effects of these (in this case pulsed) very high frequency fields that were pulsed with a very low frequency modulation. His published papers, and this goes back several years, show that this could influence the brain waves of cats and monkeys; and he didn't talk about the work that was done out there with human beings because by now this was fairly sensitive. They knew it worked. They didn't know why. So a lot of time, money and effort went into finding out what in the human brain was beginning to respond to this.

(At this point the reader might well ask: What is the Navy doing looking into electro-magnetic modification of human behavior? And, if this is for the defense of the nation, why be so secretive about it? Unless of course the real target of the psycho-political warfare is the people of the nation... Comment by Riley Crabb of BSRF)

Now, A few German physicists were looking into the possibility that this may have been the mechanism that we have lived with for thousands of years. The name of this paper is "The Biological Effect of Extremely Low Frequencies in the Atmosphere". In other words, if we live in a natural ELF environment could this possibly be the key and mechanism for mass accidents, mass suicides, etc? All of the people who did this work independently, Tromp in Holland, Koenig in Germany, found; yes — when they went back through the weather records, this had to be the mechanism that caused all of these admissions to psychiatric hospitals on certain dales, all of these homicides. The data is beginning to become massive.

James R. Hamer — or Hammer. He was working with human subjects, and he has disappeared, as have a few others. He did some extremely interesting work, and this was way back in 1968. At that time he was with the Space Biology Laboratory Brain Research Institute, University of California. The rest of his papers that I managed to gather about ten years ago are now classified. You can't get them for love or money; they have been up-stated. Hamer found that in a 9-Hertz signal the reaction time was definitely shortened. You were more alert. If you changed that signal down a few cycles per second, 3 to 5 Hertz, look what happens to the reaction time. This applies to human beings, monkeys, cats — apparently ail life forms that have brain waves.

Tromp did the same thing independently. Some more of the paper that was generated on the Office of Naval Research grant at UCLA. (Another slide) This is another of the papers which was subsequently classified. At that time he was doing this work openly at the Northrop Space Laboratory and this was an inter-office memorandum which survived the classification process. If you'd like to see that I'd be happy to share it with you.

HOW ARE YOU ACTUALLY AFFECTED BY ELF WAVES?

Let's get out of here and into other things. Solar activity and incidence of cerebral spinal meningitis. Tom Bearden was talking about Carrier possibilities? We don't know whether the waves lower your resistance, or you can actually put the information on them and it is re-created inside the nervous system. Crest days of weather pain and the relation to sun spots and magnetic disturbances, etc. Mortality diseases of the nervous system and the lower curve of sun spot activity. In other words, we are looking here at natural ELF phenomena before it began being manipulated. Sun spots and earth's magnetic activity. Again epidemic meningitis.

Okay, now it gets really interesting: Socio-political mass disturbances, 1923 to 1927, in Europe, related to Full Moon axis. Remember, the full moon modifies the tides. It modifies these frequencies. In this case the tides are in the Ionosphere and the Heaviside Layer and their position above the earth. Double daily deaths from angina pectoris, and combined groups on the Lunar axis. What if we could manipulate this? Whole

populations would be subject. Tuberculosis. What? Does it influence those germs, those little microbes, as well? I don't know, but there it is, positive correlation. Cholera in Russia, from 1823 to 1923, versus solar activity in the same period.

Maybe all of the life forms on this planet are locked in to this electro-magnetic energy, just as the Radionics and Radiesthesia people have sensed, for quite a while. Epileptic attacks, of course, totally predictable. Suicides. People tend to go unconscious on this because it's frightening and it's a little heavy, technically.

HOW TO MANUFACTURE A PSYCHIC

Again, here is an artist's conception which I have adapted to show this synchronized brain wave activity, the stranger within. Okay, if psychics are people who have a particular brain wave pattern — we don't know which comes first here, the chicken or the egg — can you make a psychic by driving his brain wave to that particular frequency? Marvelous question, don't you think? Brilliant, wish I'd thought of it first.

Our first attempt at manufacturing psychics and Radionics operators and healers was to put these little light bulbs in an empty eyeglass frame. On the left is an incandescent bulb and on the right is a little cold cathode indicator, like on your FM radio tuner. We flashed these little lights in real time to the Schumann resonance (we picked the Schumann resonance up on a coil), filtered out everything except that wave to which the psychics would entrain and fed them this little flickering light.

If you flash a light in a person's face you get an evoked potential in the occipital cortex. That's the photic response. And you know that if that is at a certain frequency you are going to turn that person onto epilepsy. You'll have a petit mal seizure. Remember all these night clubs in New York, these psychedelic clubs, that were having these lawsuits against them because the operators would get the strobes in around a thing which was the second harmonic of the Delta spiking rhythm you see in epilepsy? Okay, when they test for epilepsy in the hospital they flash lights at your head at a certain frequency, or they give you a drug which will over stimulate the firing of the neurons. But, if you put in a beneficial frequency, you can probably cause an evoked response of the brain wave at that frequency. Now that was marvelous, except for one thing. It takes about one hundred milliseconds from the time that light flashes for the signal to cause an evoked potential, and that hundred milliseconds varies for most human beings. In other words, you can test IQ with this little box. The longer it takes that flash to get out here as an electrical signal the dumber that person is because the slower his system is responding. You are aware of Hurler's work in Canada that found non-culturally biased IQ (Intelligence Quotient) tests for cats, dogs, babies, people who couldn't speak English, people who couldn't read or write, etc. So what was terribly wrong with this brilliant idea was that the light didn't get there to the brain for everybody at the same time; so we abandoned that idea and began using the magnetic H Wave.

ELF WAVES AND EEG ENTRAINMENT A PSYCHOTRONIC WARFARE POSSIBILITY

Part III

July-August 1980 Round Robin, Page 12

Adapted From a Tape Recording of a 35 mm Slide Presentation By Bob Beck
at the 1978 United States Psychotronic Association Conference In Atlanta, GA:

Continued From the May-June 1980 *Journal of Borderland Research*.

(From Riley Crabb of Borderland Science: "Hypnotists of the World take note, the High Priests of Low Astral Mind Control have graduated from strobe lights and glittering pendulums to the Magnetic H Wave as a means of surreptitiously getting inside the subject's, or victim's, mind. For, as Mr Beck told his Atlanta

audience: We abandoned that (the flashing light idea) and began using the magnetic H wave).

We began using little boxes, about half this size; you'll see a picture of one in the middle. It would alter that person's state of consciousness, and I was doing this before I began to realize the consequences of it. After while I'll tell you why we're not doing that any more. The little box is on the left.

After we found that this thing could alter moods, the questions came up: Is this hypnosis? Suggestion? Am I a magician? Am I doing it? So it occurred to me that I'd carry this thing around with me in my pocket. Now, I'm a bachelor. I've been divorced for twenty-some years; so I eat out three meals a day. So when I went to Denny's Coffee on Sunset Boulevard I put this thing in my pocket, and occasionally I set it at a specific frequency that I'm not going to mention — because I've been asked not to by the people who can ask other people not to do things. And pretty soon the waitresses would start dropping coffee into the laps of the patrons. The babies would start screaming. People within a 10 or 12 foot radius (that's a 20 foot room) would begin freaking out. I'd surreptitiously turn this thing to two Hertz higher in frequency. Hahhhhhh (a simulated sigh of relief), you could hear the room calm down. If you had a pocket Radio Shack decibel meter, the cocktail level effect, the volume of the conversation will drop, noticeably, in decibels.

Okay. We had something here and we knew that the Soviet research had gone underground. At least the papers were no longer being published at the same rate that they were.

THE MAGNETIC "H" WAVE PENETRATES EVERYTHING

Our own government was playing at that time God, I guess, with the multi-billion dollar Project Sanguine. Their purpose was to communicate with submarines under water, with ELF magnetic Fields. The project was kicked out of Wisconsin, Michigan, and a few other places by people who had a certain nervousness about environmental disruption. They're trying to use power lines as antenna systems, surreptitiously. Let's look at what they were about to do so they could talk to the submarines this way. There is a better way of doing it. Frequency less than 100 Hertz. How's that for coy? The total antenna length could be up to 1600 miles long, antenna line current 150 amperes, total power required — watch this number — 20 to 30 megawatts; and they'd need 300 to 500 acres just for the transmitter site, antenna rights-of-way up to 4400 acres. This is our answer, using brute force to communicate with underwater submarines because nothing in the world will shield the magnetic H wave, at these frequencies. Nothing. Multiple new metal cages, Faraday cages, lead, you name it. These magnetic waves, not the E or I waves but the magnetic H factor goes through anything including the earth itself. Like you saw in the model, in Tom Bearden's slide earlier this afternoon. Nobody is safe from this type of radiation.

(From Riley Crabb of Borderland Science: "Safe, Humpf! If we were not all vulnerable to the Power, Wisdom and Love of the Logos, there would be no Involution and Evolution! These electronic sorcerers have apparently stumbled on the area of radiation or vibration by which all Life on the planet is kept under control. Now we have sorcerer's apprentices in Washington and Moscow who want to use this new-found power for their own selfish purposes, guided by gleaming eyed monsters from some Astral Hell beneath the nations' capitals. (Reptilians?))

The hour is nigh... Prepare to meet thy doom; Any particular rush? (ha, ha). Anyway, maybe it is later than we think... We know times are bad when every time you call Dial A Prayer, you get a busy signal (more laughter).

Any of you turkeys wake up about four o'clock in the morning and can't get back to sleep until sunup, then sleep 'till noon? Let's see it. Let's see hands for four o'clock in the morning. Okay. You know why? We've been getting some very strong Russian transmissions. There is a particular anomaly that's the same as the Dawn Chorus — if you're familiar with atmospheric propagation research. It makes you particularly

vulnerable at that time. Notice on this top curve this 8 Hz, the thing on which we want to latch if we're pure, spiritual and psychic — whatever that means. Four o'clock in the morning the bottom drops out and whatever is left is going to get you, baby!

THE PHASE-ARRAY ANTENNAS OF THE RUSSIANS

The first estimate of the Soviet transmitters that were causing the problems were at Riga and Gomel. Kathleen Joyce donated her drill to the project and we drilled two little holes in a globe and put those two little tacks in it so you have a historical little item there. If you draw a Great Circle route between these phase-array antennas, you are in the area around Timmins, Canada. Now there may have been some tremendous disturbances up there about a year ago that were traceable to this particular problem.

Anyway, when Dr. Andrija Puharich was out here (in California) and Kathleen Joyce and I hosted him, we showed him the apparatus. This is probably the first he had heard of the psycho-physiological effects of the ELF Fields; and I recall on your living room floor, Kathleen, where he flexed his muscle near the coil, saw the spike readout on this little oscilloscope, and realized that we finally had a detector in human captivity that could see micro-gauss levels. In other words his EMG, the few micro-volts of potential, firing through the nerve impulses, through the conductive layers of his skin, was creating enough of a magnetic field to read out on this thing.

He got very excited so we began showing him some of my research dating back for about the last eight years, and he decided that this was important enough to take back to the United Nations. So he contacted the chap who really runs the government. This man has survived about the last five administrations. He must remain nameless because he is in a very low-profile position. I can assure you he is no one that you have ever heard about or read about in the newspapers. They sent me an airline ticket and invited me to come back to the United Nations and the weather was so bad that weekend — the winds were blowing about 30 miles an hour and it snowed six times in one day. The next day it was exceptionally hot. Anyway, we thought that weather manipulation was happening. It was most unusual for weather.

DR PUHARICH'S SOPHISTICATED FARADAY CAGE

Dr. Puharich and I were supposed to have about an hour. It ran into a two-and-half-hour briefing. Kurt Waldheim (Secretary General of the United Nations) was out of the country at the time, so our host and chap that we informed was the number two man in the United Nations, Rudi himself.

Now, the experiments which caused all of the excitement. Any of you guys ever been in Ossining, New York and seen this Faraday Cage? (The home of Dr. Puharich, 87 Hawkins Avenue, about 40 miles north of New York city) It was probably the most sophisticated cage in captivity. It had three layers of copper and three layers of soft iron. In other words this is H wave shielding, and copper shielding for the E wave Faraday Cage. The thing probably has as much attenuation as the one at MIT (Massachusetts Institute of Technology) the triple new metal cage.

Okay, what we did here, we took this little box. Let's break it out here. This box has been disarmed. It is only mildly psycho-active. We did this at the request of the people who tell you to do things, for damn good reasons. This is the one. We placed it outside the Faraday Cage. We sealed it up. Incidentally, the pickup, the magnetic pickup coil, is over here in this plastic garbage can filled with sand, to act as a micro seismic damper — so that we weren't seeing quite as much vibration. We worked with several subjects and this little box was run by one of Dr. Puharich's secretaries, outside. She was told to turn the dial a little bit Turn it on. Don't tell us what's happening. Turn it off. Turn the dial to another number. Turn it on. Turn it off. Total double blind. No one inside the cage knew what was going to happen or when it was going to happen.

The subject's brain waves were going to one channel on a chart recorder, with zero cross-talk. The other chart, with a tape recorder, was going to a magnetic pickup; so we could compare the brain waves of the subjects with what was happening magnetically inside of this absolutely airtight, secure environment. The chart readings — the one at the top and bottom were 180° changes of the magnetic pickup. The center portion of that chart was the human subject's brain waves. Over the range of 6 Hertz to 14 Hertz, with some subjects there was 100% entrainment of frequency and phase. Get that.

They locked on total! A little box the size of a package of cigarettes, when it uses the neural frequency principle can entrain the brain waves of a subject inside a totally shielded room, *without his knowledge, consent, etc*, That's what this is all about.

THERE AINT NO HIDING PLACE DOWN HERE

(From Riley Crabb of Borderland Science: “And now Dr Puharich had an inkling of the mechanical basis for the entrainment that he and Ila Ziebell, Sarah Bursak and Uri Geller enjoyed (or suffered) in Geller’s apartment in Tel Aviv in December 1971. Do advanced Elementals on the Lower Astral Plane (Reptilians?) also have their Little Black Boxes as they carry on their work for the false Gods of Mankind? e.g. Jehovah, Allah ?)

What we're saying here by entrainment — if you look at the shape of this wave, they all fall on the same time rate. Starting from a half a second to four seconds after the box goes on, the brain waves, the neurons, are being totally driven by this little magnetic oscillator. It is down below 25 nano-Teslas at the source. A nano is one billionth of one Tesla. A Tesla is 10 to the fourth gauss.

“PRIOR TO THE TOTAL NEWS BLACKOUT”

Back in March, the 26th and 27th of this year (1978) a chap named Mike Thoele, who is a journalist for the Eugene, Oregon *Register Guard*, decided to take his life in his hands and write about some of the things that had been happening up here. I have copies of these and many, many other articles that appeared in the public press prior to the time of the total news blackout. There were a few articles for a few days. A day after this one there were the denials, by the FCC, the Environmental Protection Agency, etc. Totally predictable, right? And I have a tape here of some of the signals that have been recorded.

ELF WAVES AND EEG ENTRAINMENT **A PSYCHOTRONIC WARFARE POSSIBILITY**

Part IV

Sept-Oct 1980 Round Robin, Page 14

Adapted From a Tape Recording of a 35 mm Slide Presentation By Bob Beck
at the 1978 United States Psychotronic Association Conference In Atlanta, GA:

Continued From the July-August 1980 *Journal of Borderland Research*.

(From Riley Crabb of Borderland Science: In March 1978 there was a spate of news items about strong ELF wave broadcasts from Russia, coming over the polar area into Canada and the United States; and then, as Bob Beck says, there was a total news blackout and there were denials by the FCC, the Environmental Protection Agency, etc. Totally predictable, right? And he had a tape recording of the signals to play for the Conference audience. Then from the screen, he reads the slide copy of a newspaper headline)

"Mystery Radio Signals May Cause Illness" Hell! They were totally disrupting left and right (brain) hemisphere synchronization! People who had never had *any* tendency toward epilepsy, had no hereditary tendencies in this direction — were going slightly unconscious. According to Marshall Van Ert there was a two mile stretch of perfectly clear highway where there had been four deaths in about a week. People were simply driving their cars off the road or into a telephone pole, or into oncoming traffic.

These are not apocryphal stories. These are a matter of public health records. It's in Los Angeles now at about 25 micro gauss, and yes, it's spreading. Now the reason that Eugene, Oregon, is particularly toxic is because there is an 800-mile long antenna terminating up there, called the Bonneville Power Authority transmission line. I guess some of you engineers have heard of this thing. They are generating current and sending it down to California as direct current, 340,000 volts. A DC line is an absolutely perfect, long wire antenna. In fact it would be highly attractive to people who couldn't launch Project Sanguine to use that as our own transmission system, at 2.2 Hertz.

SAN FRANCISCO HIT BY MYSTERY RADIO WAVES. ("BEAMING")

Whole citizen's groups are getting up in arms, and they don't know who to sue (Laughter!). Because of the zapping of America they're going out after the poor little communications towers and relay points for the telephone company and what have you

Now Marshall Manner and I got to be pretty good friends after some of this. This, incidentally, is Kay Prince, the lady in the bottom picture; and Marshall and I spent a lot of time up there running down some of these Fields. I can't talk about some of this. Some of it I can. But there were only one or two people in that area that had equipment even capable of finding the spectrum distribution — and I'll show you photographs of this. Bill Bise asked me in the lunch room if we have actual spectrum analysis stills of this Russian Woodpecker (the term selected by ham radio operators as being most descriptive of the audio characteristics of the ELF wave transmissions from Russia) and yes, we do.

Now, Bill Bise is a highly qualified engineer but he has one thing that is terribly wrong with him. He's exactly like I am. He's interested in kook subjects. Therefore, his data has been pretty well thrown out by government officials who would normally accept it exactly as it is. the truth. So you've got to run under two different covers if you're going to survive on this planet. If you hang out with kook groups like I do, you automatically don't know what you're talking about.

The EPA man (Environmental Pollution Agency) came to town and started tracking the signal. The First thing these Turkeys did was blame it on the 4.717 Megahertz signal which was coming out of the Dixon and Alameda Naval Station and — we'll now have a concert here (and he plays a tape of the Woodpecker signal, a strongly accented beep beep, with a little burst of noise after several beeps.)

THE GOVERNMENT COVERUP

Okay, (he runs the burst again) that little burst of white noise that you hear after the beeps is carrying the information — on this particular channel — *as* some of us in the room know; and in order to quiet the population and make absolute fools out of themselves, Dr. Richard Tell, who is in charge of the Western Environmental Protection Agency team that works out of Nevada said, "Oh, all you guys are hearing is Dixon and, yeah, that sounds a little bit strange to people who don't know about that transmitter."

The last time I talked to him he was just about as apologetic as Dr. Allen Hynek who, incidentally, in UFOlogy is a very good man — getting nicknamed Swamp Gas Hynek because he'd been misquoted about the Flying Saucer up there in Michigan. Anyway, the Turkeys came down here with a truck that had a hearing range of 10 Kilohertz, which was the lowest thing they had been using for submarine communication up until a few years ago. They were orders of magnitude off; so the signal you just heard was the Navy transmitter, at 4.717 Megahertz from Dixon, that they were going to blame the whole thing on.

This was the tar baby, the scapegoat. It would'nt work.

The next thing was that the power grid was identified as the source of the signal. Any high school kid can tell you that any long wire hanging out there in space can act as an antenna and pick up all the other signals that are being transmitted and re-radiate them. Okay? Even if our Navy is fooling around with long wires as a substitute for Sanguine antennas that had been ostensibly kicked out of several states. They traced the signal and it was strongest around power grids. So what else is new? These are some of the newspaper clippings that are going in the archives. Now, they created such an outrage among everyone who graduated from high school that the FCC itself had to back off from this embarrassing, pseudo-solution.

The chap who launched the whole thing is good old Walter here. I'm the heavy-set guy from the left, and this is Kay Prince, the radiological chief of the State of Oregon; and Marshall Van Ert, who until recently was the health physicist for the University of Oregon, Industrial Physics Department. The guy on the left is Mike Talley, who wrote the articles, putting his reputation on the line before news blackout. He came along to some of these sites with us.

“YOU DON'T NEED AN INSTRUMENT”

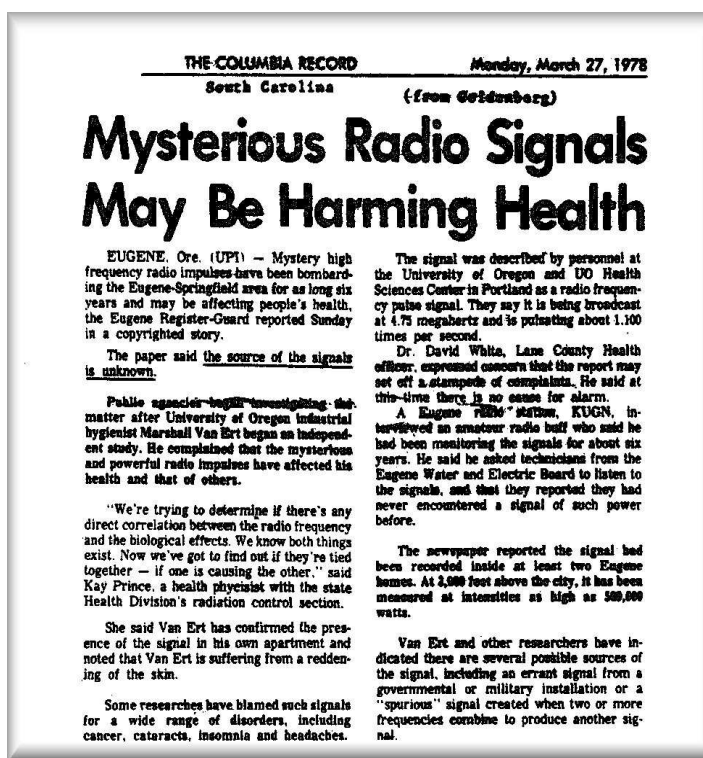
The third lady from the end was a friend of Kay Prince's who had come down from the capital to be with us on this particular field trip. At one of these sites, where we were measuring about a 50 Micro gauss ELF signal at about 5 Hertz, she got so sick that we almost had to carry her out to the car. She broke out in red splotches. She couldn't hold her coffee cup. She became disoriented, felt that she was going to faint, had trouble breathing. You don't need an instrument to find this stuff, kids. You only need an instrument to prove what it is to the establishment.

This is Walter's living room where we started the series of tests, showing some of the equipment. I've been asked to show some of the spectrum analyzer Polaroid shots. This was done on one of the better devices. You normally don't see these. They were made only for the Central Intelligence Agency bug finders, to find surreptitious transmitters. It's a Model 1501 Spectrum Analyzer. I came closer to hitting Bill on the head and stealing this thing than anything I've seen in my life. It's a little package that tunes almost from DC up to beyond 500 Megahertz. You can tune in any frequency. It measures the entire spectrum, on each side of it, displays the frequency on oscilloscope, the band width, the amplitude, the F-sub-zero, etc.

"Could they be having one frequency which they want to work with and the others are just to mislead us?" (asks an audience member). Yes, (replies Dr. Beck), they have phantom frequencies. They are reconstructing heterodynes. Let me tell you why we're getting it and they are not: We are on a 60 Hertz power grid. They are on a 50 Hertz power grid, Get that? That's why they're immune. Every civilized industrial center in America is a potential reradiating weapon of this Psychotronic ELF Field. In other words, why should they build antennas, re-radiating systems, when all of us have 110 volt systems in our homes; and we are also served with gas pipes, miles and miles of conductors, cold water pipes, etc.

Nikola Tesla was right. With some of these frequencies you can excite the earth Ionosphere cavity, as though it is a huge bell, and ring it! In other words, the Russians have a thing here which cannot be stopped. It's practically not attenuatable by anything that we are familiar with in physics.

"Is there a quick explanation of why 60 cycles will pick it up instead of 50?" Right. It's a harmonic! (replies Dr. Beck, and turns on his recording of the audio pan of the Russian broadcast) at 5.340 Megahertz. The growl was because we have a voltage control — or rather the VFO on the receiver. That was at 5.340 megahertz and we were listening to — in other words, since you cannot hear the fundamental (the actual ELF wave) we have the local oscillator on the super heterodyne receiver running. It is a global problem. Incidentally, for the engineers again, the attenuation rate of this signal is only about three tenths of a decibel to eight tenths of a db for a million meters. That means that this signal will go around the earth 4-1/2 times before it is down a half of its original value.



ELF WAVES AND EEG ENTRAINMENT A PSYCHOTRONIC WARFARE POSSIBILITY

Part IV

Nov-Dec 1980 Round Robin, Page 17

Adapted From a Tape Recording of a 35 mm Slide Presentation By Bob Beck at the 1978 United States Psychotronic Association Conference In Atlanta, GA:

Continued From the May-June 1980 *Journal of Borderland Research*.

Okay, now a lot of this is resonance. What we don't know is now much of this is being originated domestically? How much of it is a second or third order harmonic effect? And what the real and what the virtual parameters are actually engendering? But these are some of the Soviet frequencies. I have a little paper here. If we can find a Xerox machine, we can paper you guys. But meanwhile, from the standard textbook of physics, if we look at the E wave as being standard propagation wave form — as being parallel with this screen — the B wave or H wave, the magnetic vector, is at right angles to this and has to accompany it.

WHY DID GOD DESIGN US THIS WAY?

When you strip off the E wave by shielding, by natural attenuation, you still have that H wave left; and that is the one against which you cannot shield. It goes right through you, everything else, and can trip certain neurons in your head. I don't know why God designed us this way but here's something else to worry about. 150 years ago it was smallpox, diphtheria and Indians. I guess some of you turkeys are as old as I am and remember when we were trying to dig fallout shelters in our backyards. It's always something, but this is the one that appears to be the most insidious.

This report is from a previously classified document done by Dr. Wartz and Dr. Erkins, of Garret Air Research. for the Central Intelligence Agency showing the "windows" that could be the stimulus for ESP, paranormal, Russian Psychotronic research. Does that look familiar? If you move that down about two Hertz, you ain't got a psychic, you got an epileptic.

Some of the propagation paths of the various nodes. The whole earth Ionosphere cavity rings like a bell. At certain frequencies you can put a little energy in here and under the same conditions get the same amount, or even a little more out, somewhere else. Tesla was right.

A little Soviet love letter, U.S. Patent, Nov. 20, 1973, Apparatus For the Treatment of Neuropsychic and Somatic Diseases with Heat, Light, Sound and Electromagnetic Radiation — a trial balloon to see how much we knew about what they were doing. It's #3773049, and among all these words they hid their little gift, which you'll come across when you read the whole patent.

We have developed frequency counters by taking standard units and pulling a times-one hundred multiplier so we could see frequencies down to a hundredth of one Hertz. We couldn't find anything that we could carry. The big Hewlett-Packard weighs — what? — 20 pounds, plus a cost of \$13,000. So we had to build the instrumentations systems for mapping these things almost from scratch. We published the circuit diagrams for all of these things except the psycho-active frequencies and apparatus. We were requested to delete this by a chap who visited us and said, "You'd better take the apparatus apart and put one piece of it one place and one in another and go back and burn the paper work you have on it because terrorist groups could build a little box like this and paralyze us."

DOWN TO THE HUNDREDTH DECIMAL PLACE

(From Riley Crabb of Borderland Science: “ So, what’s new about registering human molecular vibrations down to the hundredth decimal place? Dr Albert Abrams, grandfather of Radionics, was doing it at his clinic in San Francisco in the 1920s! Recently, one of the later models of the Abrams Oscilloclast was brought to our headquarters here in Vista California. On the front of it was a row of Ten Buttons. Each one of them represented a group of diseases whose vibratory rate is in the 43 megacycle range. That’s below Channel 2 on your TV set, 54 megacycles. and the wavelength is about 7 1/2 meters, crest to crest.”

(Note these vibratory rates are for informational purposes only; No Healing or Beneficial Effect please!)
Button Zero: 43,000 megacycles; covers Cataracts, Adhesions, Radium Burns, X-Ray Burns. Button One: 43,245 megacycles; covers Malaria, Staph, Mumps, etc.
Button Two: 43,296 megacycles; covers Chicken Pox, Hay Fever, Strep, Impetigo, Typhus, etc. Button Three: 43,322 megacycles; covers Epilepsy, General Toxemia, Psora, Lues (Syphilis), etc. Button Four: 43,338 megacycles; covers Arteriosclerosis, Asthma, Goiter, Catarrh, etc.
Button Five: 43,346 megacycles; Arthritis, Hay Fever, Influenza, Tuberculosis, Undulant Fever Button Six: 43,350 megacycles; covers Fermentation, Carcinoma (Cancer), Eczema, etc.
Button Seven: 43,354 megacycles; covers Acute Inflammation, Pneumonia, etc.
Button Eight: 43,354 megacycles (same as Seven); covers Cataracts, Infantile Paralysis, Pyorrhea
Button Nine: 43,356 megacycles; (no classification under this number).
Button Ten: 43,357 megacycles; covers Chronic Inflammation, Chronic pain, Radium Burns, etc.

The full listing of the rates and description and schematics of the Abrams Oscilloclast are in BSRF No 33C “The Electronic Reactions of Dr Abrams”. When Riley Crabb read these rates off to a visiting scientist here a couple of years ago, he suggested that Abrams had been working with the higher harmonic of the disease, and that the actual base rate was much lower on the scale of vibration. Now I suspect that he was engaged in highly secret ELF wave research, an area of vibrations unknown and unsuspected at the time Abrams was developing the basis for Radionics or Psychotronics or Bioenergetics, as the Russians call it.)

ELF WAVE COUNTER MEASURES

Now what's happening about this? Well, Dr. Ludwig of Germany developed these little devices. Andy smuggled a couple of these into Los Angeles last October (Dr. L.O. Anderson, Anderson Research Foundation, 2942 Francis Ave., Los Angeles, Cal. 90005, phone (213) 387-9164] and I did an engineering analysis on them. I'm going to take the tape out of the cassette for a second and I'm going to put this on play and activate this on play and we're going to activate this little box. It only has a range of about a meter. Just enough to envelop the head and vital organs if one wears it on the upper part of the body. (He turns the Ludwig *Vitasette* on and the audience hears the "woodpecker" rat-a-tat-tat.)

THE LUDWIG RELAXATION OSCILLATOR (OR MAGNETIC PACER)

Sound familiar? Sound like something we've heard from Russia? Now, I'm going to change its frequency a little bit (and the rat-a-tat speeds up). We understand that about 900 of these have been built, and some of them are in the hands of people who have to wear them, in case of a hit. What they are basically is a little relaxation oscillator, driving a coil around a Numetal core. The Numetal has a permeability of over 3000. As the B field collapses, it puts out a tremendous spike of magnetic H wave energy which, for this demonstration, we just picked up on the tape head of this recorder; because the tape head, as you know, will respond to magnetic signals that are on the ferrite in the tape.

"What is the device for?"

That device is worn by people who want a beneficial frequency close to them. Fortunately, we live in a universe that works by the Inverse Square Law. If you don't like the Rock band that's putting out 2000 watts of audio on the stage, you can take a \$2 transistor radio, tune it to another radio station, hold it up against your ear and it will drown out the Rock band. Okay? A field of beneficial frequencies which is close to you will override the effect of the firing or desynchronization of the neurons that can be entrained by a field that, in this case, is 7000 miles away. All right?

Apparently—certain neurons in the cerebral cortex act as frequency modulating discriminators. Any of you guys who have played around with radio know that you have a crystal set, and you hear several stations simultaneously, you get a garble. They are all overlapped. You can't sort 'em out; but the frequency modulation discriminator will latch onto the highest amplitude signal in the environment, override the others, and you'll hear that. If you are listening to Police Radio and a loud station comes in, overriding the other, you'll get one or the other. There's very little crosstalk. So what this thing does basically is that it puts out a little magnetic H wave field with a spike wave which we don't like. We like to work with a different wave form that I don't want to talk about. But this thing is apparently mildly psychoactive, but not nearly as psychoactive as the ones they used for the tests in Los Angeles, the ones at the United Nations, and Ossining, New York.

(An audience member asks:) "Is that spike wave more effective than a sine or square?"

It should be because ΔE over ΔC means that you are inducing stronger current in the conductor nearby, and there are some other side effects which we don't like. It's rather abrasive. The other device that's in the picture (and hopefully I brought it) is disguised as a wee pocket flashlight — and it actually works! It has a little nickel-cadmium rechargeable battery. It is frequency programmable on the back.

"So what you are saying is that the West Germans are aware of this (ELF wave attacks from Russia) and are selling these?" (asked the same person).

They are not selling them, exactly, they are kind of giving them away to people that have a need for them and the answer to your question is. Yes. Now, what I'd like to point out to you is that in this very narrow frequency spectrum corresponding to the Alpha-Theta border of brain waves, you can change the excitation frequency by a fraction of a Hertz, and have an entirely different reaction. Now this was a big surprise. This is the thing that was not anticipated any more than the little germs were before Von Leeuwenhoek and Pasteur.

YOU ARE EXTREMELY SENSITIVE TO COHERENT FREQUENCIES

One reason I feel that this effect has been missed by other researchers who were working with gross frequency inputs is that they were not defining their frequencies down to a hundredth of a Hertz. Now there's a tremendous amount of a supportive evidence in the neuro-physiological literature that certain molecules in our brain, with dielectric constants of over 140,000 and other inductive capacitor parameters, act as long-chain, semi-liquid crystal dipoles that are extremely sensitive to coherent frequencies. Now coherent means to find out that they are a little bit further than most of the researchers have investigated.

Where I think I have done original work is in building systems that can go out to that second, third and fourth decimal place, taking them to the coffee shop, testing them on my own head and seeing what they do empirically, and kind of sounding the alarm on what we are now experiencing.

"Again, some of the Soviet frequencies. We'll take a break and see if we can get some of these in real time on the radio right now. (Apparently he gets a signal from the program director.) Oh, I guess our vote has been cancelled. Okay, there are a couple of more goodies on here but I'm going to thank you fellows, I'm going to conclude it at this and take a break. If there are any questions we'll handle them later. Thank you for listening. (A burst of applause ends the tape. For those of you who wish to contact Bob Beck directly, his address is 1538 Cassil Place, Hollywood, California 90028, phone 213-403-8901.) (Deceased)