

Original Rife Instruments and Modern Copies
 As it Pertains to Cancer
 By Douglas Saint

Raymond Royal Rife was a brilliant scientist and researcher in the 30's who developed high frequency machines capable of denaturing the protein of certain bacteria and what he called "viruses" or non filterable bacteria. He developed a microscope to see these living organisms at greater magnification than the common light microscopes used today and employed his high frequency Beam Ray in the close proximity to the microscope to visually witness the destruction of both common and pathogenic (disease causing) bacteria. The frequencies at which the destruction occurred he called the Mortal Oscillatory Rates (MORs).

Rife experimented on several victims of cancer, which he believed to be caused by a sub-microscopic bacteria he called Bacillus X (BX) or Bacillus Y (BY) which he believed to be the causative agents in carcinoma and sarcoma respectively. His experiments were reported to have been 100% successful in "killing" the cancer; respected medical professors attested to the cures.

Rife, it is said, described around seventy MORs for various bacteria. Today, researchers pouring over the available material written by Rife have found less than half that number. These bacteria and MORs are shown below.

| ORGANISM | RIFE MACHINE #4 1934 in Hz | PRIOR TO 1934 IN Hz | PRIOR TO 1934 IN METERS |
|---------------------------------|-------------------------------|------------------------|----------------------------|
| Actinomycosis (Streptothrix) | 192,000 | 678,000 | 186,554 |
| Anthrax | 139,000 | 900,000 | 272,539 |
| Anthrax Symptomatic | | 400,000 | 16,655 |
| B. Coli (Rod form) | 417,000 | 683,000 | 317,914 |
| B. Coli (Filterable virus) | 770,000 | 8,581,000 | 11,103,424 |
| Bacillus X (carcinoma) | 1,604,000 | 11,780,000 | 17,033,662 |
| Bacillus Y (sarcoma) | 11,430,000 | | |
| Bubonic Plague | | 160,000 | 512,466 |
| Catarrh | | 1,800,000 | 1,713,100 |
| Cholera Spirillum | | 851,000 | 960,873 |
| Contagious Conjunctivitis | | 1,206,000 | 2,025,625 |
| Diphtheria | | 800,000 | 1,090,154 |
| Glanders | | 986,000 | 736,531 |
| Gonorrhea | 233,000 | 600,000 | 150,649 |
| Influenza | | 1,674,000 | 1,946,704 |
| Leprosy | | 743,000 | 251,926 |
| Pneumonia | | 1,200,000 | 381,901 |
| Spinal Meningitis | 427,000 | 927,800 | 1,795,164 |
| Staphylococcus Pyogenes Aureus* | 478,000 | 998,740 ¹ | 555,171 |
| Staphylococcus Pyogenes Albus | 549,070 ² | | |
| Streptococcus Pyogenes | 720,000 | 1,214,000 | 2,111,214 |
| Syphilis | 789,000 | 900,000 | 2,775,856 |
| Tetanus | 234,000 | 700,000 | 15,779 |

¹ Exception. Should this have been reported as 998,736?

² Exception. Should this have been reported as 549,072?

| | | | |
|--------------------------------|-----------|-----------|------------|
| Tuberculosis (Rod) | 369,000 | 583,000 | 541,142 |
| Typhoid Fever (Rod form) | 760,000 | 900,000 | 868,964 |
| Typhoid Fever (Filter passing) | 1,445,000 | 9,680,000 | 13,943,835 |

If you are unfamiliar with “Hz” it is pronounced “Hertz” and means the number of cycles a wave makes in one second or the number of pulses made per second in non wave events e.g. Direct Current (DC). The frequency of our alternating current (AC) electricity in North America is maintained (tuned) at sixty Hertz (60 Hz) which is equal to 60 cycles per second.

The Electromagnetic Spectrum

Any time electricity and magnetism move together, an electromagnetic field is created. These fields have three prominent properties: wavelength, frequency and strength. Wavelength is measured in meters, frequency in Hertz and strength in electron volts.

Electricity and Sound

The “normal” auditory range for humans is about 20 to 20,000Hz. While it is true that our electricity vibrates at 60Hz which would be within our normal auditory range, our ears are not designed to receive “sound” from electricity. One, however, may convert electricity to sound by using a clever device called a speaker. If you are an old-time audiophile, you might remember those turntables we used for 33.3 RPM records. If the turntable was improperly grounded, a 60 cycle hum was transferred to the speakers. This hum was caused by the frequency of the electricity.

Referring back to the list of Rife’s MORs, you notice that none of his frequencies are within our normal auditory range. It is difficult to comprehend these frequencies, except that one number is higher or lower than another number. When trying to make sense of these numbers it helps to establish the presence of any relationships between or among these frequencies used by Rife.

While it is interesting to note that all of Rife’s frequencies, as measured in Hertz, if converted to sound, are outside the audible range of the human ear, it is curious to find that with the two exceptions noted, all are evenly divisible by eight.

Strings and Things

The physics behind the frequency created by vibrating objects (waves), whether they be electricity, sound or water is the same. So, as we begin the discussion of frequency, keep in mind we are simply talking about vibrating strings, like a guitar or piano. Specifically, frequency is inversely proportional to the length of the string. This means if one shortens the length of a string by half, the frequency will double. It turns out that the doubled frequency is an octave (8) higher.

Tuning Forks

And, speaking of eight, in music there are eight distinct steps in one octave, the first and last being the harmonic. C_1 DEFGABC₂ where the frequency of C₂ is twice that of C₁. C₂ is a harmonic of C₁ and vice versa.

In our office we have four tuning forks. Two are labeled “256C” one is labeled “512C” and the other is labeled “440A”. In the “octave” above, 256C is represented as C₁ and 512C is represented by C₂. If struck and held to the ear, each produce a sound. The 512C produces a tone twice as high as the 256C (256 x 2 = 512). The 440A produces a sound somewhere between the 256C and 512C.

If one of the 256C's is struck and held near the other three, the silent 256C and the 512C began to vibrate and produce their respective tones, but the 440A remains silent. The struck fork acts as a transmitter, and the other three act as antennae, two of the antennae (256C and 512C) are in tune and receive and respond with sound. The other (440A) is not in tune and cannot receive and respond with a tone. If the 440A and the 256C are struck and held together near the ear, an irritating disharmony is created.

220.00 A
233.08 A#
246.94 B
261.63 C (Middle)
277.18 C#
293.66 D
311.13 D#
329.63 E
349.23 F
369.99 F#
392.00 G
415.30 G#
440.00 A
466.16 A#
493.88 B
523.25 C
554.37 C#
587.33 D
622.25 D#
659.26 E
698.46 F
739.99 F#
783.99 G
830.61 G#
880.00 A

Octaves and Harmonics

Setting a Standard by which Comparisons May be Made

By convention, man has chosen middle A (A_3) on the standard piano forte keyboard to be exactly 440 Hz. This means that the A, one octave higher (A_4) will have the frequency of 880 Hz and one octave lower (A_2), the A will have the frequency of 220 Hz. Again, this is by convention...man's design. Also please note that octaves are not linear but geometric progressions, that is, each higher octave vibrates twice as fast as the previous octave.

Thus there are Rife frequencies and octaves of Rife frequencies. There are also harmonics of Rife Frequencies.

Frequency Relationships

Rife frequencies have undergone modification towards the audible range (20 - 20,000 Hz) by two individuals, Phillip Hoyland and John Crane.

Carcinoma (epithelial derived tissue)

Rife's MOR for Bacillus X was 1,604,000 Hz and gave the 100% cure for carcinoma. Hoyland claimed success at 21,275 Hz and Crane, who took Hoyland's frequencies and divided them by 10 (!) claimed the MOR for Bacillus X to be 2128 Hz. Now, lets see if these changed frequencies are harmonic octaves of Rife's 1,604,000 Hz.

The following numbers expressed in Hz are the harmonic octaves of Rife's MOR for Bacillus X:

1,604,000
802,000
401,000
200,500
100,250
50,125
25,063
12,531
6,266
3,133
1,566
783

Harmonic Comparison

Please take note, in the following discussion, it is not being claimed that Rife's original MORs are in any way related to a note on a keyboard. What is attempted here is a reduction by octaves to a common denominator, something we are familiar with on an everyday basis.

The middle scale on the standard keyboard ranges from A₃ (440 Hz) to A₄ (880 Hz). Now, 783 Hz listed above may be played on a standard keyboard and corresponds (within one Hz) with the note of G₃ (784 Hz) which is exactly middle G. Thus middle G is a harmonic of Rife's MOR for Bacillus X.

Looking at Hoyland's harmonics of his MOR for Bacillus X:

21,275
10,638
5,319
2,659
1,330
665

Referring back to the middle scale, one can see that 665 Hz is between E₃ (659 Hz) and F₃ (698 Hz) and does not correspond to any harmonic of Rife's MOR for Bacillus X..

Looking at Crane's harmonics of his MOR for Bacillus X:

2,128
1,064
532

The harmonic of Crane's MOR for Bacillus X, 532 Hz, is between C₃ (523 Hz) and C₃# (554 Hz) and does not correspond to any harmonic of Rife's MOR for Bacillus X.

The bottom line is this, Hoyland and Crane fundamentally altered Rife's MOR for carcinoma. Neither duplicate Rife's original frequency of 1,604,000 Hz nor its natural harmonic.

This has become a problem because one need only to search the Internet to find hundreds of claimed frequencies treating almost any cancerous condition. Here is a short survey:

Cancer (BASIC SET. Also see rotation of General sets 1, 2, and 3 as Basic sets. All others below are SECONDARY but may provide useful additional frequencies depending on type. Also add ones determined from scans. See Electroherbalism Cancer Regimen for more information.) 2128, 2008, 2184, 2084, 2048, 2720, 2452, 6064, 120, 524, 854, 800, 728, 784, 880, 666, 464, 5000, 3176, 10000, 3040
Cancer (experimental additional frequencies to basic sets) - 55.56, 6.8, 440, 778, 1050, 1550, 2180, 663, 3672
Cancer cells, conidium head - 728
Cancer maintenance secondary - 120, 250, 428, 465, 600, 626, 650, 661, 664, 667, 690, 728, 776, 784, 800, 802, 832, 880, 1489, 1550, 1600, 1865, 2000, 2012, 2100, 2170, 2490, 2730 for 1 min.
Cancer not killed by 2008/2128 - 2180, 2182, 2184
Cancer, adenocarcinoma, esophageal - 47, 2182, 2219, 832, 2084, 2127, 2160, 2452, 2876
Cancer, adenoma - 433
Cancer, astrocytoma (common tumor of brain and central nervous system) - 857, 9.19, 8.25, 7.69, 2170, 543, 641, 2127, 880, 690, 666
Cancer, bladder secondary (see Parasites, schistosoma)
Cancer, breast (1) - 2100, 2104, 2116, 2120, 866, 2128, 676, 2152, 166, 2182, 732, 3072, 2150, 1550, 2189, 2112, 3072, 2008, 120
Cancer, breast (1) secondary - 422, 942, 4412, 1862, 808, 1552, 728, 2720, 1234, 690, 2160, 2136, 477, 28, 317, 96, 3176, 96, 3176, 3040, 2145, 2048, 1830, 2112
Cancer, breast (2) - 3672, 2008, 2063, 2103, 2128, 2146, 2133, 2162, 2173, 2180, 2189, 2208, 2263, 2289, 2333, 1865, 444, 125, 95, 72, 48
Cancer, breast (3) - 656, 127, 1582, 478, 982, 2134, 2120, 9000, 9999, 304
Cancer, breast (4) - 2128 for 56 mins, 33, 1131 for 1 min
Cancer, BX virus - 2128, 3713, 2876, 11780000
Cancer, BY virus - 2008, 3524
Cancer, carcinoma, basal cell skin - 2116 for 30 min, 760, 2280 for 5 min
Cancer, carcinoma, bronchial - 462, 776, 852, 1582, 2104, 2144, 2184, 3672
Cancer, carcinoma, colon - 656
Cancer, carcinoma, larynx - 327, 524, 731, 1133
Cancer, carcinoma, liver (1) - 393, 479, 520, 734, 3130
Cancer, carcinoma, liver secondary (see Hepatitis B and Parasites, fluke, liver)
Cancer, carcinoma, liver, fermentative - 214
Cancer, carcinoma, scan - 728, 690, 2008, 2104, 2112, 2120, 2128, 2136, 2144, 2152, 2160, 2168, 2176, 2184, 2192, 2200, 2217, 5000, 9999, 304
Cancer, carcinoma, uterine, fermentative - 127
Cancer, cervical secondary (see Pappiloma virus)
Cancer, droglioma (see also Cancer, glioma, astrocytoma) - 853
Cancer, fibrosarcoma (malignancy containing connective tissue and developing rapidly from small bumps on the skin) - 1744
Cancer, fibrous tumor secondary - 1340
Cancer, gastric, adenocarcinoma - 676
Cancer, general, set 1 - 728, 784, 880, 464, 666, 2720, 800, 120, 2084, 2184, 2050, 524, 2452, 854, 2008, 2128, 5000, 3176, 9999, 304
Cancer, general, set 2 - 727, 786, 880, 465, 1552, 802, 1862, 2182, 20, 64, 72, 96, 125, 2450, 2489, 2048, 2008, 2127, 3176, 3040, 10000, 3176, 304
Cancer, general, set 3 - 728, 943, 414, 866, 886, 732, 676, 690, 776, 240, 650, 442, 2180, 2454, 1865, 523, 128, 2128, 2008, 2049, 10000, 3176, 304
Cancer, glioblastoma - 720, 2008, 2128, 2180, 2182, 728, 832, 800, 664, 20, 855, 543, 641, 857
Cancer, glioblastoma tremor - 463, 466
Cancer, gliomas (largest group of brain cancers) - 543, 641, 857
Cancer, Hodgkin's disease (a form of malignancy characterized by enlargement of the lymph nodes, spleen, and lymph tissue and often includes weight loss, fever, night sweats, and anemia. Also called lymphogranuloma. Also see Chlamydia pneumoniae.) - 552, 1522
Cancer, Kaposi's sarcoma - 249, 418, 647
Cancer, leukemia - 2127, 2008, 880, 787, 727, 690, 666, 2217
Cancer, leukemia "hairy cell" (typified by abnormal blood cells & shortage of others) - 122, 622, 932, 5122, 488, 781
Cancer, leukemia myeloid (characterized by rapid growth of incompletely-formed white blood cells) - 422, 822
Cancer, leukemia, feline (cat) - 424, 830, 901, 918
Cancer, leukemia, lymphatic - 478, 833
Cancer, leukemia, T-cell - 222, 262, 822, 3042, 3734
Cancer, liver (see Cancer, carcinoma, liver)
Cancer, liver secondary (see Hepatitis B and Parasites, fluke, liver)
Cancer, lung (see Cancer, carcinoma, bronchial)
Cancer, lymphogranuloma, lymphoma (see Hodgkin's disease)
Cancer, lymphogranuloma venereum secondary (see Chlamydia trachomatis)
Cancer, lymphosarcoma - 482
Cancer, melanoma metastasis - 979
Cancer, multiple myeloma secondary (see Cancer, Kaposi's sarcoma)
Cancer, mycosis fungoides (a form of skin cancer resembling eczema) - 852
Cancer, nasopharyngeal secondary (see EBV)
Cancer, pain - 3000, 95, 2127, 2008, 727, 690, 666
Cancer, plasmacytoma (plasma-cell tumor) - 475
Cancer, prostate (also see Prostate adenominum and Prostate hyperplasia) - 20, 60, 72, 95, 125, 666, 727, 787, 790, 766, 800, 920, 1998, 1875, 442, 2008, 2127, 2128, 2217, 2720, 2050, 2250, 5000, 2130, 2120, 690, 304
Cancer, prostate (1) - 2128, 2125, 2131, 2140 for 3 to 6 min, 2145, 666, 3672 for 3 to 4 min
Cancer, prostate (Vega result 1) - 854, 1840, 2145, 2288
Cancer, rhabdomyosarcoma (1) - 2000, 2005, 2008, 2016, 2048, 2084, 2093, 6024, 2100, 2128, 2127, 2184, 2217, 6384, 728, 784, 880, 464
Cancer, rhabdomyosarcoma, embryonal (Vega result 1) - 2586, 5476, 4445
Cancer, rhabdomyosarcoma, embryonal - 2004, 2008, 2016, 2032, 2040, 2060, 2586, 6024
Cancer, sarcoma general - 2008, 3524
Cancer, skin (see Cancer, carcinoma, basal cell skin and specific forms)
Cancer, stomach secondary (see Heliobacter pylori)
Cancer, tertiary - 20, 421, 965, 50, 383

None of these frequencies are related to Rife's original. Rife found one MOR...it killed all carcinoma. Why the need for so many different frequencies?

How these frequencies were derived is anyone's guess but if these are founded in the audio range (20 - 20,000 Hz), it would be within logic that they must be at least a harmonic of Rife's MOR for Bacillus X.

Furthermore, many of the other frequencies dealing with diseases other than cancer cannot be based on Rife's original work. I have counted over 40 separate frequencies claiming to "treat" Lyme, a disease that did not even exist in man prior to 1975!

Again, considering the audio frequencies, I asked a friend at Texas A&M who is an authority on the subject. He had this to say:

Remember that in theory the audio bombardment through (steel) tubes might be good on the human tissue but technically it takes lots of power to generate much in the way of useful audio bombardment, particularly at the lower frequencies where audio tubes would be resonant. I would guess that the theory is basically good but it's real result is probably the placebo effect in healing.Mike.

I have a better than average audio range resonator. It comes from a reputable company and it is well made. It is a quality instrument and it operates, that is, it produces frequencies as claimed and proven by a digital frequency counter. I measured the peak voltage AC and DC and found it to be less than 20v AC and less than 10v DC. The current produced was less than 10 mA (milliamps) AC and less than 5 mA DC. Mike indicates that much more power would have to be introduced to cause effective bombardment of the body with audio frequency. Well, how much power would be required through the steel tubes or pads?

The following is from the Electrical Injuries section of the Merck Manual of Medical Information: Home Edition. Pennsylvania: Merck, 1997. "At currents as low as 60 to 100 milliamperes (0.06 - 0.1 A), low-voltage (110-220 volts), 60-hertz alternating current traveling through the chest for a split second can cause life-threatening irregular heart rhythms. About 300-500 milliamperes (0.3 - 0.5 A) of direct current is needed to have the same effect."

But death, according to Zitzewitz, Neff and Merrill in *Physics, Principles and Problems*. New York: Glencoe McGraw-Hill, 1995, state that "the damage caused by electric shock depends on the current flowing through the body -- 1 mA can be felt; 5 mA is painful. Above 15 mA, a person loses muscle control, and 70 mA can be fatal."

As an extreme reference of electricity applied to the human body is that of the old electric chair. It was reported by Laurence in *A History of Capital Punishment*, that the use of 2000-2200 volts at 7-12 amperes for 60-90 seconds was usually adequate.

Relating frequency to the power to penetrate the body, we have seen that the Rife MORs were on the order of a thousand times the audio frequency used by Hoyland and Crane. Working the math, it would require voltages and amperages far in excess of those that would be considered safe for human use.

As you can see, my resonator is well below these current and voltages and would generally be regarded as safe for use in direct patient contact. But the question remains as to its

effectiveness at these low power outputs. Perhaps, this is why it and all other resonators are marked "FOR EXPERIMENTAL USE ONLY" or "INVESTIGATIONAL DEVICE."

The skin is, in effect, a giant capacitor. It can hold and transfer a charge. Witness those cold days when you scrub your shoes across a rug and touch a door knob. The skin will hold many thousands of DC volts, but little current. When applying these low voltages and currents to the skin, the electricity tends to take the path of least resistance: the charge remains on the surface of the skin and when holding the resonators it transfers that charge from one resonator tube to the other, regardless of whether AC or DC current is used. It requires more voltage and current to treat below the surface. This is precisely why Rife set his oscillations at such a high rate (1,604,000 Hz) and broadcast them through an antenna placed near the patient.

The audio approach between hand held electrodes is at best inefficient when compared to Rife's application, and at worst not effective. Yet, there is too much anecdotal evidence to the contrary. For a moment, lets discuss the audio approach as it, too, may still have some merit.

Have you ever been waiting for a green light when someone in a low-riding older automobile with darkened windows pulls up next to you; the deep rhythmic beat of the bass guitar and drums rocking through your body and shaking your car? Perhaps one could imagine a new trend in rock and roll music where the majority of the notes are "middle G" in the audible range played at a very intense volume to induce healing of those in the audience who have cancer! I would recommend earplugs!

The reason Rife's instruments weren't dangerous was because the high voltage and current were never applied directly to the patient, but to a nearby antenna. The voltage and current were transformed into waves of moderate energy, less than 400 watts at the source. These waves emanated from the antenna to bombard the patient with frequencies set to Rife's MORs for the organism to be treated.

Rife commented on the range of frequencies of his MORs.

Rife: "Some of them are in the visible band, or I mean not only the visible band but, uh, band of frequencies audible to the human ear. Some of them are way beyond either way. They run through a very, very large gamut. Some of them are very, very broad, long. Some of them are...not extremely short. There are none of them what we call our ultra short wave that I have found yet. Well there's many of them...we would, uh, classify in the ultrasonic band because they're not visible [sic] with the human ear. They're way beyond you know. And some of them are even in the broadcast band. Your cancer is very high. You can't hear it, the oscillation. But now you take your T.B. [Tuberculosis]. Now that's down. A little more you see...if you don't have an absolute coordinative resonance, you have nothing. One tenth of one meter off and you have nothing. Its got to be absolutely correct for that individual organism. Its got to be precise...the virus of cancer has a certain frequency. And it has to be there, otherwise if it's a little one way or the other, no good, no good for nothing." (John Marsh Rife CDs - CD 5 track 2, CD 6 track 2 and CD 7 track 1)

Rife used alternating current (AC) at high voltages and high current which were directed to a tube antenna made of quartz or Pyrex glass filled with a noble gas (Helium) with two directional electrodes inside. This Beam Ray tube emitted very high frequencies in the radio wave spectrum to bombard and penetrate the body. Physics dictates that this tube antenna needed to be close to the body to be effective thus ruling out all modern "Beam Ray" devices used to treat a room-full of people.

It is important to remember that it was Hoyland, not Rife, who introduced the typical steel type tubes or pads as antennae, using lower frequency and lower voltage and current that was directly applied to the patient's body. Considering that audio frequency range is the basis of all modern steel tube or pad type antennae resonators, the published frequencies do not match the harmonics according to Rife, and the myriad of additional frequencies have no basis in scientific research whatsoever. Because of this, and with the understanding that testimonials are subjective opinions and not objective fact, one must consider that the actual effectiveness of modern audio frequency devices may not exist outside of the placebo effect.

There is no doubt that Rife was successful in treating cancer using his 1934 Beam Ray machine. There is no doubt that frequency plays an important role in health and disease. But, there is no doubt that modern "copies" of Rife's invention are neither using the original MORs nor Rife's proven technique of bombarding the body with high frequency waves as a method of treating carcinoma.

Douglas

DRAFT