Kapitel #15

John Marshs 1970er Beam Ray Replik Rife Machine

1) Habe eine Strahlenröhre verwendet.

2) Die Trägerfrequenz betrug 4.150 MHz.

3) Modulierte Sinus- und Rechteckwellen-Audiofrequenzen auf die Sinuswellen-Trägerfrequenz.

4) Der Stromverbrauch betrug ca. 460 Watt. Leistung an die Strahlenröhre ca. 50 Watt.

John Marsh ließ diese Replik der Beam Ray Clinical Rife Machine Model #JLMSQ-1A im November 1971 für 3.800 US-Dollar bauen. Sie wurde am 1. Januar 1972 fertiggestellt. Er und John Crane hatten eine gerichtliche Anordnung, keinen Umgang miteinander zu haben. Aufgrund dieses Gerichtsbeschlusses gingen sie getrennte Wege, kommunizierten aber oft durch Telefonanrufe und Briefe. John Crane blieb in Kalifornien und John Marsh ging nach Colorado, ließ sich aber schließlich bis zu seinem Tod im Jahr 1987 in SLC, Utah, nieder. Alle seine Rife-Maschinen und Rife-Informationen wurden vor seinem Tod an seine Krankenschwester weitergegeben. Seine Ausrüstung und Dokumente wurden 2012 von ihr beschafft. Seitdem wir dieses Instrument erhalten konnten, konnten wir es richtig datieren und bessere Fotos vom gesamten Instrument machen. Einige dieser Informationen und neue Fotos sind unten zu sehen und nun Teil dieses Berichts.

Das Foto unten zeigt die beiden Chassis, die durch Drähte verbunden waren, wobei ihre Abdeckungen entfernt wurden. Dieses Instrument war eine Mischung aus Röhrentechnologie und modernen Solid-State-Komponenten.

Auf dem nächsten Foto, das unten zu sehen ist, können Sie sehen, dass das Gerät sowohl Sinus- als auch Rechteckwellen-Audiofrequenzen ausgeben kann. Der Frequenzbereich des Audio-Oszillators reichte von 20 Hertz bis 20.000 Hertz über drei Bänder. John Marsh wollte ursprünglich einen Frequenzbereich von 0 bis 100.000 Hertz haben. Es hatte grobe und feine Einstellungen für die Audiofrequenzen. Über diesen Knöpfen sehen wir das digitale Anzeigefenster der Frequenzen. John Marsh hat einen modernen Solid-State-Audio-Oszillator mit digitaler Anzeige eingebaut. Rechts neben der Digitalanzeige sehen wir einen Timer mit einer Reichweite von bis zu 5 Minuten.

Rechts neben diesem Timer, der auf dem Foto unten zu sehen ist, sehen wir den Leistungsmesser, auf dem "Stehwellenverhältnis" und "Prozentuale reflektierte Leistung" steht. Der Knopf unterhalb des Messgeräts diente zum Einstellen des Stehwellenverhältnisses. Unterhalb des Knopfes befindet sich die Stelle, an der die Strahlenröhre angeschlossen wurde. John Marsh verwendete den CB-Antennenanschluss anstelle der Bananenklinkenmethode, die in der ursprünglichen AZ-58 von 1953 verwendet wurde.

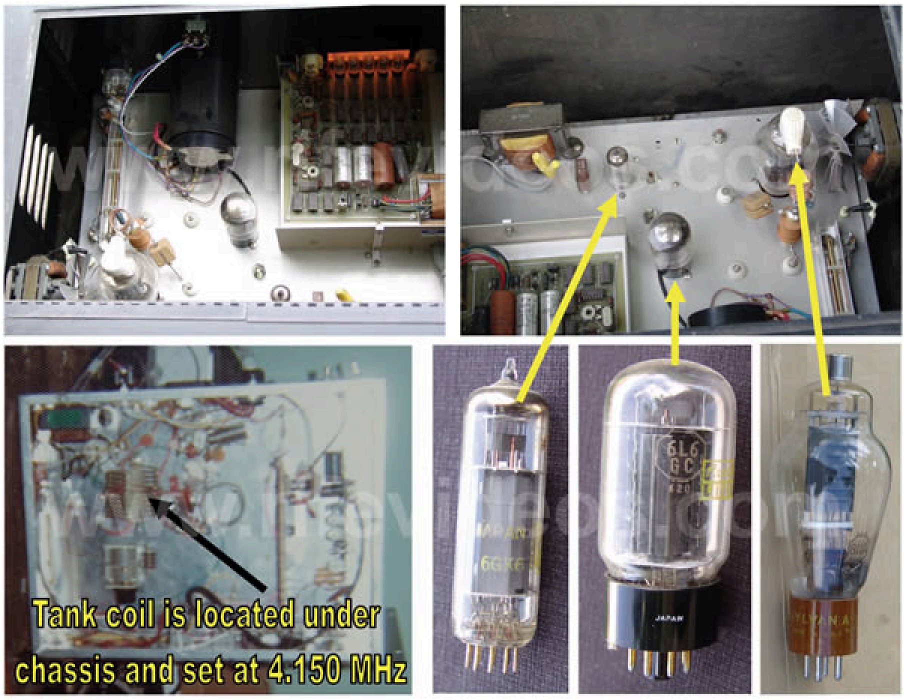
Auf dem nächsten Foto, das unten zu sehen ist, können Sie immer noch eine Nahaufnahme des John Marsh-Kreppbandes sehen, auf dem die Frequenzen der 1950er Jahre geschrieben sind.

Das nächste Foto, das unten zu sehen ist, zeigt eine Draufsicht auf das Gehäuse mit entferntem Gehäuse. Man sieht deutlich, dass John Marsh eine Mischung aus alter Röhrentechnik und Solid-State-Elektronik verwendet hat.

Die nächsten vier Fotos, die unten zu sehen sind, sind Nahaufnahmen der Oberseite des Chassis. Das erste Foto ist der eingebaute Timer. Das zweite Foto zeigt den Solid-State-Audio-Oszillator. Das dritte Foto zeigt die 811a-Vakuumröhre mit Hauptausgangsleistung. Die vierte zeigt den Transformator, der die Audio-Oszillatorplatine mit Strom versorgt.

Das nächste Foto, das unten zu sehen ist, ist eine Rückansicht des Instruments. Das Messgerät ist ein DC-Milliamperemeter. Die Steckdose rechts neben dem Zähler dient zum Anschluss des kleineren Kastens, in dem sich die Leistungstransformatoren befinden.

In den nächsten vier Fotos, die unten zu sehen sind, erhalten Sie einen Einblick in die verschiedenen Komponenten. Das erste Foto mit der Bezeichnung #1 zeigt die Innenseite des Instruments und zeigt den Audio-Oszillator. Links neben dem Audio-Oszillator befindet sich der Fünf-Minuten-Timer. Foto #2 schaut auf die Rückseite des Instruments und zeigt die drei Vakuumröhren. Die drei Fotos von Vakuumröhren mit der Bezeichnung #4, #5 und #6 zeigen eine klare Sicht auf die Vakuumröhren 811a, 6L6GC und 6GK6 und deren Platzierung im Gehäuse. Foto #3 ist eines der Originalfotos von John Marsh aus dem Jahr 1970, das die Unterseite des Chassis zeigt, wo man die HF-Tankspule sehen kann, die bei 4.150 MHz (4.150.000 Hertz) befestigt war.



Das nächste Foto unten zeigt eine Seitenansicht der 811a-Röhre. Man sieht auch die HF-Drossel direkt vor der 811a-Röhre mit einer kleinen Spule darauf. Diese Spule trug dazu bei, parasitäre Schwingungen zu eliminieren.

Drei der nächsten vier Fotos, die unten zu sehen sind, sind die neuen Fotos, die von der Unterseite des Chassis aufgenommen wurden. Das erste Foto war eines der drei Bilder, die wir von der Unterseite des Chassis haben. Dieses Foto war nicht sehr detailliert und wurde 1971 aufgenommen, als das Instrument gebaut wurde. Auf dem zweiten Foto (neue, klarere Fotos) ist die größere Spule die HF-Tankspule, die auf 4.150 MHz eingestellt wurde. Der variable Kondensator mit dem schwarzen Knopf wurde verwendet, um die Trägerfrequenz auf 4.150 MHz abzustimmen. Das dritte und vierte Foto sind aus verschiedenen Winkeln aufgenommen, so dass Sie die Komponenten sehen können.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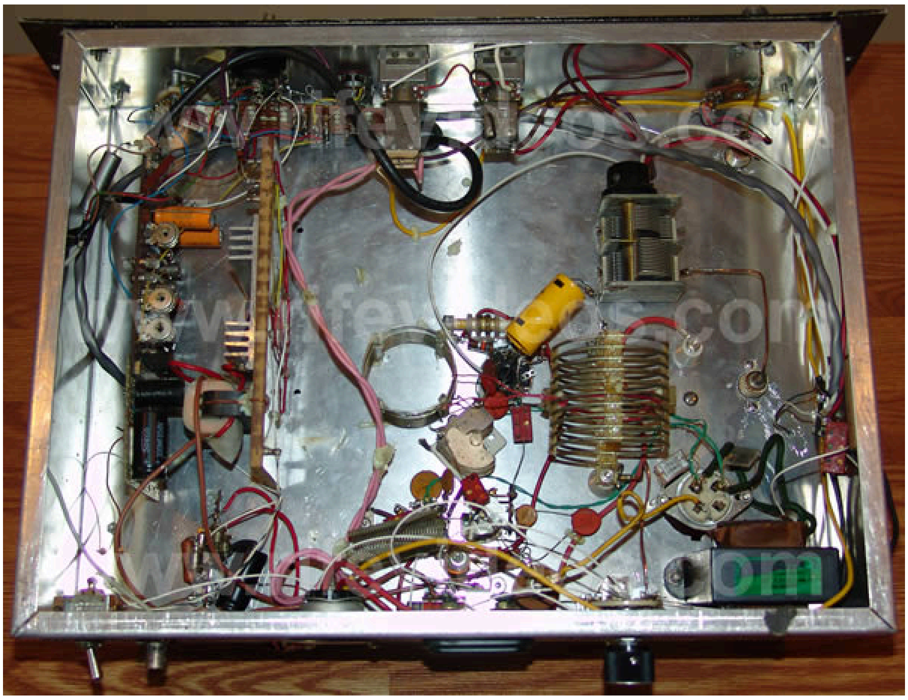
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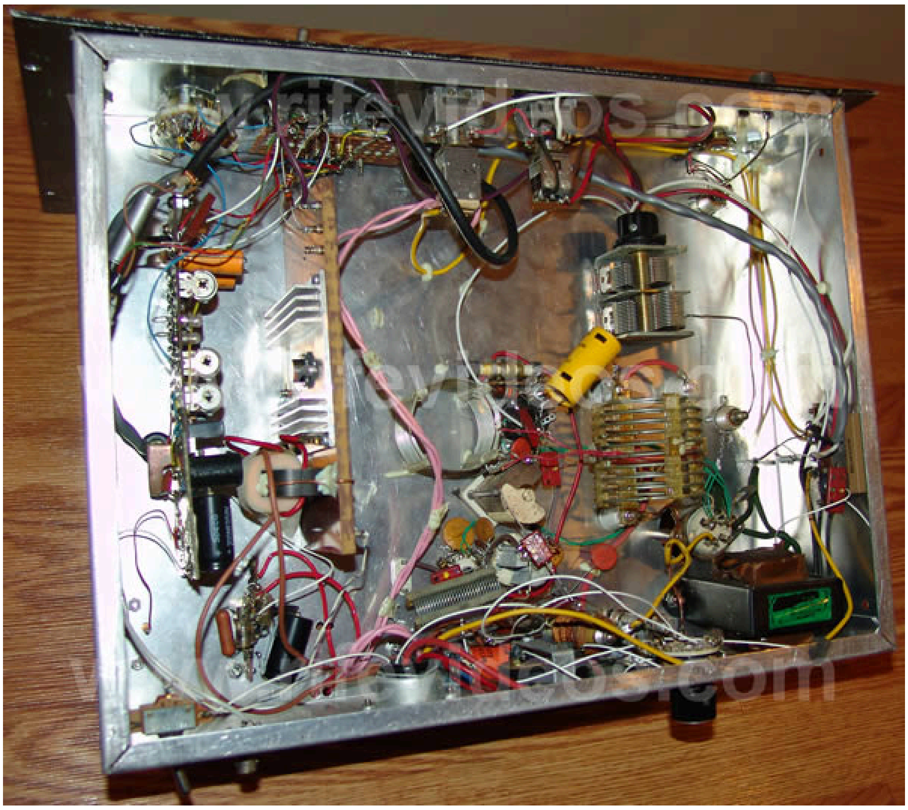
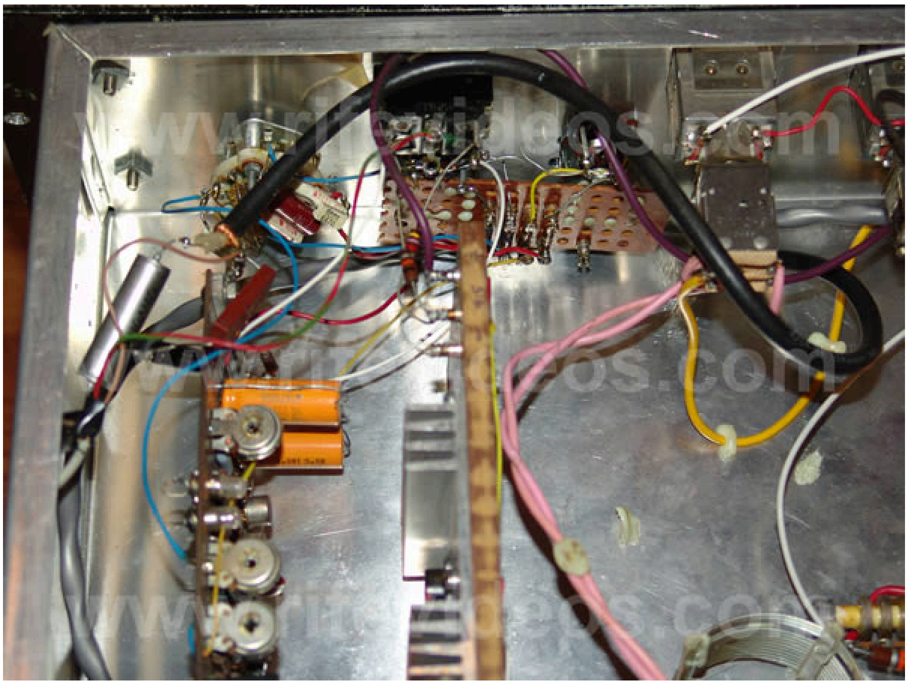


The next four photos, shown below, are up-close photos of the underside of the chassis showing the various components used to build this instrument.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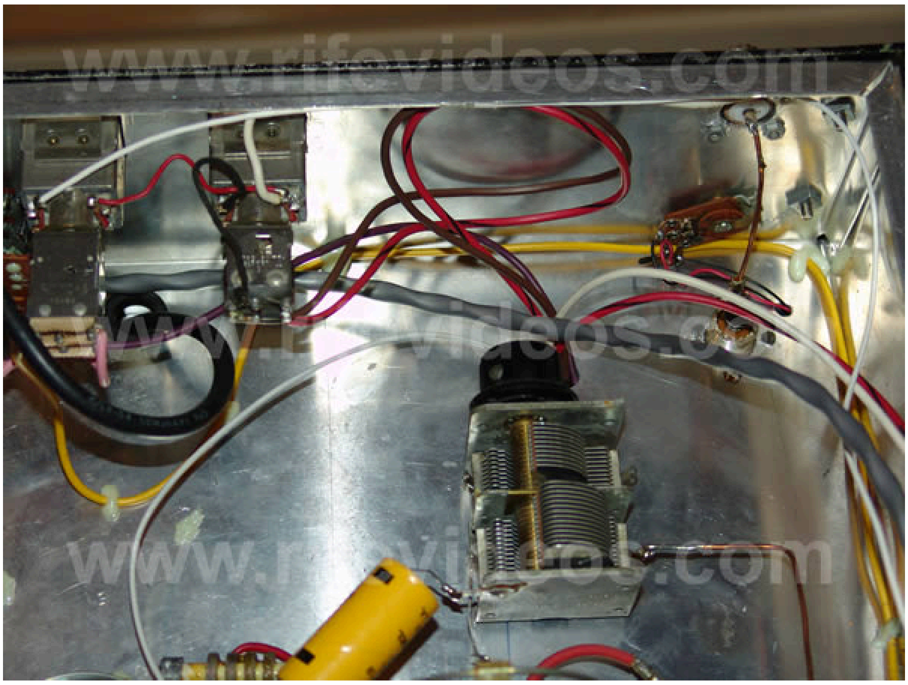
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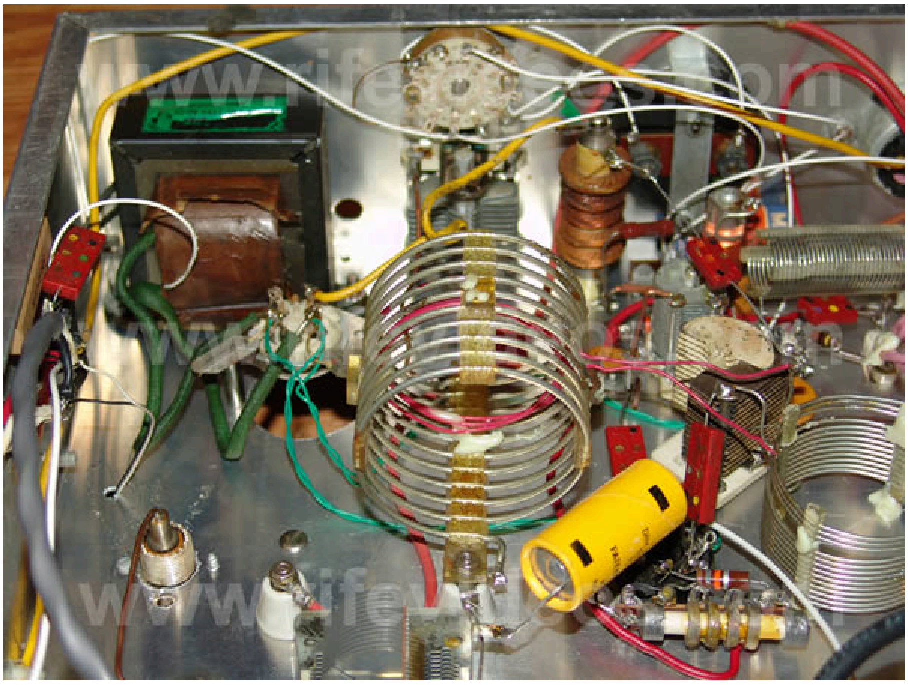
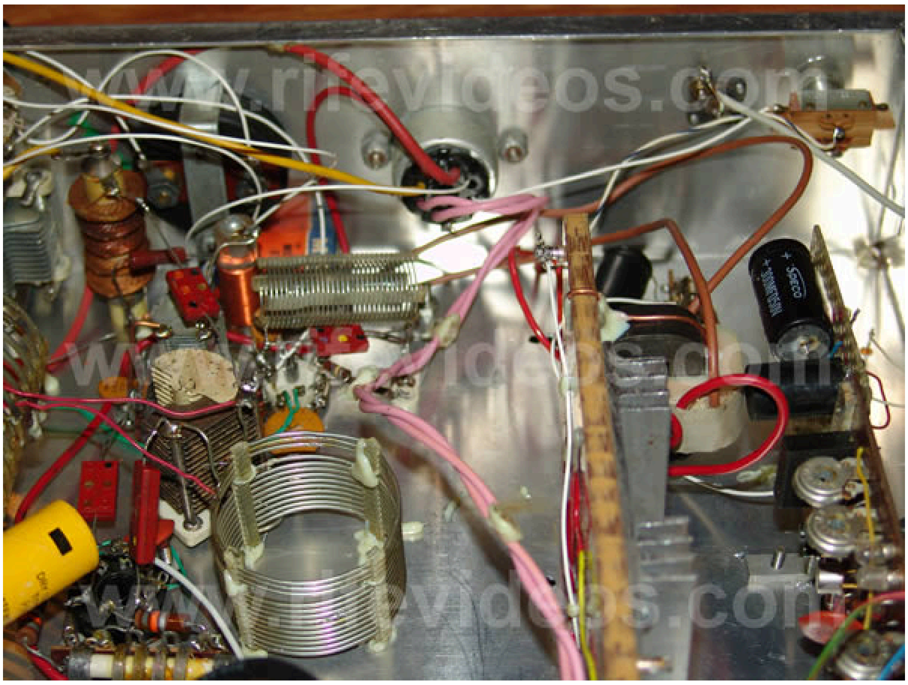
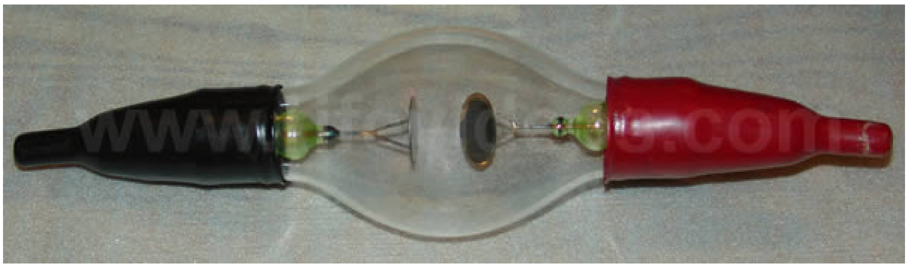




The next two photos, shown below are of the inside of the small case. It contained almost all the transformers. The standard Beam Ray Rife Machine had two shelves in one case for components. The AZ-58 combined everything into one case but for some reason, John Marsh used two cases to hold the components.

The next five photos, shown below, are of this instrument. The first four are photos of the instrument being used in a doctor's office back in 1972. The last photo is this instrument at John Marsh's home.

The photo below is the ray tube that was used with this instrument. The ray tube still worked when we tested it.



John Marsh's instrument, like the AZ-58, was a more modern replica version of the original Beam Ray Clinical Rife Machine. The carrier frequency that John Marsh chose to use with this instrument again clearly shows he did not understand the importance of the RF carrier frequency. He changed it from the 1953 AZ-58's 4.68 MHz to 4.150 MHz. The 4.150 MHz RF carrier frequency is probably one of the worst carrier frequencies he could have chosen using the AZ-58 low audio frequencies for the sideband method. In fact, it would not be a good carrier for the higher audio frequencies either. We will explain again how to determine the best RF carrier frequencies to use in an instrument.

The method Philip Hoyland used to determine the best RF carrier frequency to use was by doing multiples of the BY (Sarcoma 1,529,520 Hertz) and the BX (Carcinoma 1,607,450 Hertz) frequencies. Logically, multiples of these frequencies are the best RF carrier frequencies to use because they were Dr. Rife's highest M.O.R.

frequencies that he found. If you multiply the BY frequency by two you get 3,059,040 Hertz and if you multiply the BX frequency by two you get 3,214,900. So an RF carrier frequency in the 3,100,000 to 3,300,000 Hertz range would work well. Philip Hoyland used 3,300,000 Hertz. The next best range would be to multiply these two frequencies by a factor of three. The BY multiplied by three gives you 4,588,560 Hertz and the BX multiplied by three gives you 4,822,350 Hertz. So a carrier frequency in the 4,600,000 to 4,700,000 Hertz range would be the next best RF carrier frequency to use in an instrument. So you can see by the math that 4,150,000 Hertz would not be a good carrier frequency to use if you were going to use the sideband method that Philip Hoyland used when building the Rife Ray #5 or Beam Ray Clinical instrument. The RF carrier frequency should always be determined by multiples of the highest frequencies that Dr. Rife found for the various organisms. The 1953 AZ-58 had an RF carrier frequency of 4,680,000 Hertz. This carrier frequency would have worked very well had they understood the sideband method Philip Hoyland used. Since they lowered the audio frequencies instead of recalculating them to work on the sideband method then this also again reveals that they did not understand how Philip Hoyland's instrument really worked.

With the above understanding, it is easy to see that the only reason you would use a 4.150 MHz RF carrier frequency is if you did not care what RF carrier frequency you used. The fact that they didn't really care what RF carrier frequency they used is without question since both John Marsh and John Crane have said in several documents and on audiotapes that the audio frequencies were the M.O.R. frequencies. The whole concept of using the sideband spacing method is to choose a carrier frequency that would work the best with all of the Rife Ray #4 higher frequency harmonics. Had John Marsh really understood the significance of the RF carrier frequency he would have chosen a different one. But just like the 1953 AZ-58 they changed it and relied on the square wave audio frequency harmonics rather than the sideband spacing method used in the original Beam Ray Clinical instrument. The Aubrey Scoon Beam Ray Clinical instrument replica was working on the sideband spacing method because the audio frequencies used with it were high enough to make the number of sideband harmonics reasonably low. So far Aubrey Scoon's instrument is the only instrument that we have seen, except for the original Beam Ray Clinical Rife Machine, which worked properly on the sideband spacing method. It is clear that the 1953 AZ-58 was not working fully on the sideband principle even though it could have. It appears that just by chance or accident some of the frequencies, like the BX frequency, worked because the RF carrier frequency was set at about 3.2 MHz by Dr. Stafford. Just the fact that they lowered the audio frequencies by a factor of 10 and then depended solely on square wave audio frequencies showed they didn’t understand Philip Hoyland’s sideband method. Had Philip Hoyland revealed how his Beam Ray Clinical Rife Machine worked a lot of confusion could have been avoided. This machine of John Marsh's could have easily been changed to work properly on the sideband method. The audio frequency range was designed to go to 20,000 Hertz. If the RF carrier frequency was changed to 3,300,000 Hertz, which would have been easy to do, then most of the original audio frequencies could have been used. The only two that would need to have been re-calculated would have been the BX and the BY frequencies. This also would have been easy to do.

In the chart, shown below, the frequencies have been calculated for John Marsh’s instrument. You will notice that the “Original 1950's AZ-58 Frequencies” (low audio frequencies) are almost a perfect match to the “Correct Sideband Frequencies.” But before we place too much significance in this coincidence we need to keep in mind the “Number of Sideband Harmonics.” These numbers are so high that almost any low frequency can be divided into the “Carrier Difference Frequency” and come out within a few Hertz of the “Correct Sideband Frequency.” The audio frequency needs to be a great deal higher in order to make it so the sideband frequencies will work. This is due to the fact that power is lost in sidebands. We must keep in mind that the higher the audio frequency is, the lower the number of sidebands that will be created and the better they will work. So these low audio frequencies in the chart below are too low to work with an RF carrier frequency of 4.150 MHz. In fact, they would be too low to work even if they were used with a 3.30 MHz RF carrier frequency as was used in the original Beam Ray Clinical instrument. Using the higher audio frequencies like Philip Hoyland used is the method that worked in the original equipment. If the frequency you want to hit is close to the RF carrier frequency then the lower the audio frequency you can use. But if the frequency is farther away from the carrier frequency then the higher the audio frequency you will need to use in order to make it work properly. Philip Hoyland could have used even higher audio frequencies since his audio oscillator in the original Rife Ray #5 or Beam Ray Clinical instrument would go to a little over 40,000 Hertz. He could have used frequencies up in the 30,000 to 40,000 Hertz range which would have worked with even fewer sidebands. But Philip Hoyland was also trying to hide the method he was using. So Philip Hoyland balanced his frequencies in order to make sure they would work and also not reveal the method he was using. He did accomplish his goal.

If you want a higher resolution copy of this chart click here.

John Marsh's Beam Ray Clinical Instrument Sideband Square Wave Audio Frequencies Based On A 4.150 MHz Carrier							
Organism	Rife Ray #4 Frequencies	Higher Harmonic Frequencies	*Carrier Difference Frequency	1/10 Of A Meter Freq.	Number of Sideband Harmonics	Original 1950's AZ-58 Frequencies	Correct Sideband Frequencies
Actinomycosis or Streptothrix	192,000 Hz	4,032,000 or 21st	118,000 Hz	12 Hz	151	784 Hz	781 Hz
Anthrax	139,200 Hz	4,176,000 or 30th	26,000 Hz	6 Hz	41		634 Hz
B or E Coli Rod	417,000 Hz	4,170,000 or 10th	20,000 Hz	58 Hz	25	800 Hz	800 Hz
B or E Coli Virus	770,000 Hz	3,850,000 or 5th	300,000 Hz	198 Hz	193	1552 Hz	1554 Hz
BX Virus Carcinoma	1,604,000 Hz	4,812,000 or 3rd	662,000 Hz	858 Hz	311	2128 Hz	2129 Hz
BY Sarcoma	?1,530,000 Hz	4,590,000 or 3rd	440,000 Hz	780 Hz	219	2008 Hz	2009 Hz
Gonorrhea	233,000 Hz	4,194,000 or 18th	44,000 Hz	18 Hz	62	712 Hz	710 Hz
Pneumonia or Spinal Meningitis	427,000 Hz	4,270,000 or 10th	120,000 Hz	61 Hz	155	776 Hz	774 Hz
Staphylococcus Pyogenes Aureus	478,000 Hz	4,302,000 or 10th	152,000 Hz	76 Hz	209	727 Hz	727 Hz
Streptococcus Pyogenes	720,000 Hz	4,320,000 or 6th	170,000 Hz	173 Hz	193	880 Hz	880 Hz
Syphilis	789,000 Hz	3,945,000 or 5th	205,000 Hz	207 Hz	311	660Hz	659 Hz
Tetanus	234,000 Hz	4,212,000 18th	62,000 Hz	18 Hz	517	120 Hz	120 Hz
Tuberculosis Rod	369,000 Hz	4,059,000 or 11th	91,000 Hz	45 Hz	113	803 Hz	805 Hz
Tuberculosis Virus	769,000 Hz	3,845,000 or 5th	305,000 Hz	197 Hz	197	1552 Hz	1548 Hz
Typhoid Rod	760,000 Hz	3,800,000 or 5th	350,000 Hz	192 Hz	492	712 Hz	711 Hz
Typhoid Virus	1,445,000 Hz	4,335,000 or 3rd	185,000 Hz	694 Hz	99	1862 Hz	1869 Hz

If you look at the "Number of Sideband Harmonics" it takes to hit the correct Rife Ray #4 "Higher Harmonic Frequencies" you will understand that this instrument could never work on the sideband spacing method using these low audio frequencies. None of the "Number of Sideband Harmonics" is less than 59 sideband steps and the highest is 75. The chance of this working would be almost zero. The best method to use with John Marsh's instrument is the audio frequency square wave harmonic method. This is the method he used with his instrument.

Below in this chart is a list of the higher audio frequencies, 20,000 Hertz or lower, that could be used with John Marsh's instrument and make it work using the harmonic sideband method. Many different audio frequencies could be calculated to work. We did the highest audio frequency for each organism. The BX and the BY frequencies probably would not work since the sidebands would have to go nearly 600,000 Hertz to hit the correct frequency. For this reason, the RF carrier frequency should be changed. The best frequencies would always be the highest audio frequency you could use within the 20,000 Hertz frequency range of the instrument.

John Marsh's Beam Ray Clinical Instrument Higher Sideband Square Wave Audio Frequencies Based On A 4.150 MHz Carrier			
Anthrax	13,000 Hz	Streptococcus	18,889 Hz
B or E Coli Rod	10,000 Hz	Steptothrix	19,667 Hz
B or E Coli Virus	20,000 Hz	Syphilis or Treponema	18,636 Hz
BX Virus Carcinoma	19,471 Hz	Tetanus	15,500 Hz
BY Sarcoma	19,130 Hz	Tuberculosis Rod	18,200 Hz
Gonorrhea	14,667 Hz	Tuberculosis Virus	19,062 Hz
Pneumonia or Spinal Meningitis	17,143 Hz	Typhoid Rod	19,444 Hz
Staphylococcus	19,000 Hz	Typhoid Virus	18,500 Hz

Chapter Summary: The fact that John Marsh built these Beam Ray replica Rife Machines and used different RF carrier frequencies with the same audio frequencies conclusively proves that he never understood how the instrument was really intended to work. This also shows that John Crane didn't really know how the instrument was intended to work either. John Crane was doing the same thing that John Marsh was doing. The fact that Philip Hoyland did not reveal how the Beam Ray Clinical instrument really worked has affected Rife's work in a negative way to this very day.

In chapter 16, we will look at the ray tube instrument that John Marsh built back in the 1980s when he lived in Salt Lake City, Utah.

(To read chapter #16)