

## Energy Pipe Project Update

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An iPhone 5 was used in the following tests with an application that is capable of FFT analysis using swept frequency from 10 Hz to 24 KHz and its output generator is extremely flat. The microphone is also of very high quality that is essentially flat from 10 Hz to 20 KHz and is made especially to interface with the iPhone 5.

The first mast tested is mast 1, which is the original mast that is identical to the type of mast that exhibited high voltage arcing when the large bottom end of the pipe came down on grounded metal flashing surrounding the flat asphalt roof I was standing on. The mast was oriented East-West which was correctly determined when I googled the address and got my bearings correct.

First, a reference plot is made at 33.25 inches of separation and the sound was confined to a wrapping paper cardboard tube of 1 and  $\frac{3}{4}$  inches in diameter. The signal strength of the generator is set to -9.04 decibel output for all tests including the initial reference plot.

The reference plot is shown immediately below.

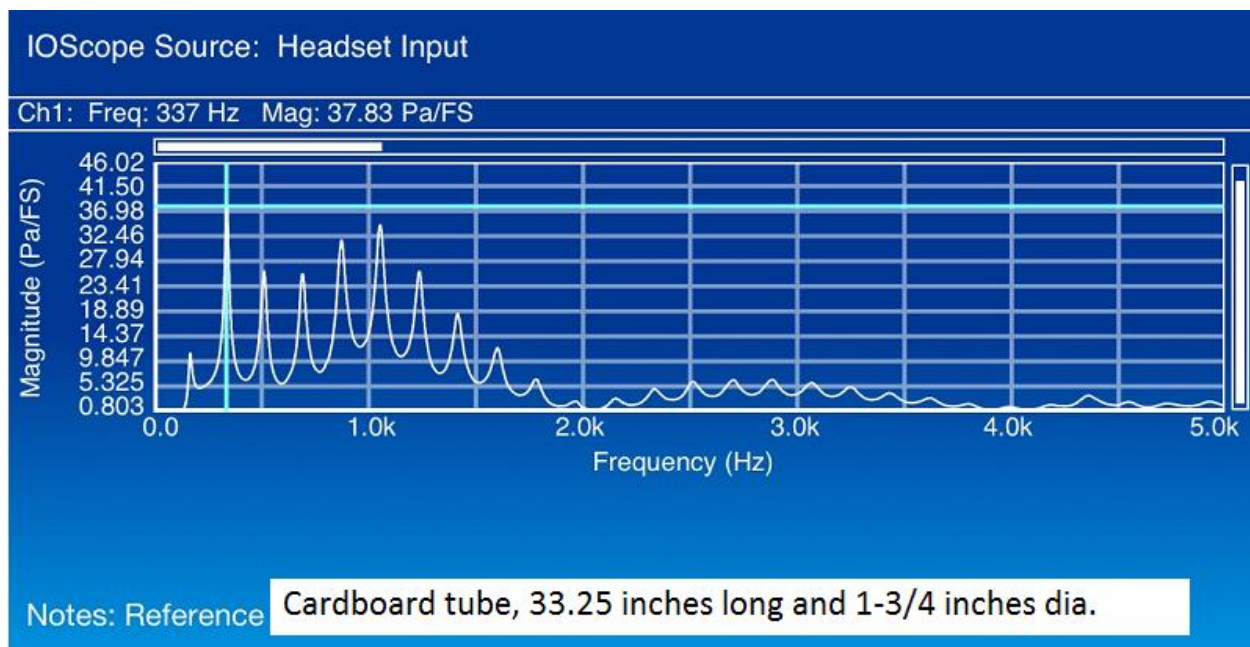


Figure 1

The units vertically are in Pascal over Full Scale which means that the vertical amplitude is automatically scaled so that clipping does not occur during measurement. Since we are working with sound pressure in Pascal units, (newton per meter squared), multiplying the Pascal unit the by velocity of sound, we arrive at the Poynting power vector equivalent, expressed in **watts per meter squared**.

The next plot is for the original mast, (mast #1), and we see that the frequency of maximum amplitude compares closely with the reference signal in figure 1 above.

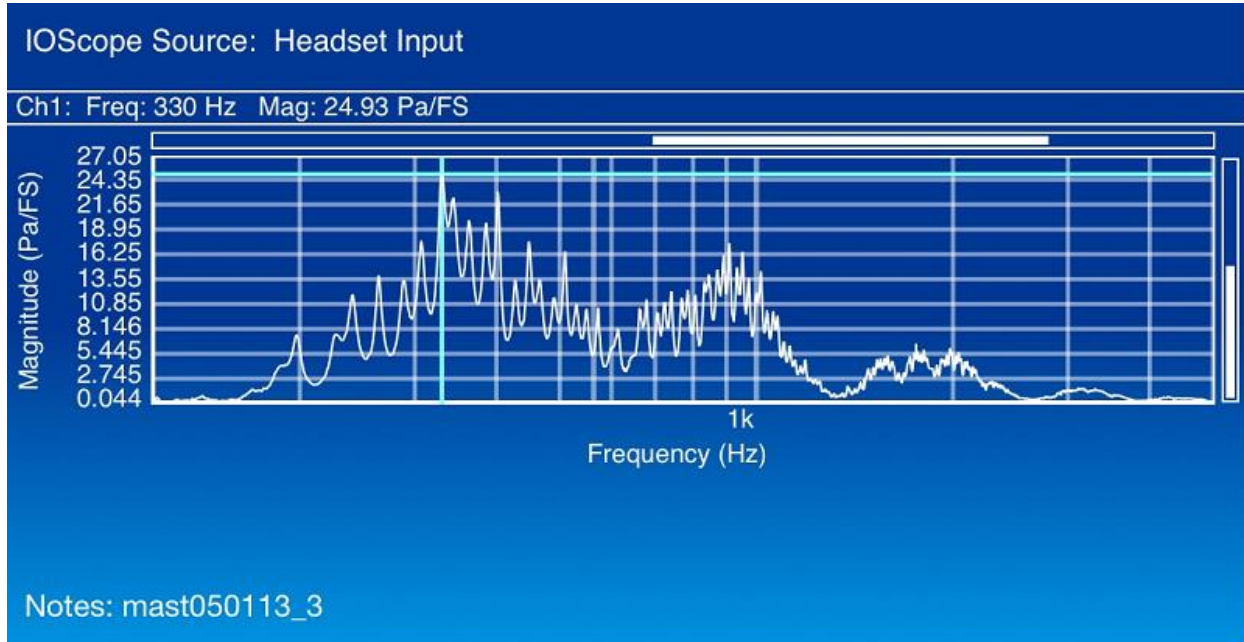


Figure 2

The pipe is effectively open at both ends but if we closed off the bottom end with tightly packed sandy dirt, (as for the original incident where high voltage arcing occurred), we might expect standing waves and the total power could rapidly build to enormous levels due to echo in the pipe. Causing a sharp impact on the sealed off end of the pipe just above the packed sandy soil while the metal pipe was connected or touching a grounded surface would allow for electrons to rush to ground from the metal pipe outside surface. When the pipe rebounded, the pipe is now positive with respect to ground and then an arc starts to follow the rebounding pipe. That explains how the arc began in the first place. The arc current builds as the acoustic pressure begins to build due to standing wave action ramping up the power gain. That is why I determined to quickly force the end of the pipe down to the metal flashing to short out the arc.

If the pipe were to be wrapped with insulated copper wire, it may be expected that a circulating magnetic vector potential (A-vector) would cause current to be generated in that conducting helix. During standing wave conditions, an open circuit helix may generate considerable voltage.

Next, the second pipe is tested in the same manner as for the first pipe. The plot is shown below on the next page.

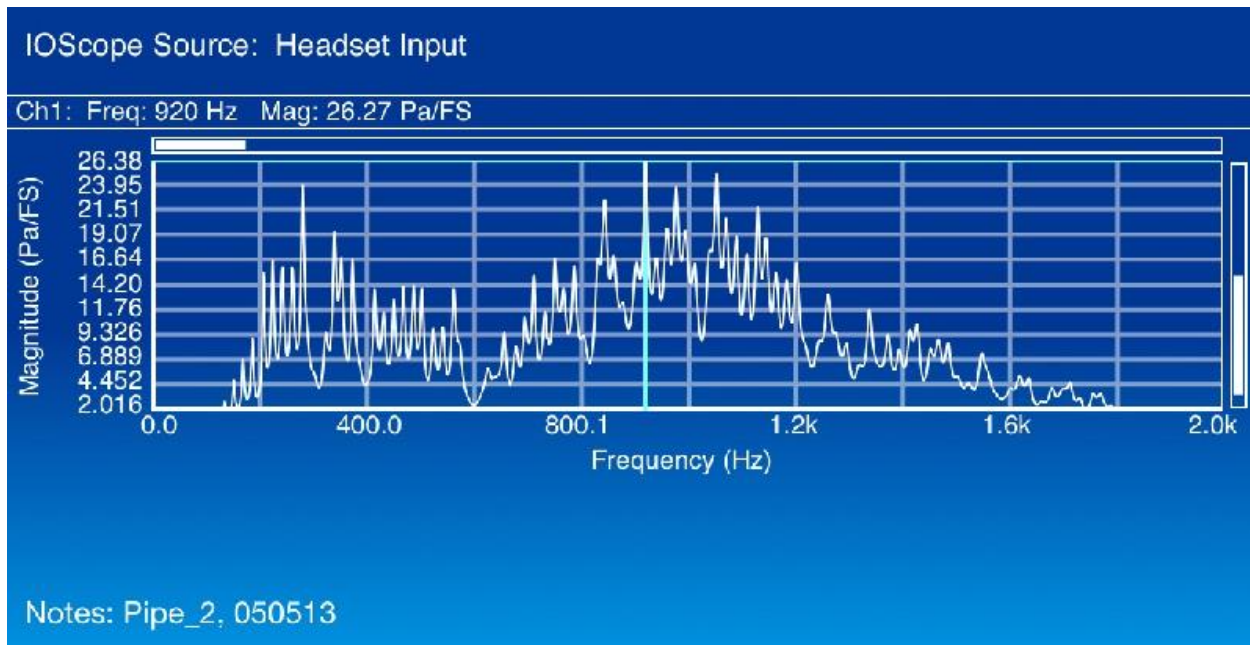


Figure 3

The peak frequency is much higher at 920 Hz where pipe 1 was at 330 Hz. Pipe 1 is a three section mast where the bottom two sections each have twelve wavelength cavities of the hyperfine wavelength of Hydrogen. Pipe 2 is a five section mast where the bottom four sections each have eight wavelength cavities in their active length. The diameter of pipe #2 grows by a quarter-inch from top to bottom for each section. The first pipe is 1 ½ inches in diameter. This forces the acoustic wave to be compressed and expanded alternately. This is a changing energy density per unit length. During the test, the signal is fed from the bottom end of the mast and the microphone is at the top end. Again, during the actual test, the signal level to the bullet speaker is set at -9.04 db which is the same as for the reference plot.

Grounding the pipe at one end and then un-grounding the pipe at the exact time of the peak acoustic pressure at that location may cause the arc to start. Allowing that high frequency arc to be stepped down by a high frequency Tesla coil could allow for putting the power gain of the mast to work at the local level. The power could be then be rectified and then restored at 60 Hz by an inverter for household use. For human survivability, individual power sources are the best option in a nuclear armed world.

There are more upcoming tests in the planning stage.

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### Details of test instruments and mast dimensions:

1. Apple iPhone 5
2. MicW i436 Kit, consists of electret condenser microphone includes windscreen, 2m cable, split adapter (headphone/mic) clip and aluminum storage tube.  
<http://www.fullcompass.com/product/436599.html>
3. Music Bullet, as seen on television, off the shelf at Winco Foods, distributed by idea village, [customerservice@ideavillage.com](mailto:customerservice@ideavillage.com)
4. IOSCOPE, App downloaded from iTunes Store. This is the Fast Fourier Transform acoustic swept analysis system that runs on the iPhone 5. It works especially well with the above microphone i436 kit in #2 above. Turns the iPhone 5 into a precision sound analyzer.
5. Old-style television antenna mast: Three 10 foot sections, 2 ¼, 1 ¾, and 1 ½ inch diameter thin walled steel mast sections of pipe that telescope into each other. Set up so that the bottom two larger diameter sections form cavities that are 12 wavelengths of 21.1 cm each. Assembled length: 26 feet, 6 ½ inches. Maker not known. Vintage 1950?
6. New antenna mast: 5 sections, 76 ½, 82 ½, 88 ½, 94 ½, 96 ½ inches long each, with diameters of 2 ¼, 2, 1 ¾, 1 ½, and 1 ¼ inches respectively. Bottom 4 larger sections set up so that cavities are formed of 8 wavelengths of 21.5 cm each. Assembled length 30 feet, 2 ½ inches.

Signal input is to the largest 2 ¼ inch bottom section of the mast by the “Bullet Speaker”. The i436 microphone is placed at the opening of the smallest diameter top section of the mast.



Figure 4

The above figure shows the cables, (w 3.5 mm connectors), i436 microphone, splitter adapter, and Bullet Microphone. The iPhone was used to take the photo. Thus, it is not shown.

The next photos show the new mast (#2) with the Bullet Microphone inserted in the end of the mast.



Figure 5



Figure 6

The above mast is made by ROHN, model 9H50, 34', 30" telescoping mast. Available on eBay from [kay@gizmotchy.com](mailto:kay@gizmotchy.com). This is a really nice mast and is easy to set up and safer than the older one mentioned above from the standpoint of being able to securely lock each section with screw clamps.

END