



Fountain Giving Life

Dimensions for Fabrication

and

Wiring Diagrams

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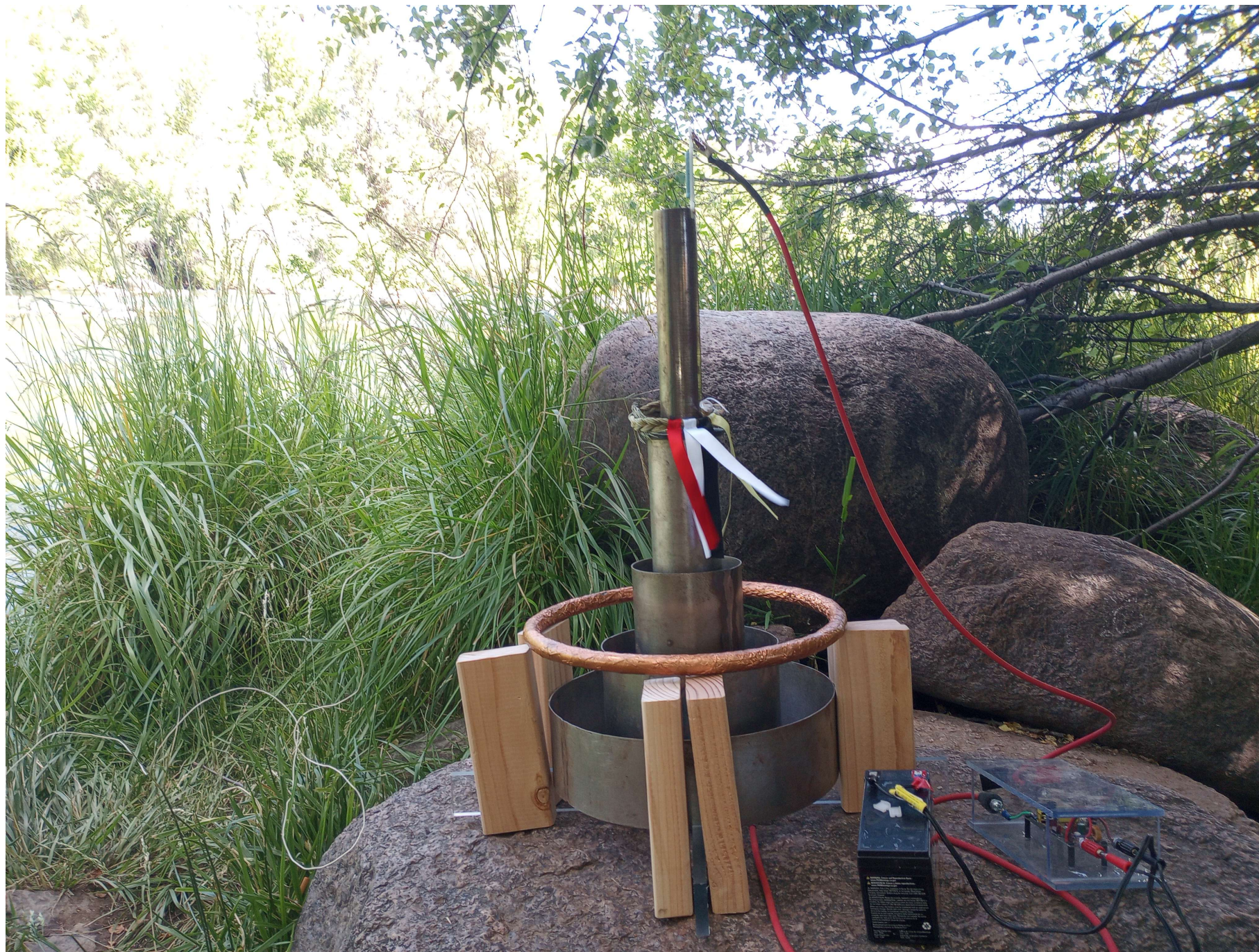
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Safe Operating Instructions

Do not operate for more than 4 hours per month, otherwise severe weather and flooding may result. The instrument must be grounded into a flowing river to function. Operate within seven days after the new moon. Do not touch the instrument while it is running. Stand at least 25 feet away. If you get too close, or touch it while it is energized, you may become overstimulated, and have trouble sleeping.



This instrument is composed of five concentric steel tubes, surrounded by a hollow ring.

The center tube is connected to an electric circuit, which rapidly varies the amount of charge on the tube. The tube is at all times charged negative. The electric circuit is grounded into a flowing river.

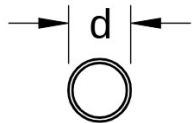
The tubes sit on a plastic jig, which holds them in place. The ring sits on blocks, which hold it in position.

The hollow ring is made from a length of steel tube, rolled into a circle, and the ends welded together. It is covered with a layer of cellophane (or other dielectric material) then a layer of copper foil.

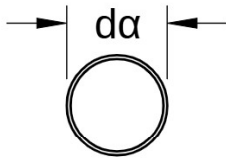


Cylinder Dimensions, Algebraic

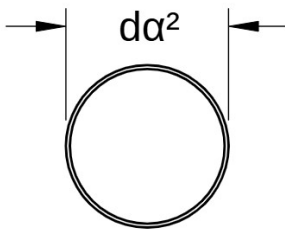
A



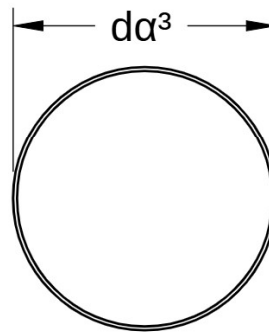
B



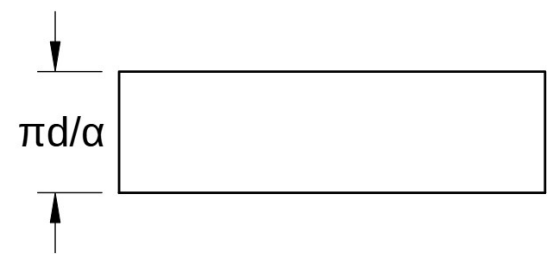
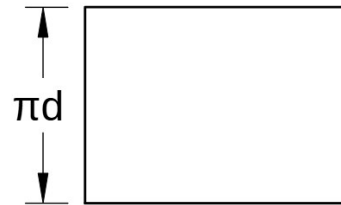
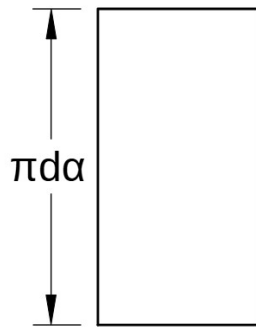
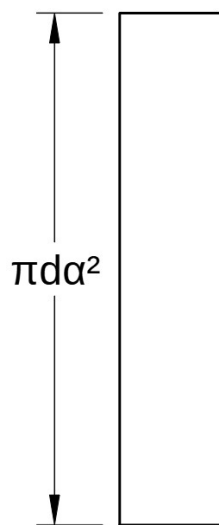
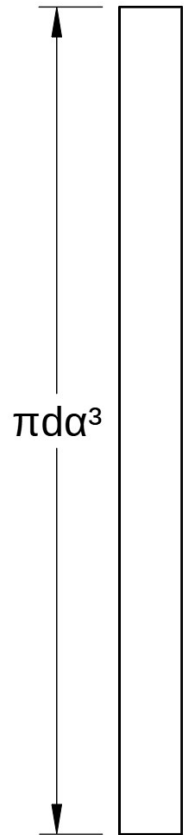
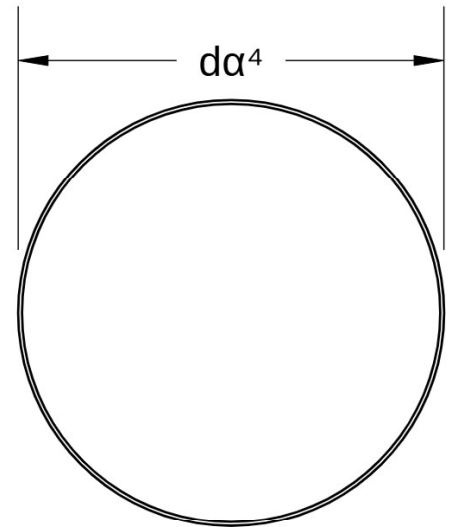
C



D



E



Steel tubes

PROJECT

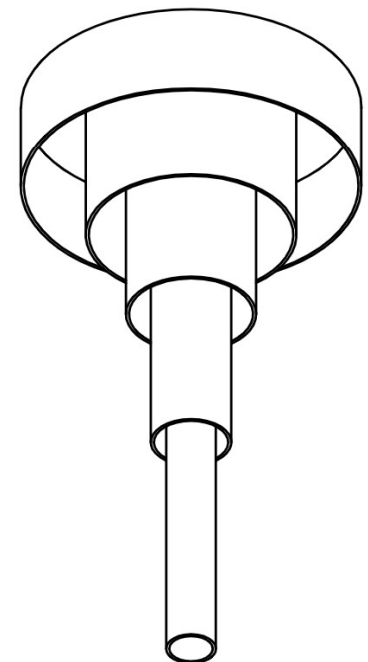
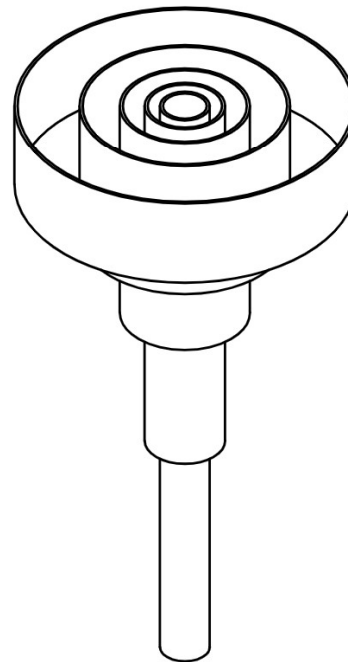
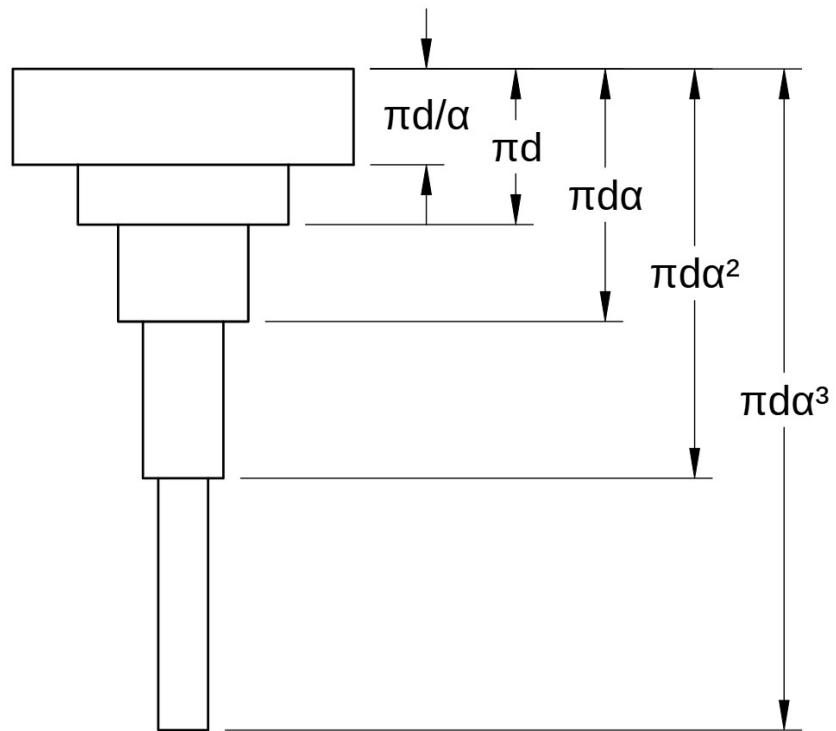
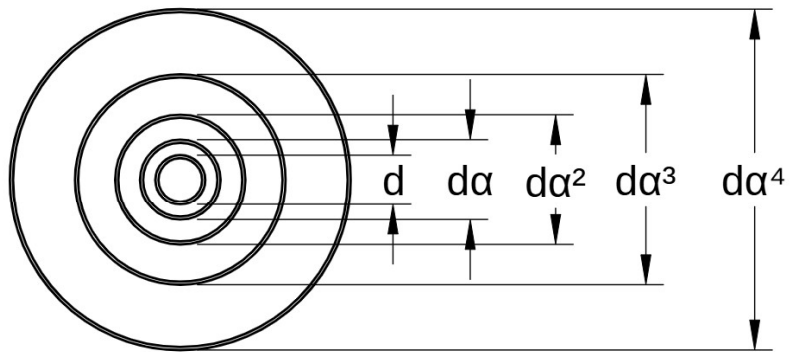
Wave Articulation Matrix

TITLE

Algebraic
Parts

SCALE

SHEET 1/3



PROJECT	
Wave Articulation Matrix	
TITLE	
Algebraic Assembled	
SCALE	SHEET 2/3

d = diameter of innermost cylinder

$$\alpha = \frac{1 + \sqrt{5}}{2}$$

$$a = 1.61803$$

“Extreme and Mean Ratio”

$$\pi = 3.14159$$

#	Diameter	Length	Circumference
A	d	$\pi d \alpha^3$	πd
B	$d \alpha$	$\pi d \alpha^2$	$\pi d \alpha$
C	$d \alpha^2$	$\pi d \alpha$	$\pi d \alpha^2$
D	$d \alpha^3$	πd	$\pi d \alpha^3$
E	$d \alpha^4$	$\pi d / \alpha$	$\pi d \alpha^4$

Geometric Sequence

Euclid of Alexandria
The Elements of Geometry
Book 6, Definition 3
Extreme and Mean Ratio
Circa 300 BC

PROJECT	
Wave Articulation Matrix	
TITLE	
Algebraic Table	
SCALE	SHEET 3/3



Cylinder Dimensions,
Decimal

2 inch Diameter Cathode

A

B

C

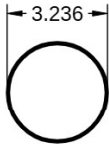
D

E

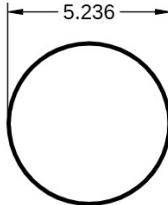
2.000



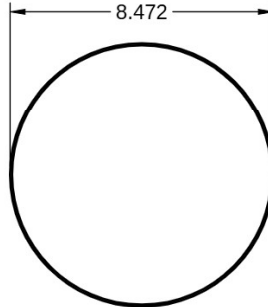
3.236



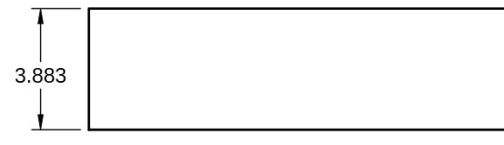
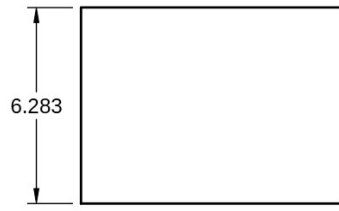
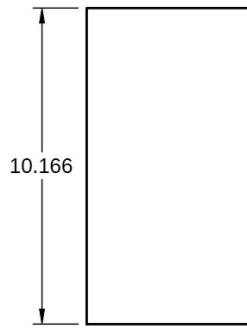
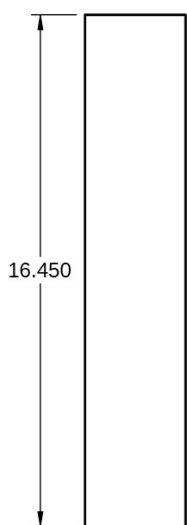
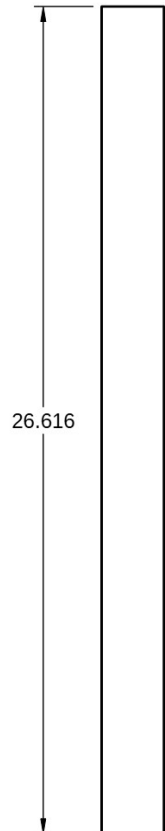
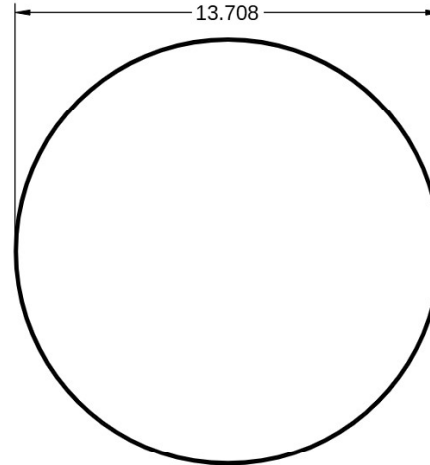
5.236



8.472



13.708



Steel tubes

All Units in Inches

PROJECT

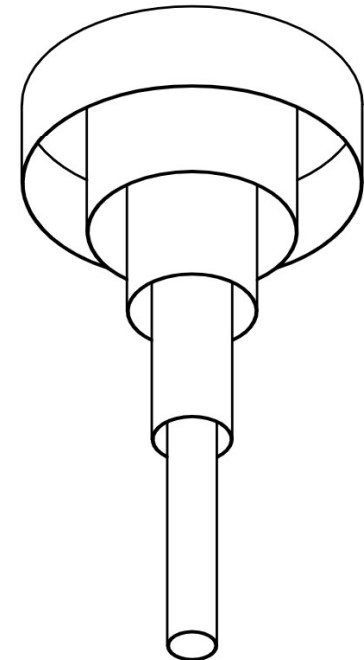
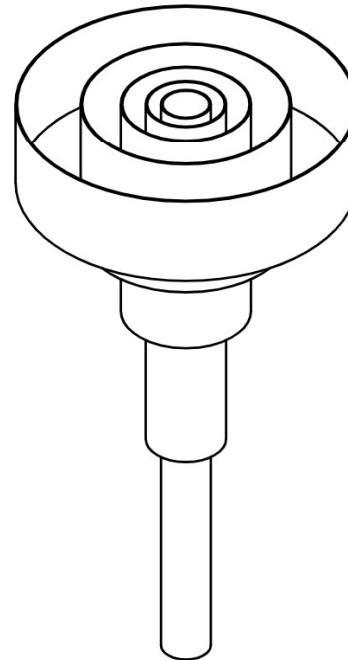
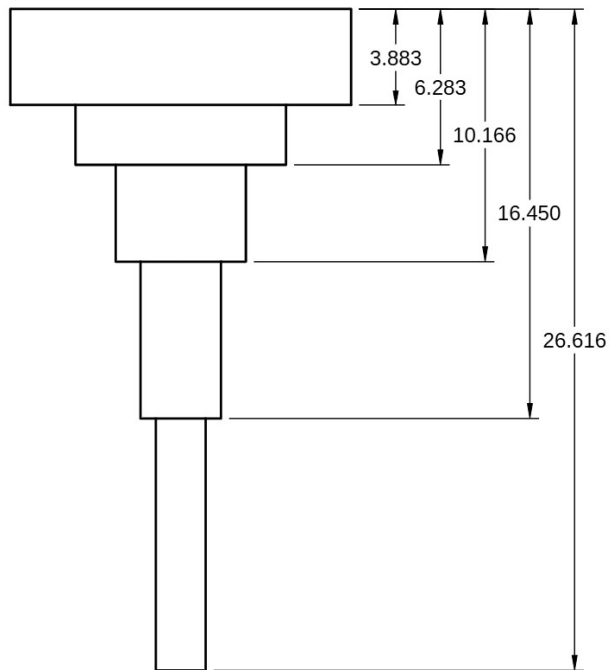
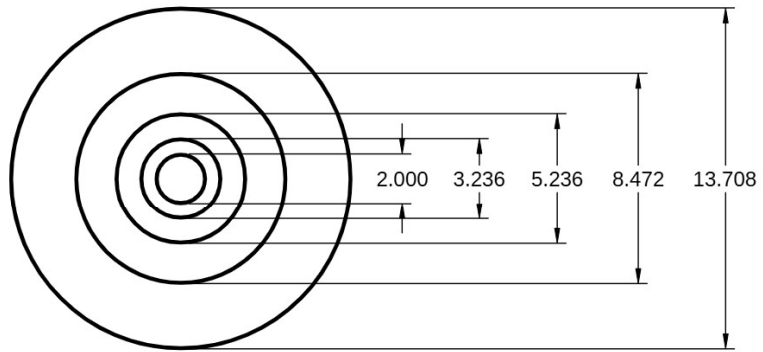
Wave Articulation Matrix

TITLE

2" Diameter Primary
Parts

SCALE 1:4

SHEET 1/3



All Units in Inches

PROJECT	
Wave Articulation Matrix	
TITLE	
2" Diameter Primary Assembled	
SCALE 1:8	SHEET 2/3

#	Diameter	Length	Circumference
A	2.000	26.616	6.283
B	3.236	16.450	10.166
C	5.236	10.166	16.450
D	8.472	6.283	26.616
E	13.708	3.883	43.066

16 gauge mild steel.
.0625 inch low carbon steel.
Seam weld.

PROJECT	
Wave Articulation Matrix	
TITLE	
2" Diameter Primary Table	
SCALE	SHEET 3/3

Jig to Hold Steel Cylinders



MATERIAL
THICKNESS

$\frac{3}{8}$

POLYCARBONATE

6.854

CENTER
LINE

4.236

2.618

1.618

1"

JIG 1

2"

1"

A

B

C

D

E

$\frac{1}{4}$

$\frac{3}{16}$

$\frac{1}{8}$

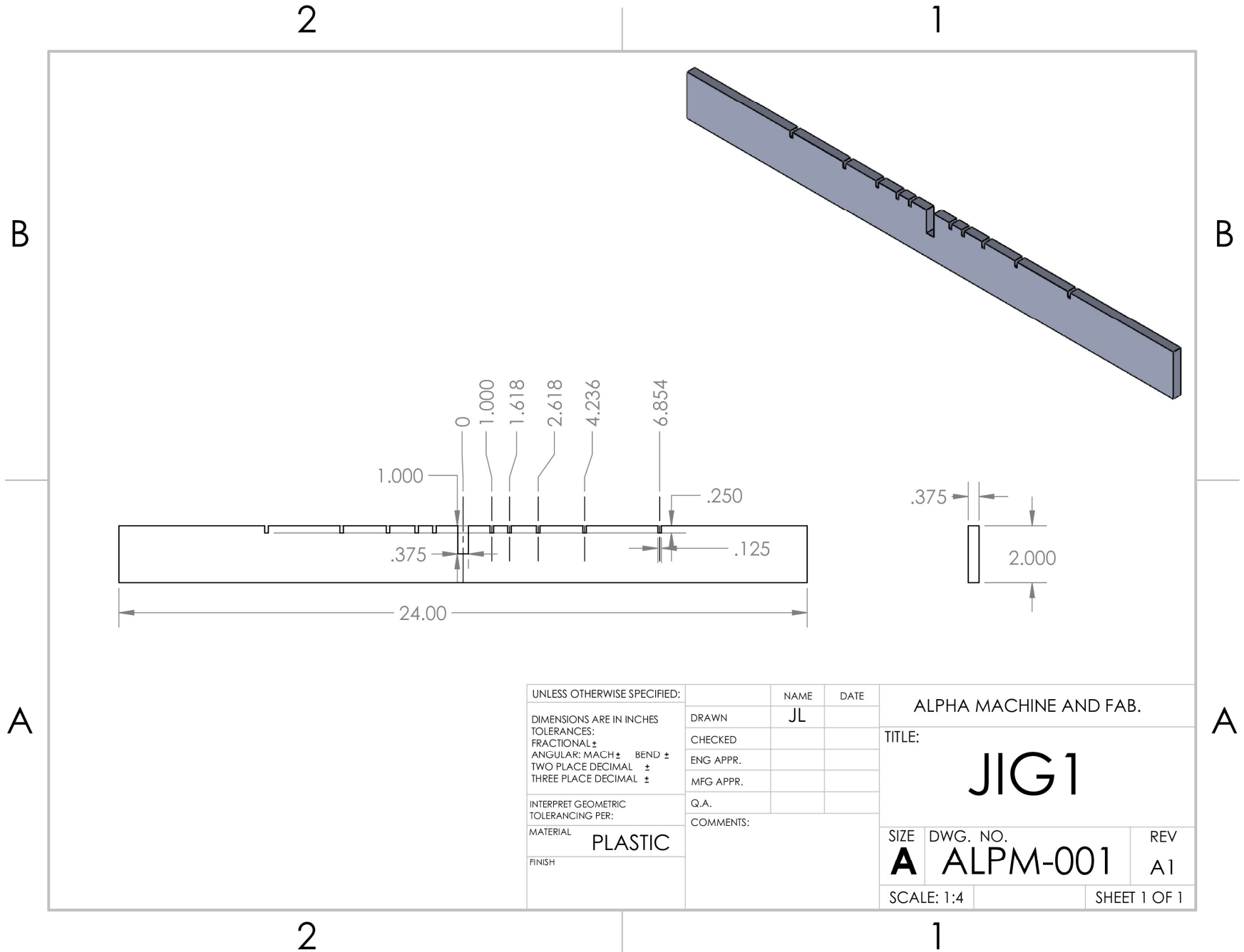
JIG 2

2

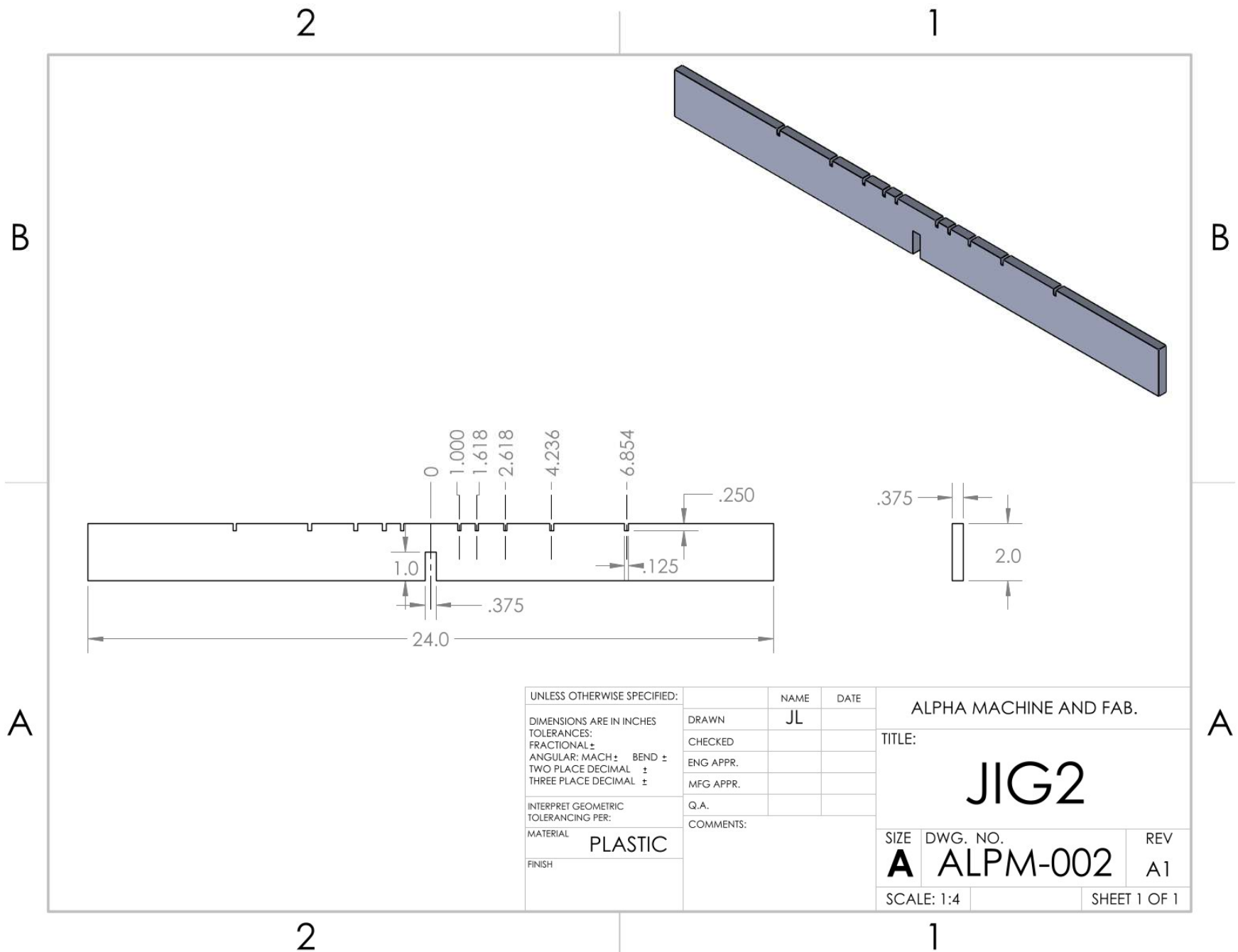
1

$\frac{3}{8}$

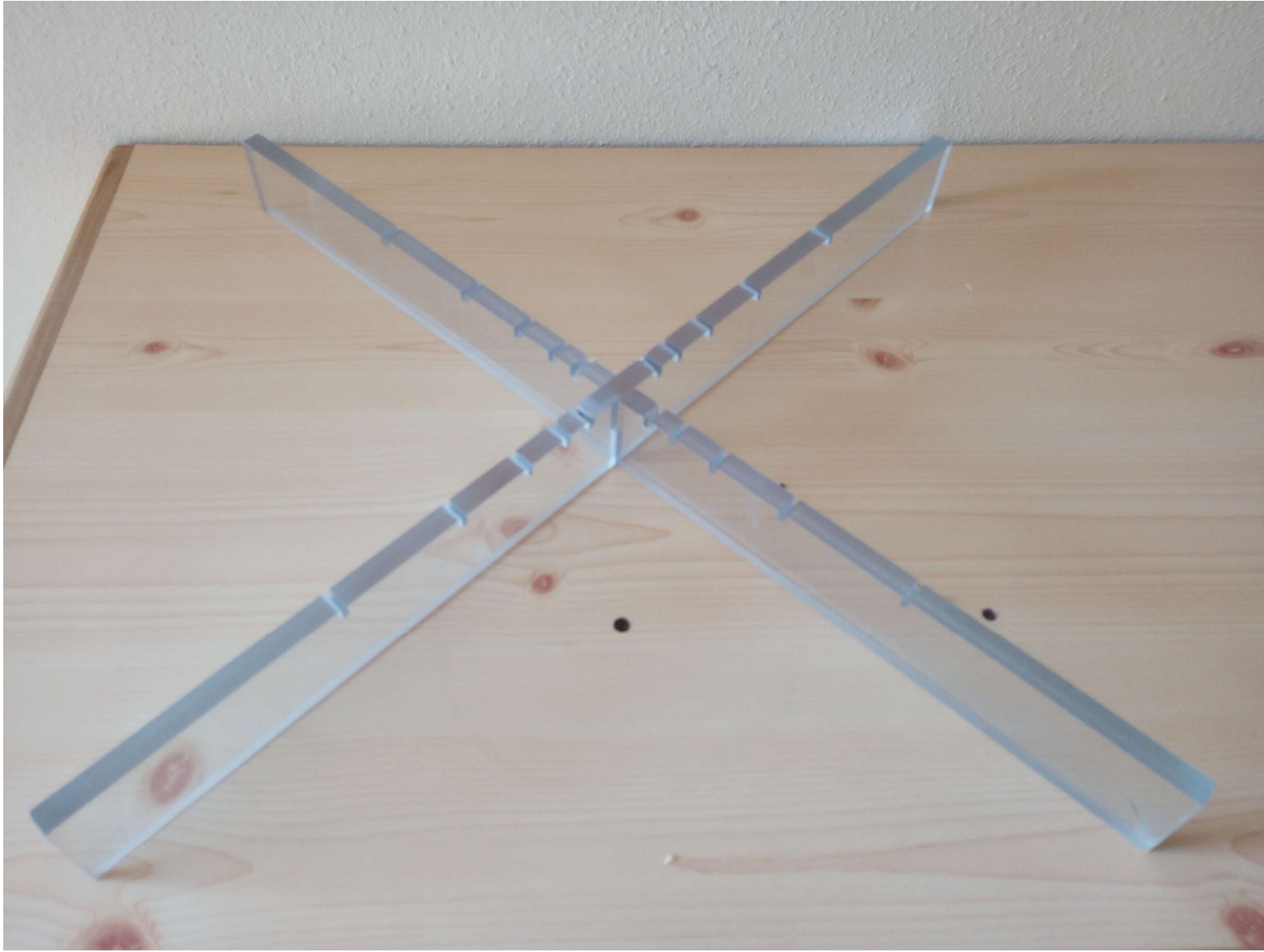
24 INCH LONG STRIP



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	ALPHA MACHINE AND FAB.	
DIMENSIONS ARE IN INCHES		DRAWN	JL	TITLE: JIG1	
TOLERANCES:		CHECKED			
FRACTIONAL: ±		ENG APPR.			
ANGULAR: MACH ± BEND ±		MFG APPR.			
TWO PLACE DECIMAL ±		Q.A.		SIZE DWG. NO. REV	
THREE PLACE DECIMAL ±		COMMENTS:		A ALPM-001 A1	
INTERPRET GEOMETRIC TOLERANCING PER:				SCALE: 1:4 SHEET 1 OF 1	
MATERIAL					
PLASTIC					
FINISH					





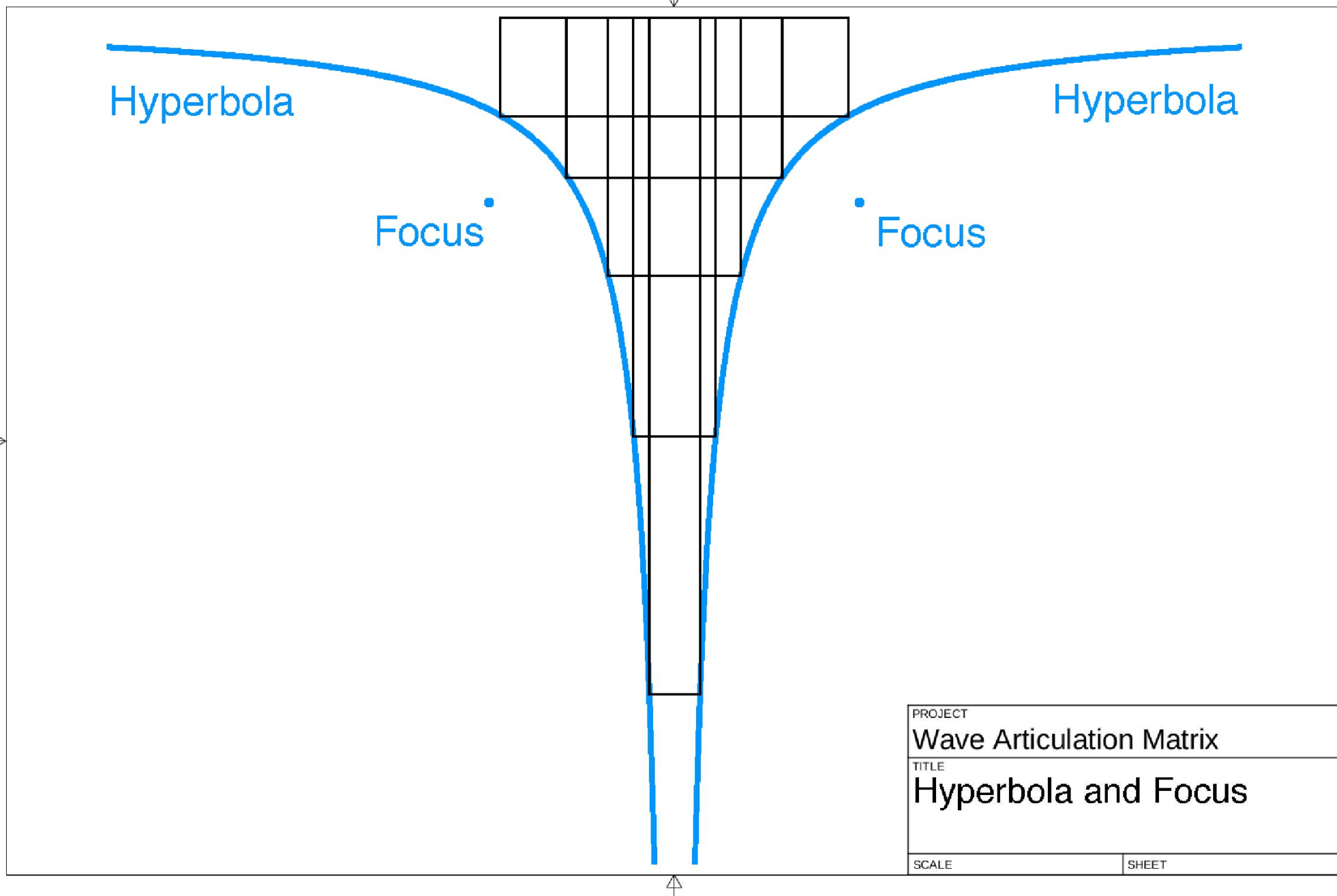






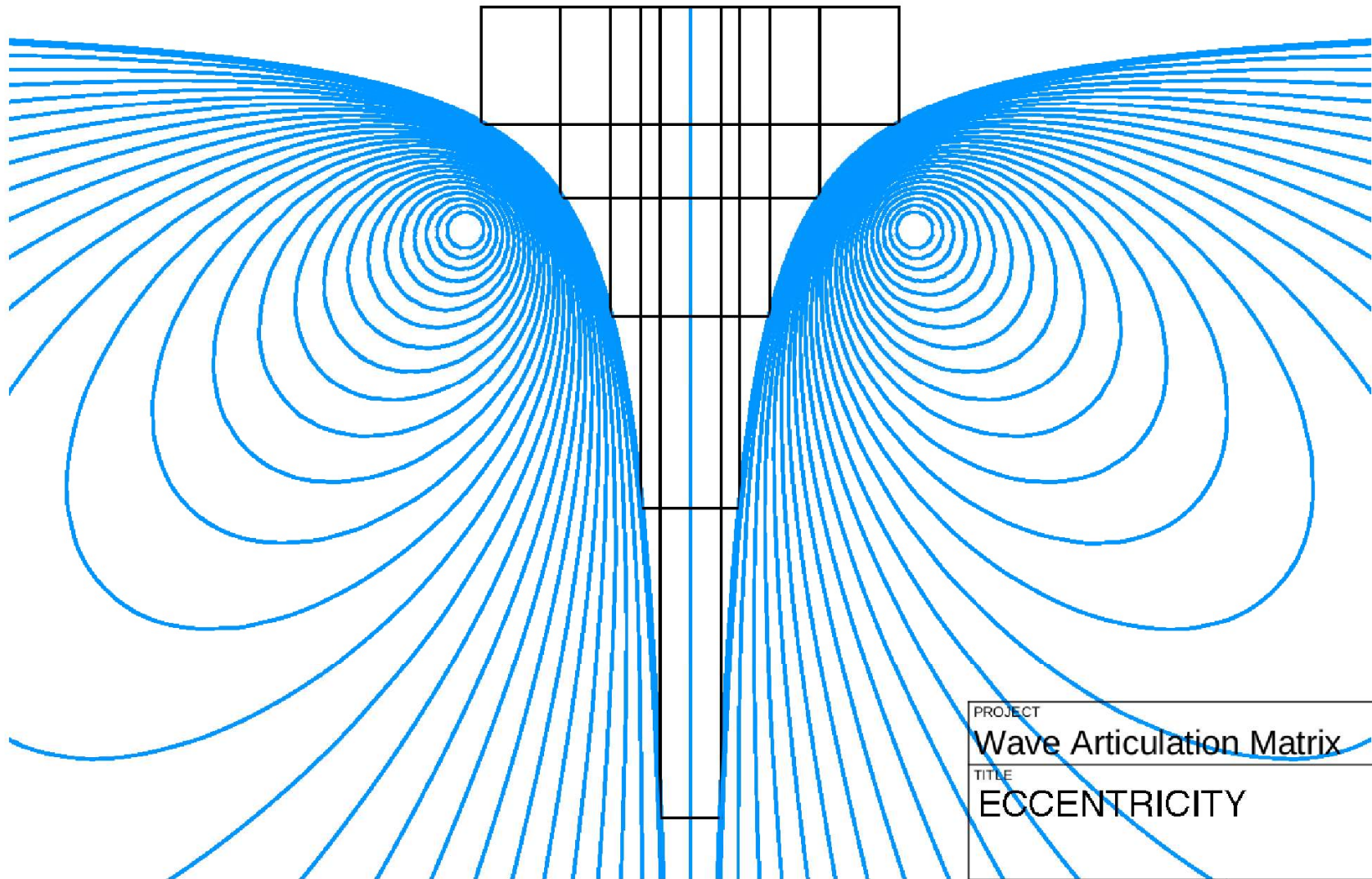


Hollow Ring



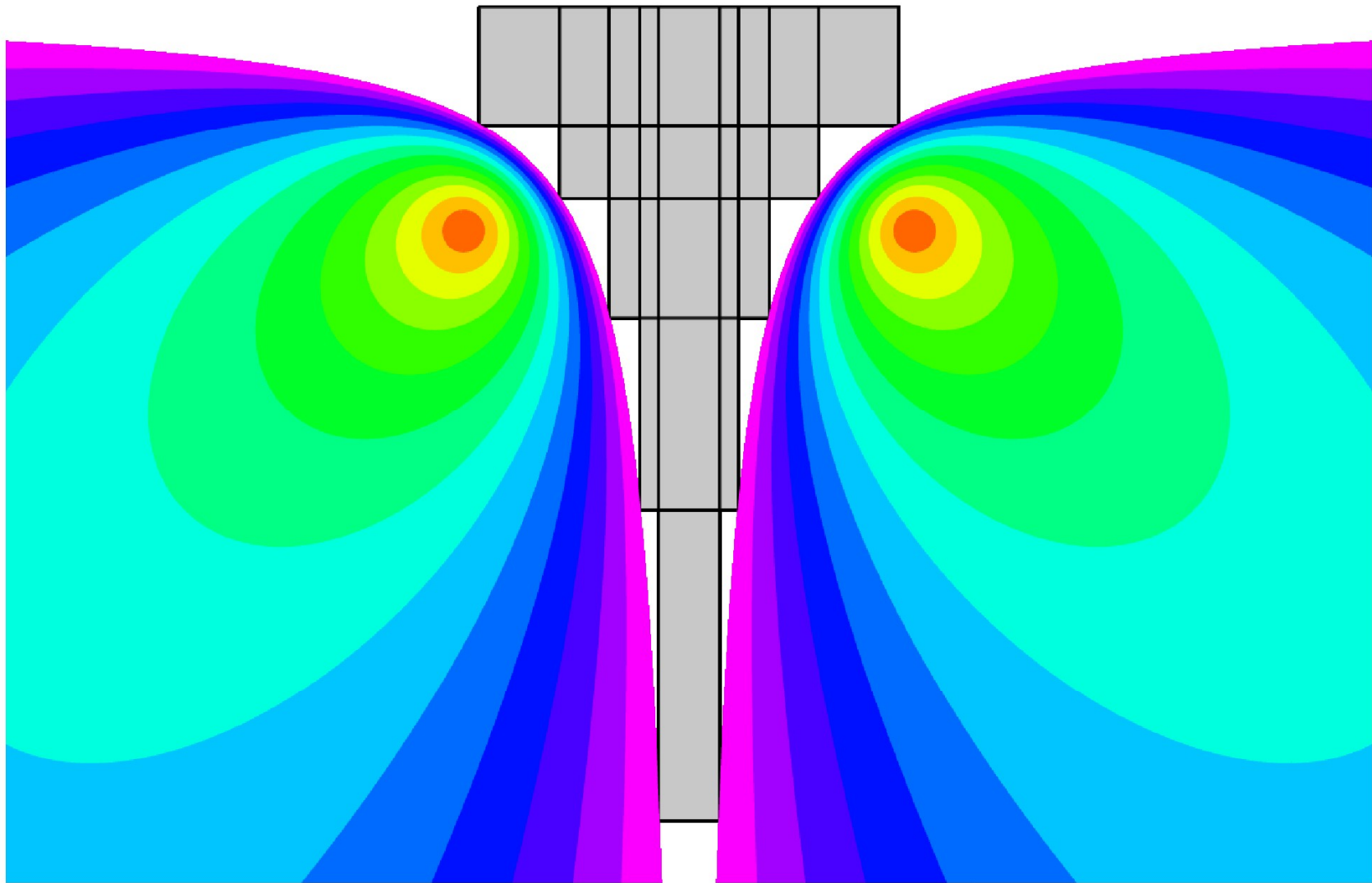
PROJECT	
Wave Articulation Matrix	
TITLE	
Hyperbola and Focus	
SCALE	SHEET

Vary the eccentricity of the Hyperbola to create Ellipses



PROJECT	Wave Articulation Matrix	
TITLE	ECCENTRICITY	
SCALE	SHEET	

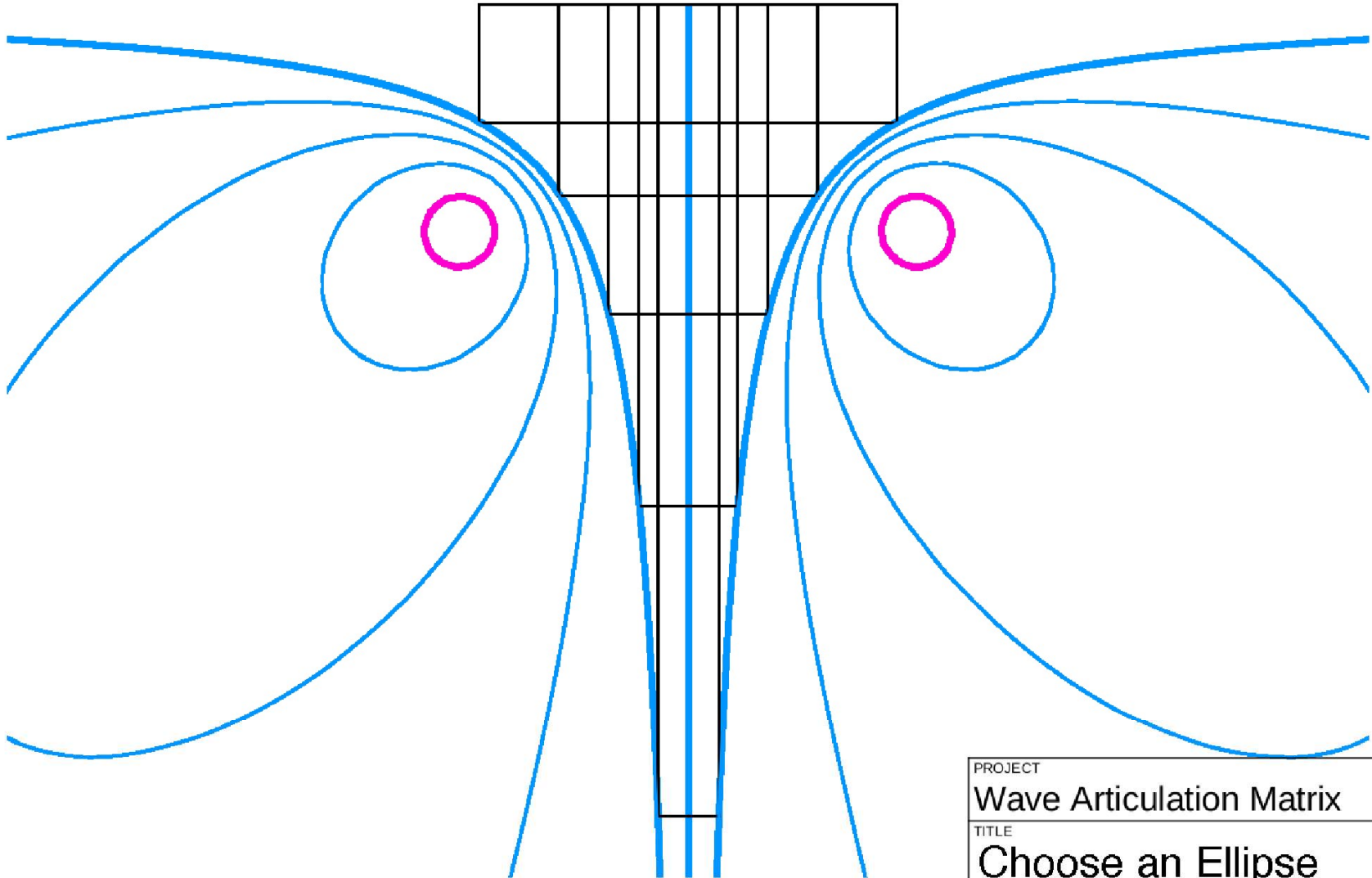
The Ellipses each share one focus with the Hyperbola



SCALE

SHEET

Choose one of the Ellipses



PROJECT

Wave Articulation Matrix

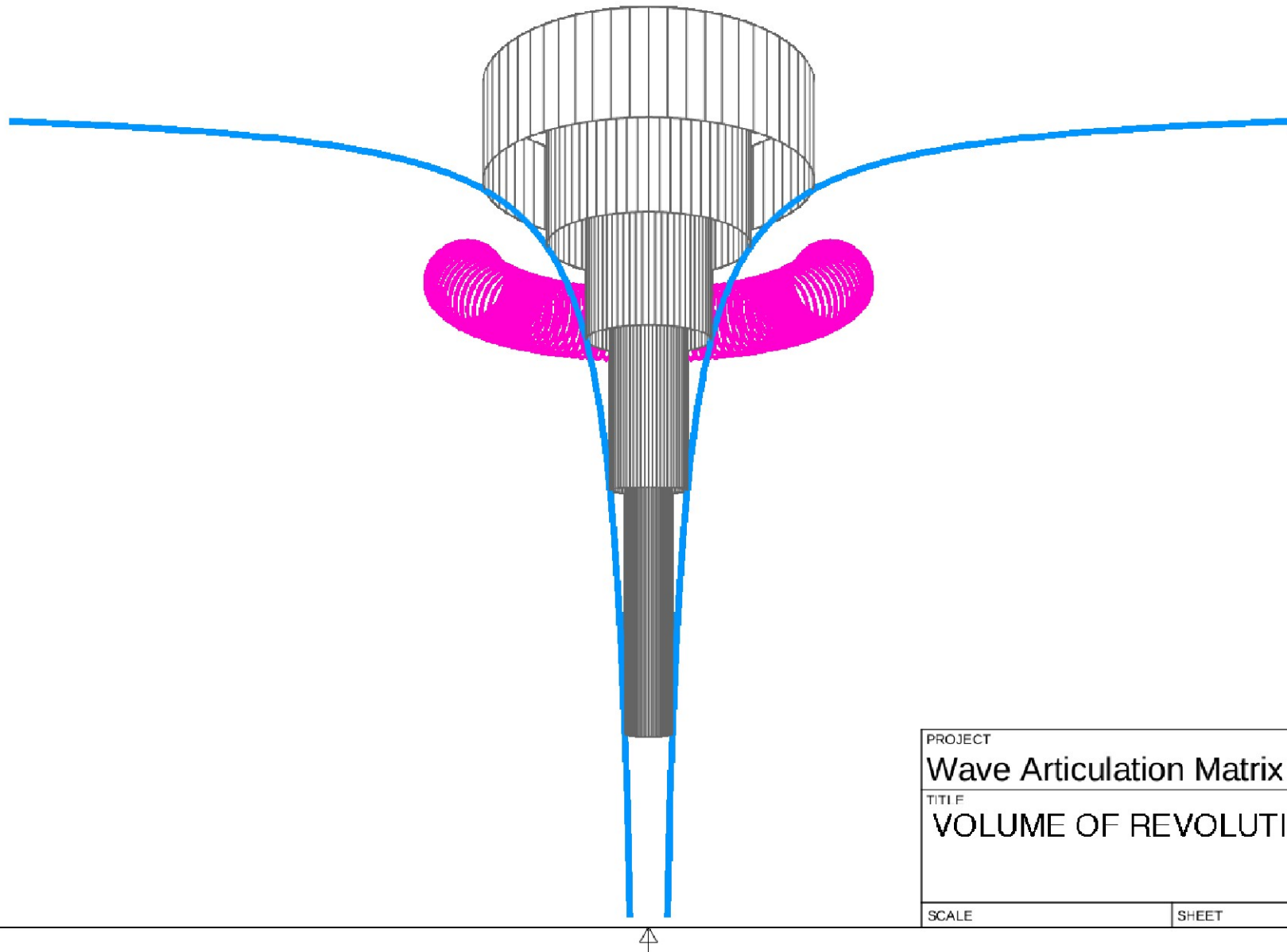
TITLE

Choose an Ellipse

SCALE

SHEET

Rotate the Ellipse around the Hyperbola's vertical asymptote.



PROJECT

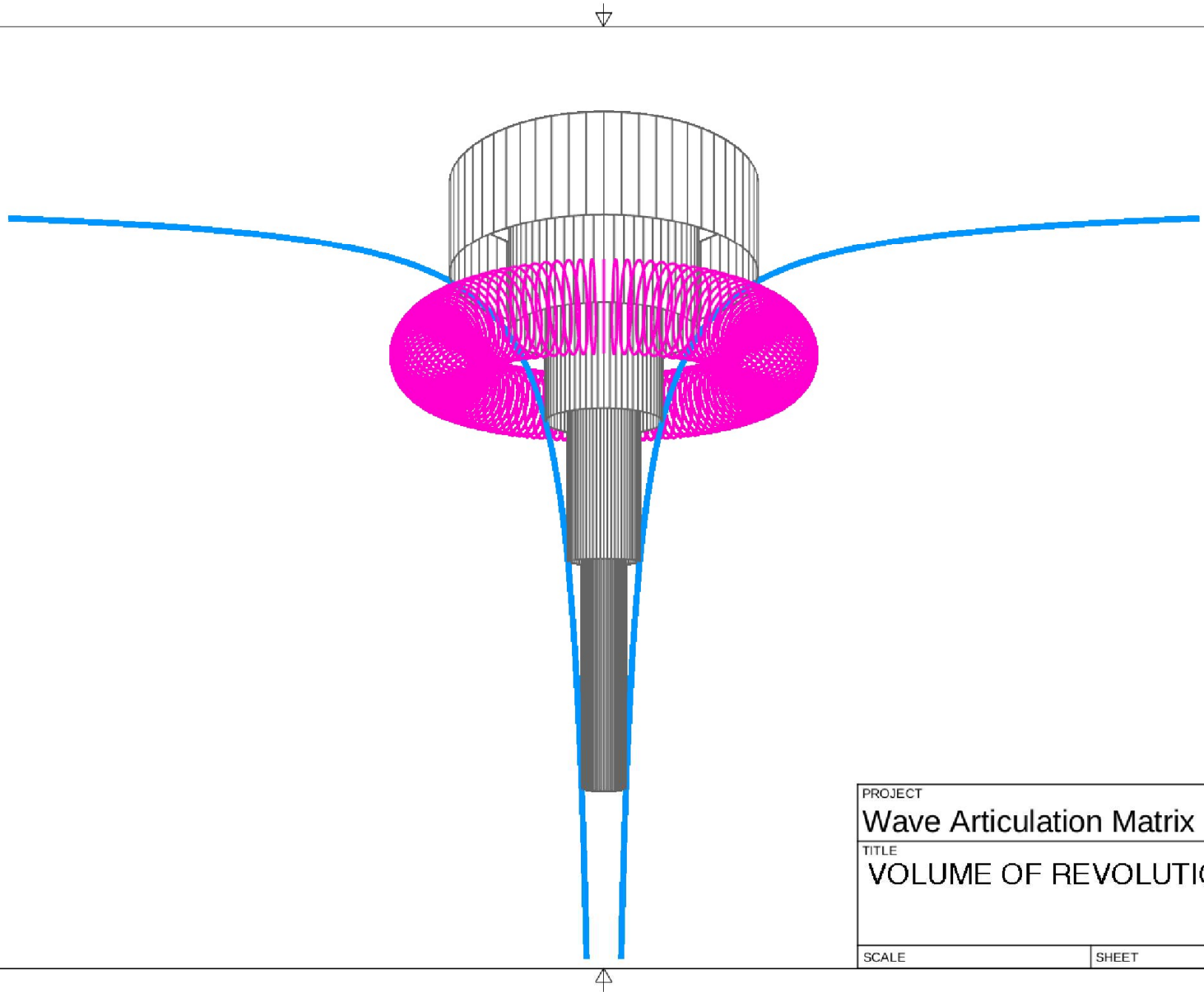
Wave Articulation Matrix

TITLE

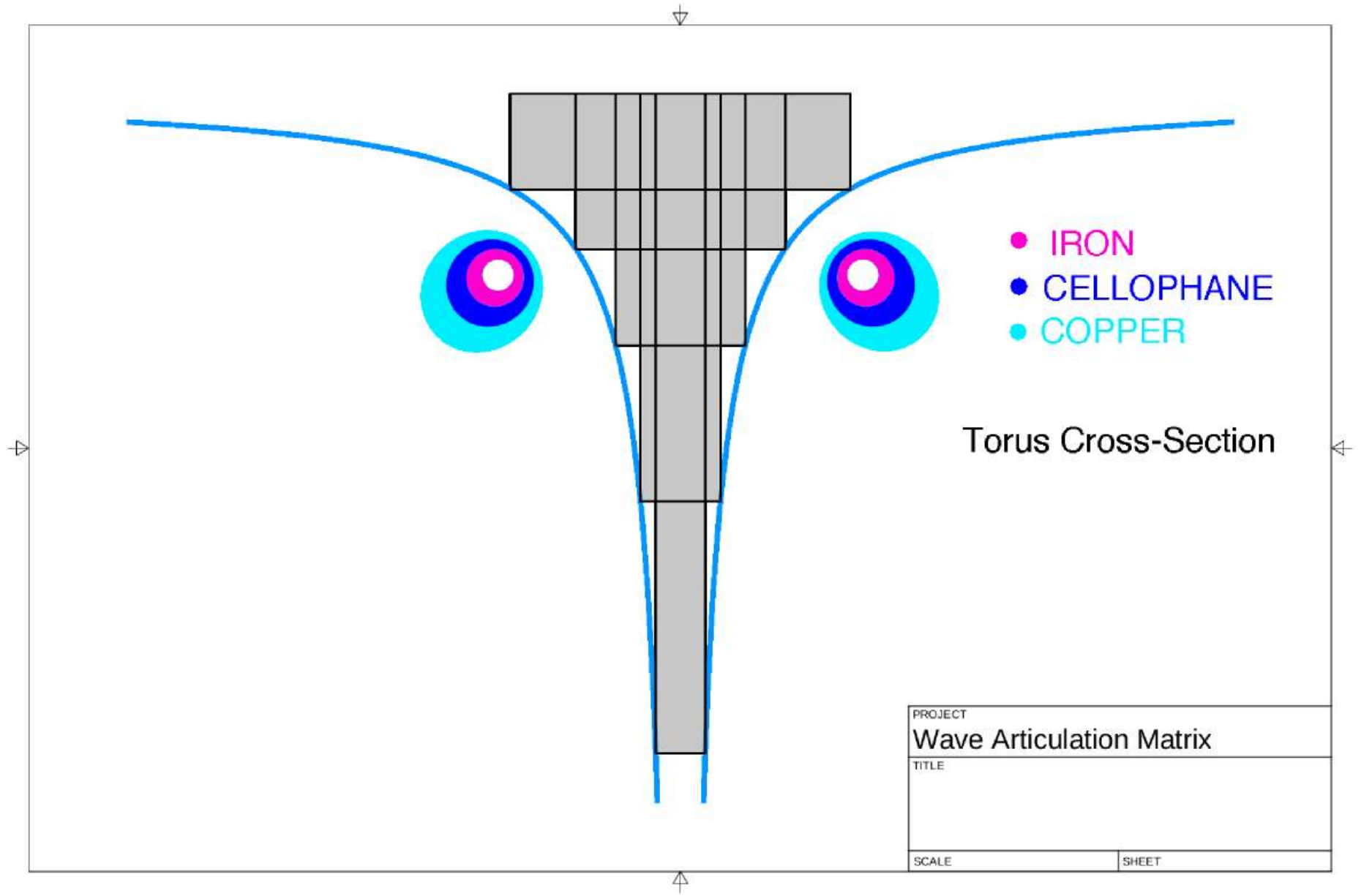
VOLUME OF REVOLUTION

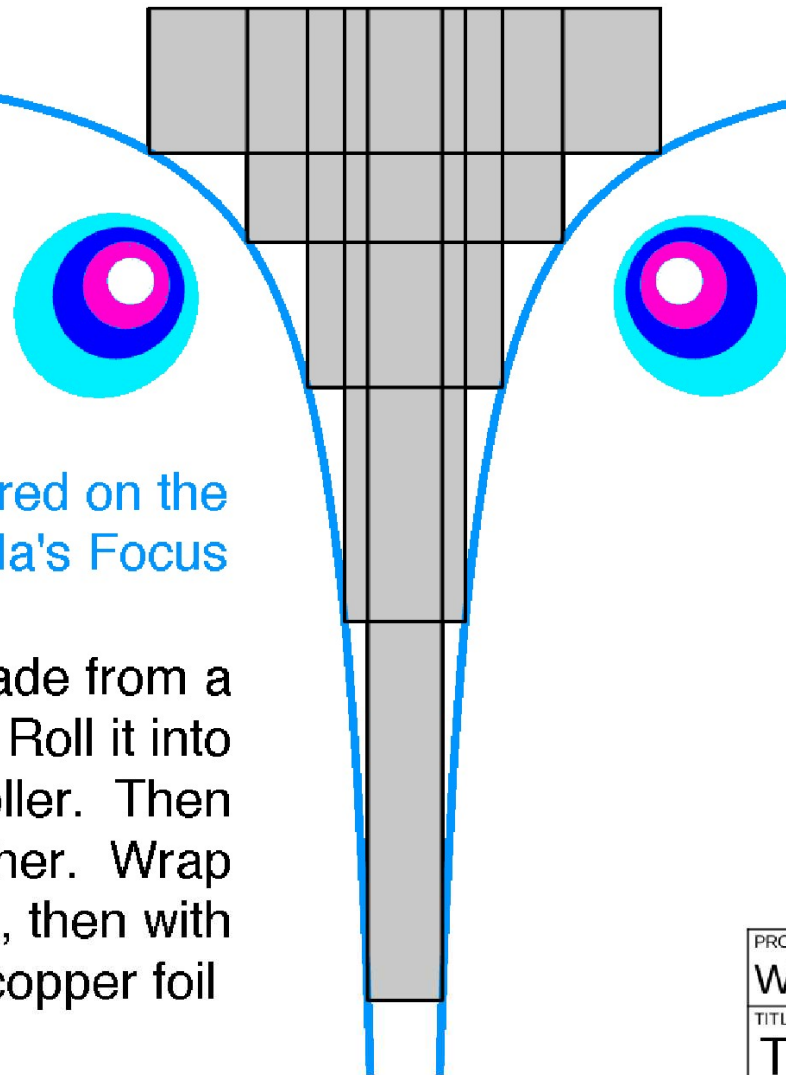
SCALE

SHEET



PROJECT	
Wave Articulation Matrix	
TITLE	
VOLUME OF REVOLUTION 2	
SCALE	SHEET





- IRON
- CELLOPHANE
- COPPER

Torus Cross-Section

The Torus is centered on the
Hyperbola's Focus

The torus can be made from a
length of steel tube. Roll it into
a circle on a pipe roller. Then
weld the ends together. Wrap
it first with cellophane, then with
copper foil

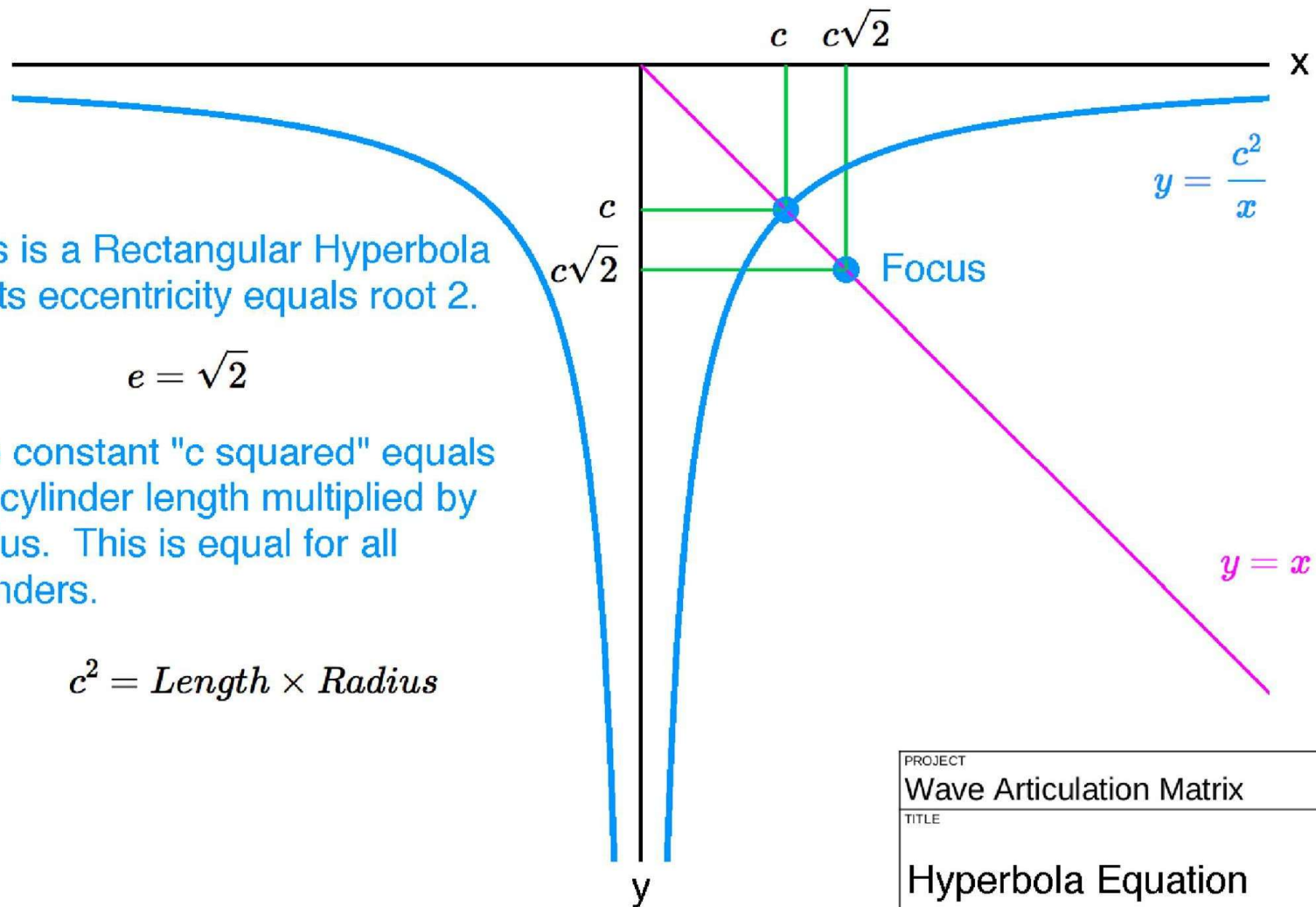
PROJECT	
Wave Articulation Matrix	
TITLE	
Torus Cross-Section	
SCALE	SHEET

This is a Rectangular Hyperbola
so its eccentricity equals root 2.

$$e = \sqrt{2}$$

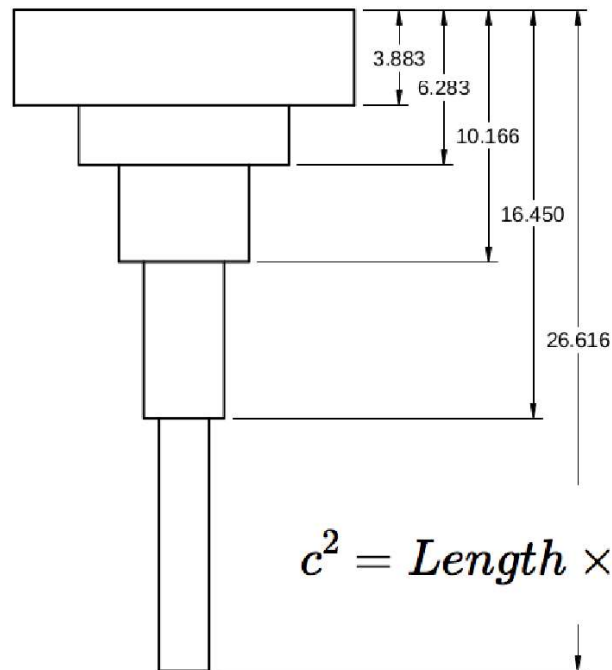
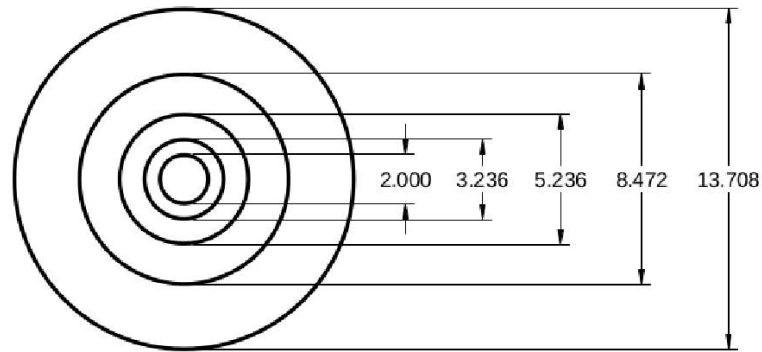
The constant "c squared" equals
the cylinder length multiplied by
radius. This is equal for all
cylinders.

$$c^2 = Length \times Radius$$

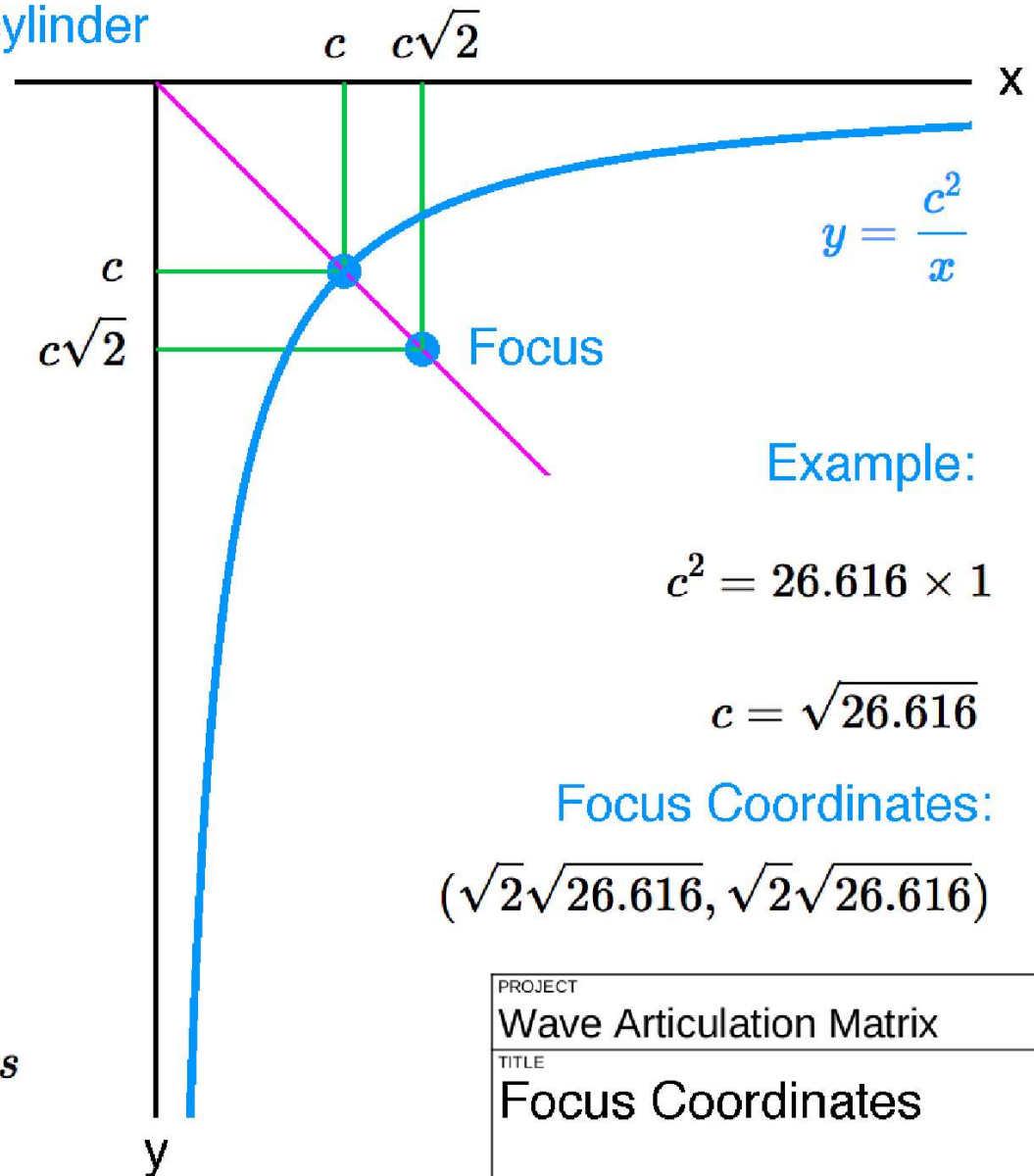


PROJECT	
Wave Articulation Matrix	
TITLE	
Hyperbola Equation	
SCALE	SHEET

Example: 2 inch diameter center cylinder



$$c^2 = \text{Length} \times \text{Radius}$$



Example:

$$c^2 = 26.616 \times 1$$

$$c = \sqrt{26.616}$$

Focus Coordinates:

$$(\sqrt{2}\sqrt{26.616}, \sqrt{2}\sqrt{26.616})$$

PROJECT

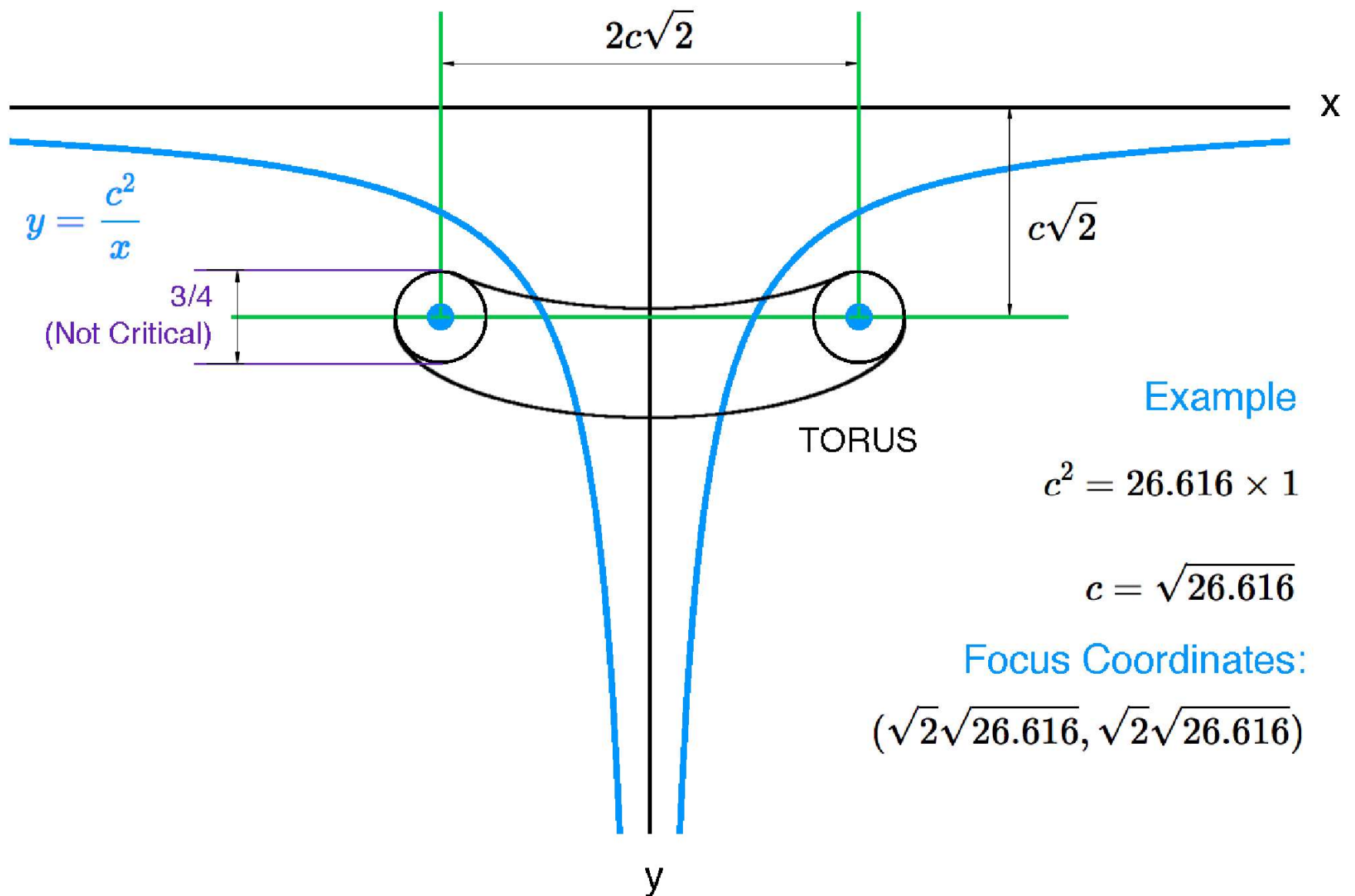
Wave Articulation Matrix

TITLE

Focus Coordinates

SCALE 1:8

SHEET 2/3



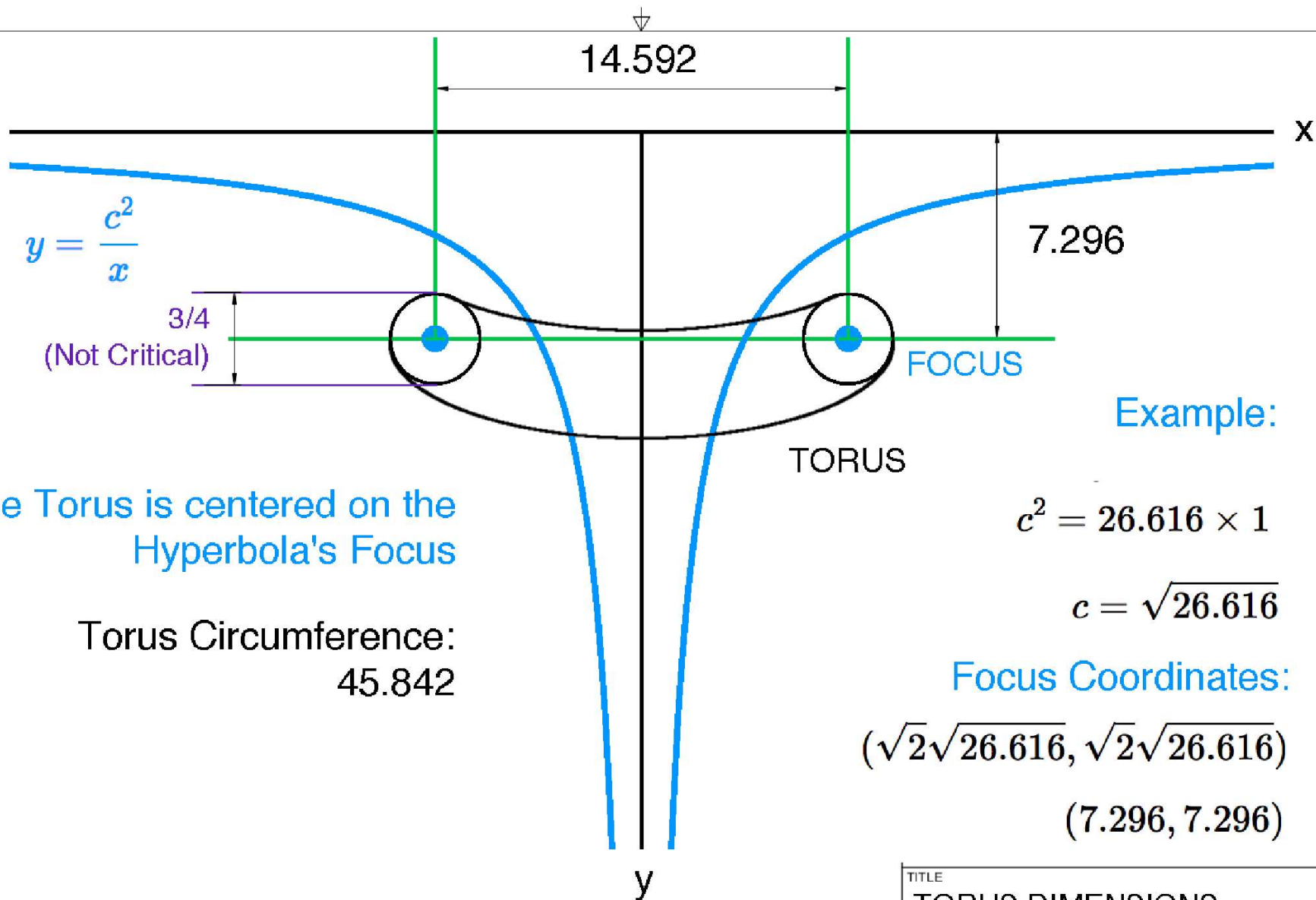
Example

$$c^2 = 26.616 \times 1$$

$$c = \sqrt{26.616}$$

Focus Coordinates:

$$(\sqrt{2}\sqrt{26.616}, \sqrt{2}\sqrt{26.616})$$



All Units in Inches

TITLE

TORUS DIMENSIONS,
DECIMAL

SCALE

SHEET

Hollow Ring, or "Torus"

The Torus is made out of 3/4 inch steel tube, .049 inch wall (18 gauge). The important thing is that the center of the tube is lined up with the Hyperbola's Focus. That's where the magic happens.

The circumference of the torus is just under four feet. In the process of bending the tube into a circle on the tube rolling machine, you lose about 10 inches at each end. So order a six foot length of steel tubing.

Low-Carbon Steel Round Tube

0.049" Wall Thickness, 3/4" OD

6 Feet Long

[McMaster Carr Part Number 7767T21](#)

\$12.66 Each

Hollow Ring, or "Torus"

Wrap the “Torus” with a layer of cellophane. Then wrap with a layer of copper foil tape.

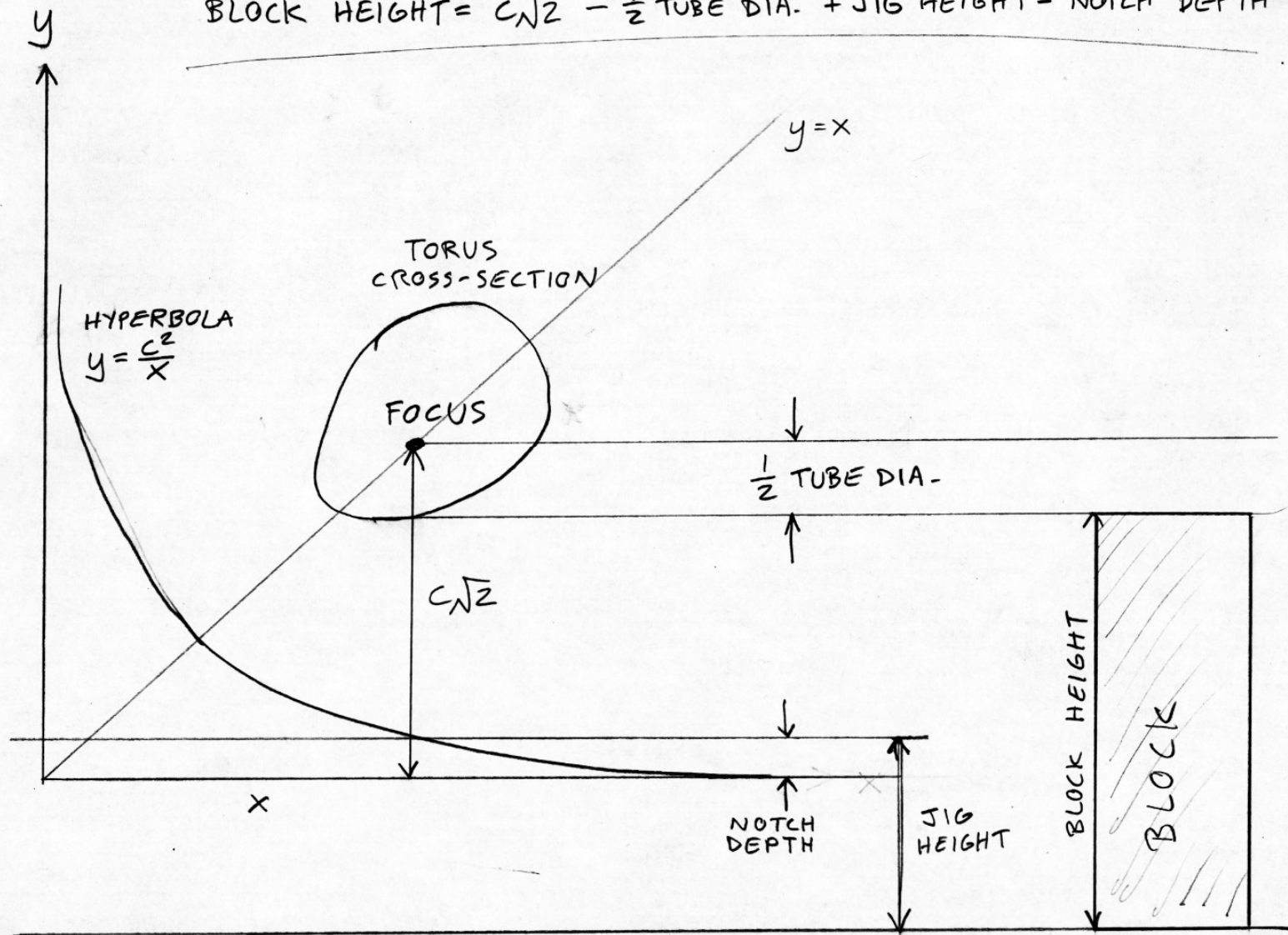


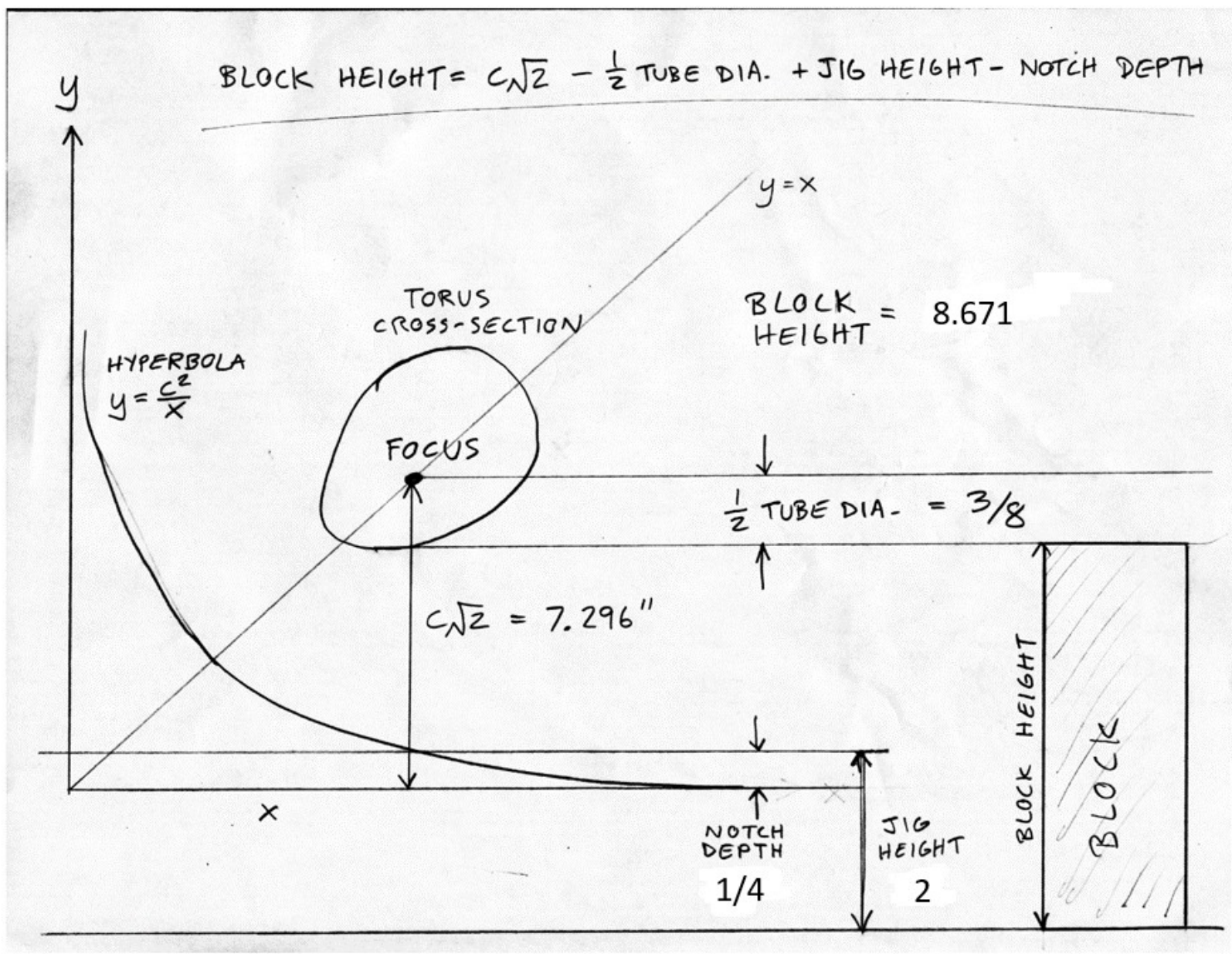




Blocks to Hold
Hollow Ring

$$\text{BLOCK HEIGHT} = C\sqrt{2} - \frac{1}{2} \text{ TUBE DIA.} + \text{JIG HEIGHT} - \text{NOTCH DEPTH}$$





$$C^2 = 26.616 \times 1$$

$$C = \sqrt{26.616}$$

FOCUS COORDINATES:

$$(\sqrt{2}\sqrt{26.616}, \sqrt{2}\sqrt{26.616})$$

$$C\sqrt{2} = 7.296''$$

JIG HEIGHT = 2 inch

NOTCH DEPTH = 1/4

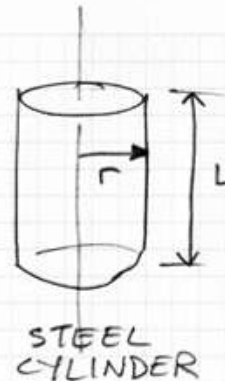
1/2 TUBE DIA. = 3/8

$$\begin{aligned} \text{BLOCK HEIGHT} &= 7.296 - 3/8 + 2 - 1/4 \\ &= 8.671 \end{aligned}$$

$$\text{BLOCK HEIGHT} = C\sqrt{2} - \frac{1}{2} \text{ TUBE DIA.} + \text{JIG HEIGHT} - \text{NOTCH}$$

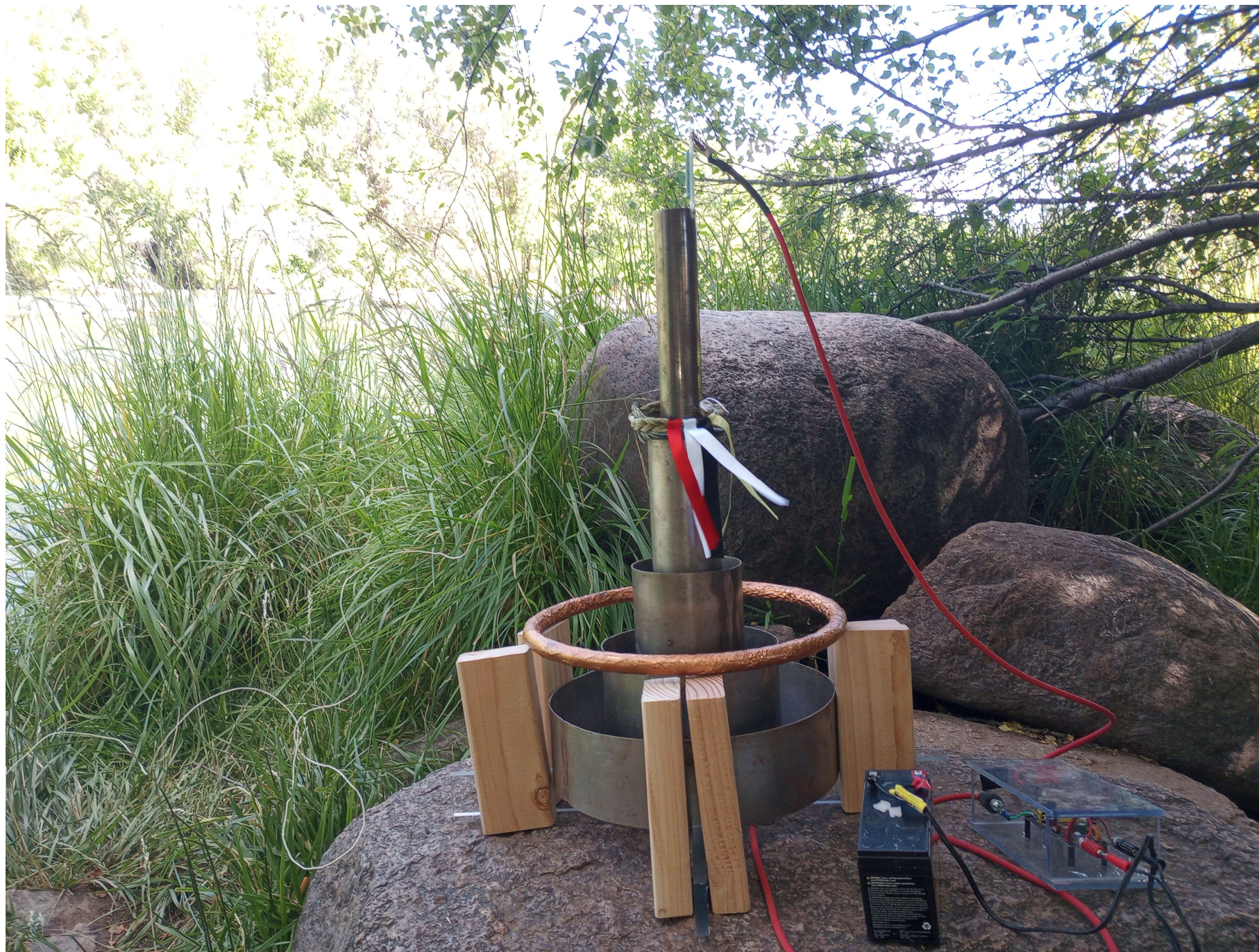
BLOCK HEIGHT = 8.671

BLOCK HEIGHT = 8 - 5/8 INCH



$$C^2 = r \times L$$

THIS VALUE
IS THE SAME
FOR ALL 5
STEEL CYLINDER





Wiring Diagram

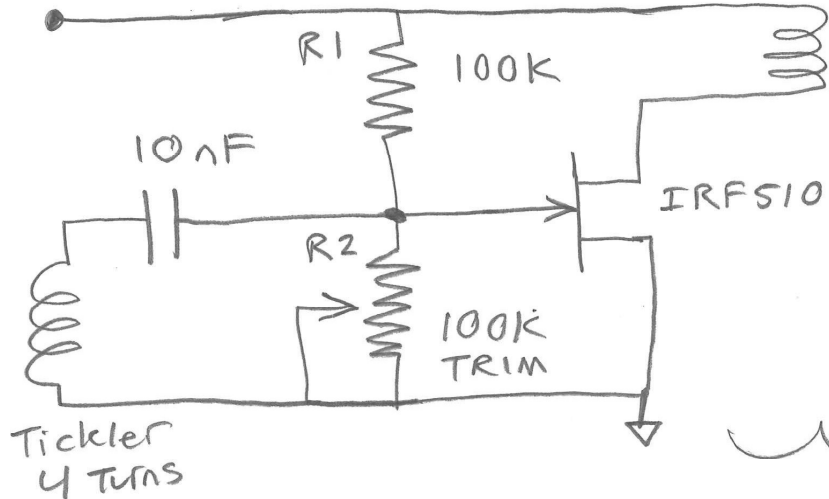
Armstrong Oscillator

1 Mhz

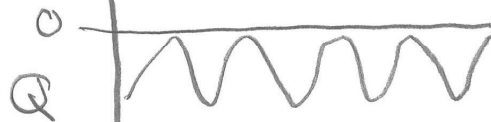
100 V p-p

ARMSTRONG
OSCILLATOR

+12.5V



CHARGE ON TUBE



STEEL
CENTER
TUBE
20pF

UF4007

100V_{PP}

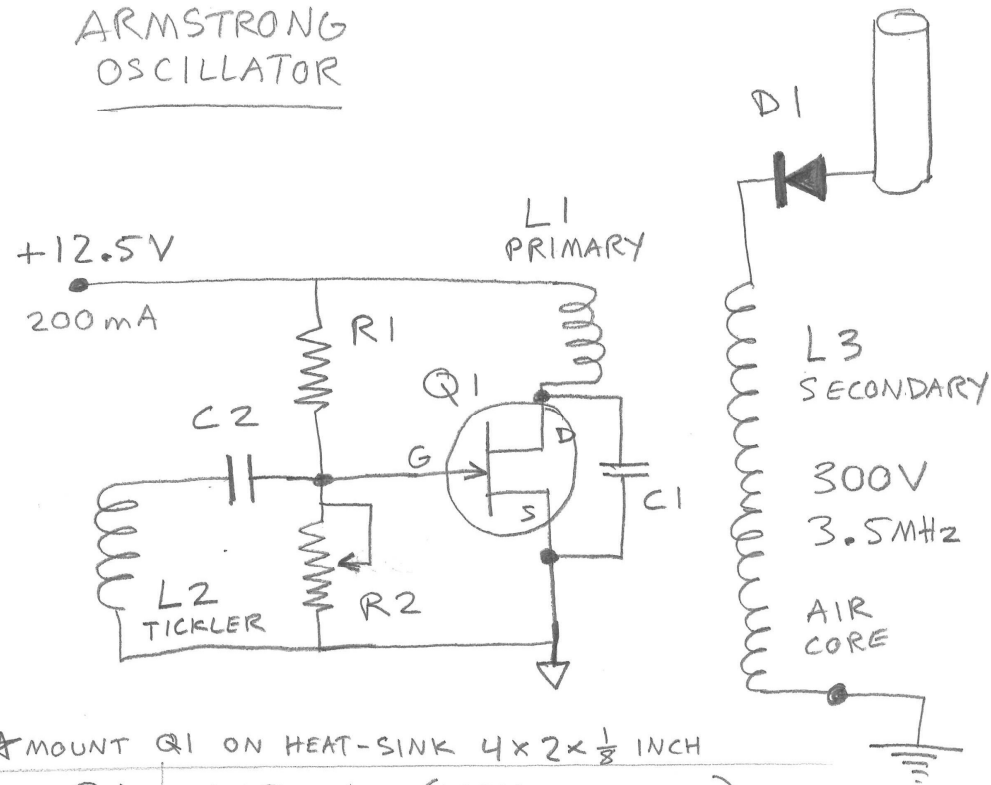
1MHz

Air Core
Transformer
100 TURNS

GROUND
ROD
IN
RIVER

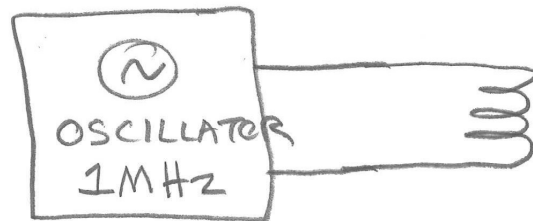
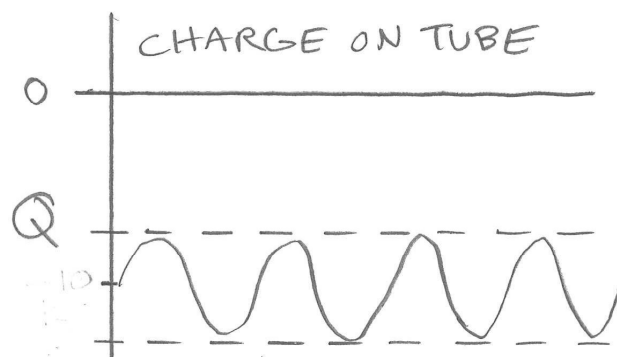
Tickler, Primary, Secondary wound on 2 inch HDPE tube. HDPE has low dielectric loss tangent. Turn up R2 until oscillation begins. Steel tube will become negatively charged. The diode's small junction capacitance allows the tube to discharge slightly each cycle. Effective at making rain.

ARMSTRONG OSCILLATOR



★ MOUNT Q1 ON HEAT-SINK $4 \times 2 \times \frac{1}{8}$ INCH

Q1	IRF510 (100V 5A NMOS)
C1	1nF 100V CERAMIC
L1	4 TURNS 22 AWG SOLID COPPER WIRE
R1	100K Ω
R2	100K Ω TRIM
C2	10nF 50V CERAMIC
L2	4 TURNS 26 AWG
D1	UF4007 ULTRA FAST DIODE
L3	100 TURNS, 26 GAUGE MAGNET WIRE



STEEL
TUBE

Air Core
Transformer

400 PF
20KV
DOORKNOB
CAPACITOR

CHOKE OR
RESISTOR
100K

-10KV
DC

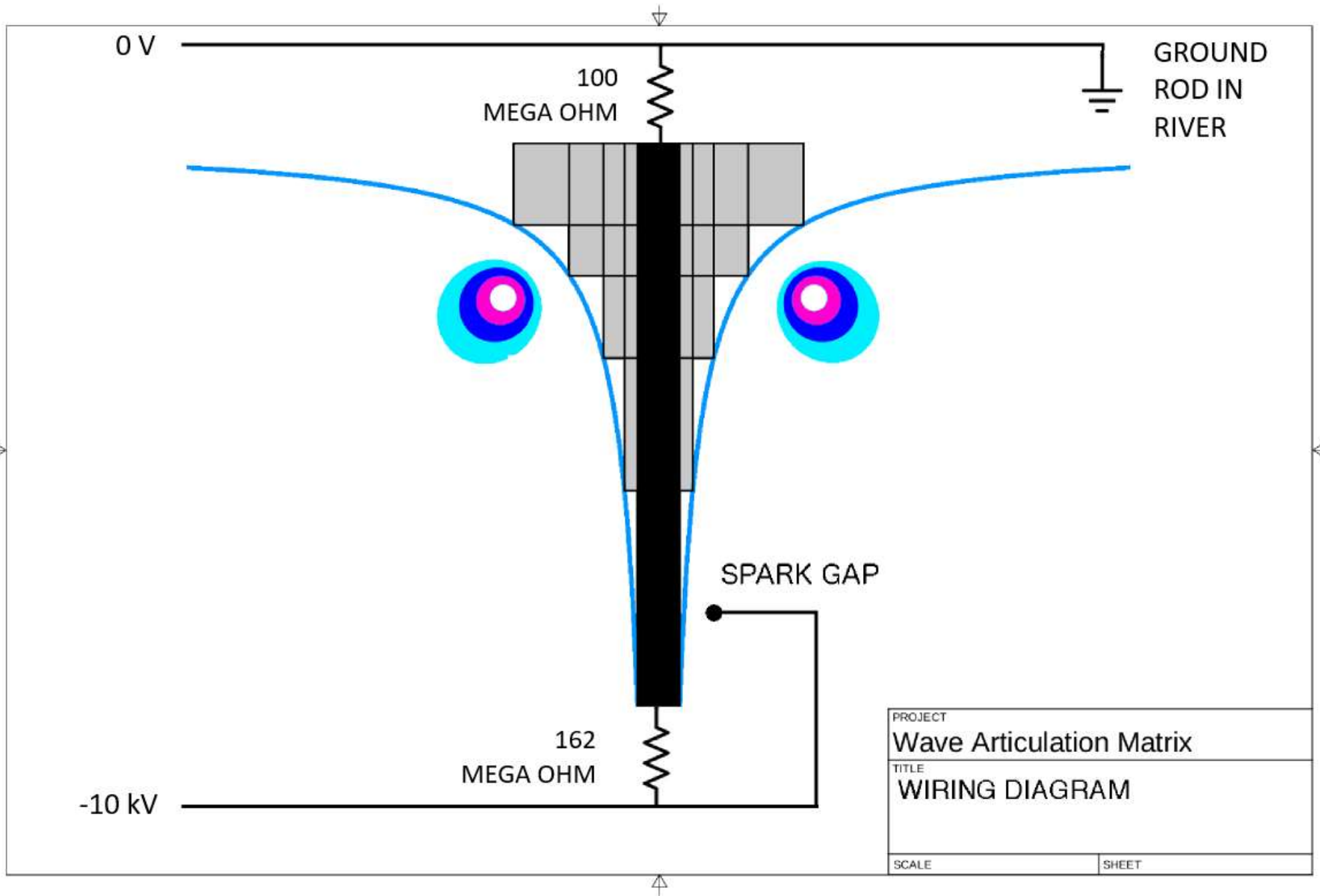
GROUND
ROD IN
RIVER

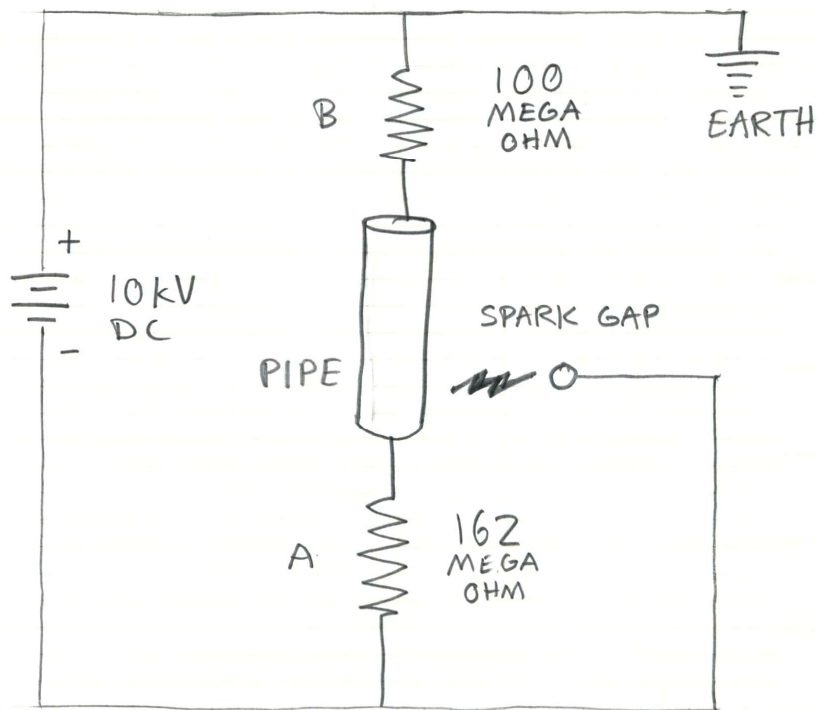




Wiring Diagram

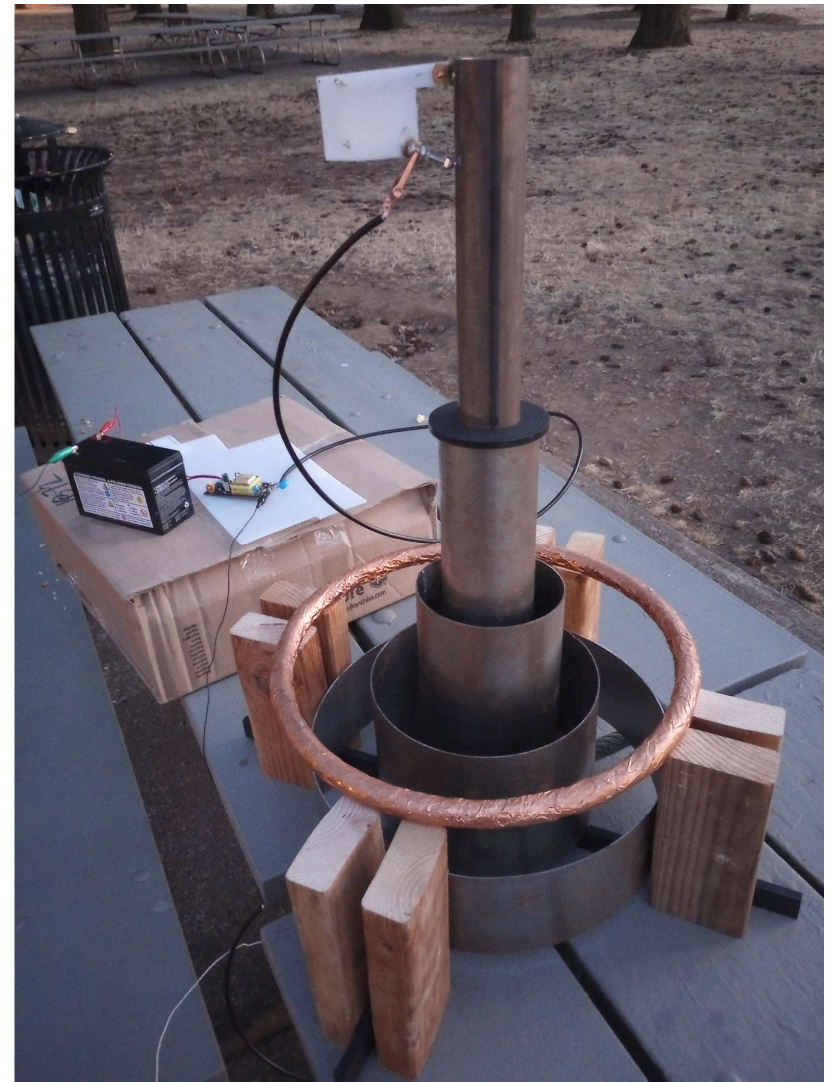
-10 kV DC, Spark Gap





$$\frac{A}{B} = \frac{1 + \sqrt{5}}{2}$$

$$\frac{A}{A+B} = \frac{2}{1 + \sqrt{5}}$$



V = Circuit Voltage relative to Earth

Q = Charge

σ = Surface Charge Density

Φ = Electric Potential

ϕ = Life

$$Q = CV$$

$$Q \propto V$$

$$\sigma \propto Q$$

$$\Phi \propto \sigma$$



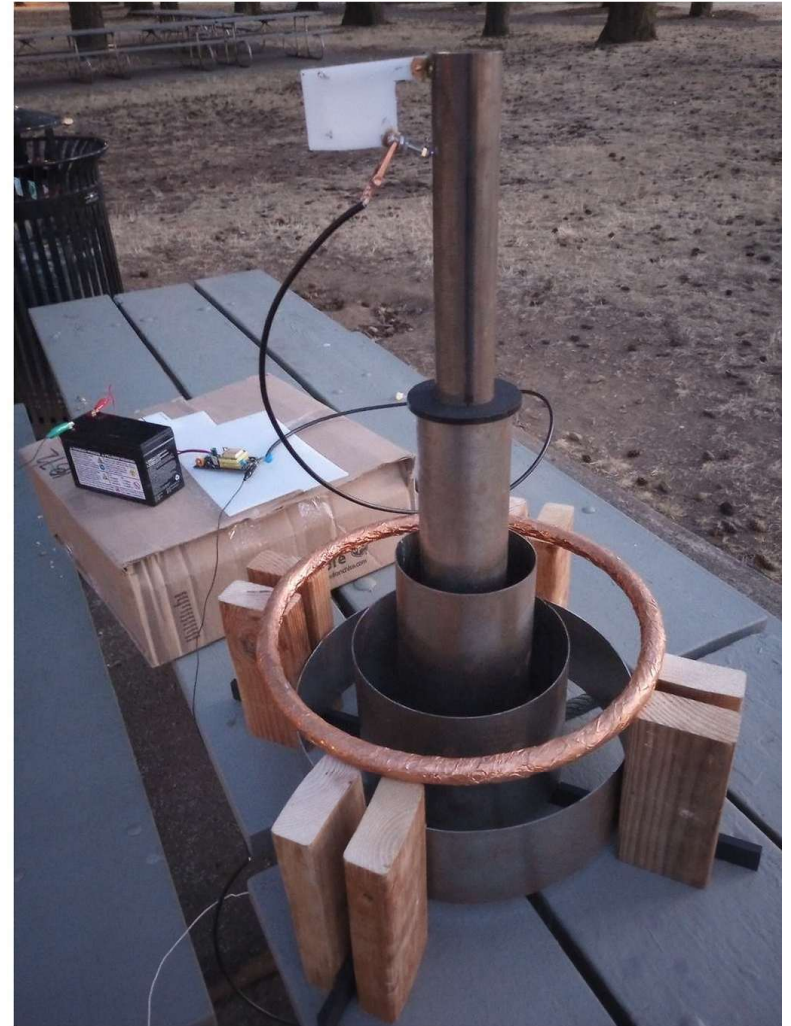
$$\Phi \propto V$$

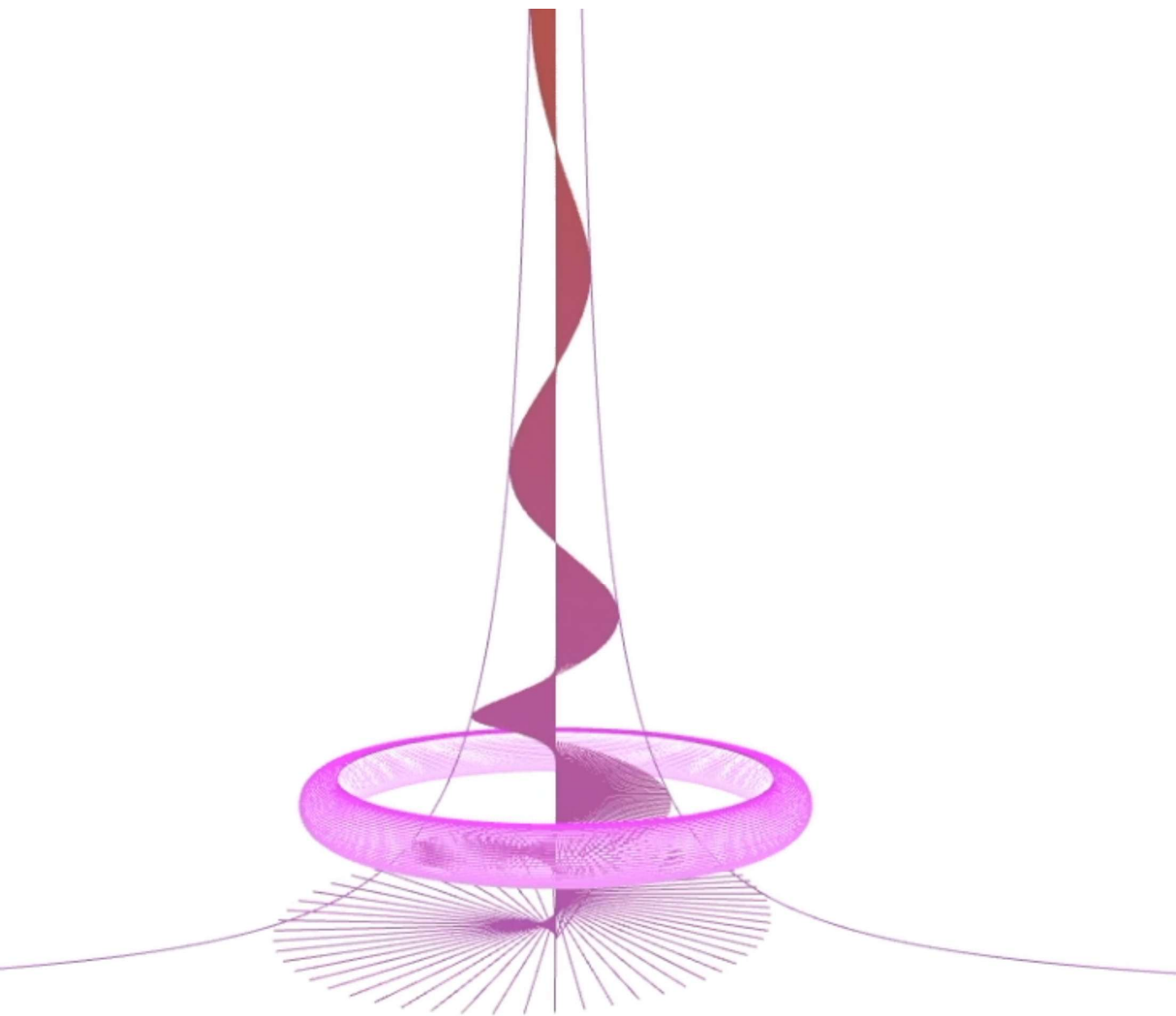
$$\frac{\partial \Phi}{\partial t} \propto \frac{\Delta V}{\Delta t}$$

$$\phi \propto \frac{\partial \Phi}{\partial t}$$

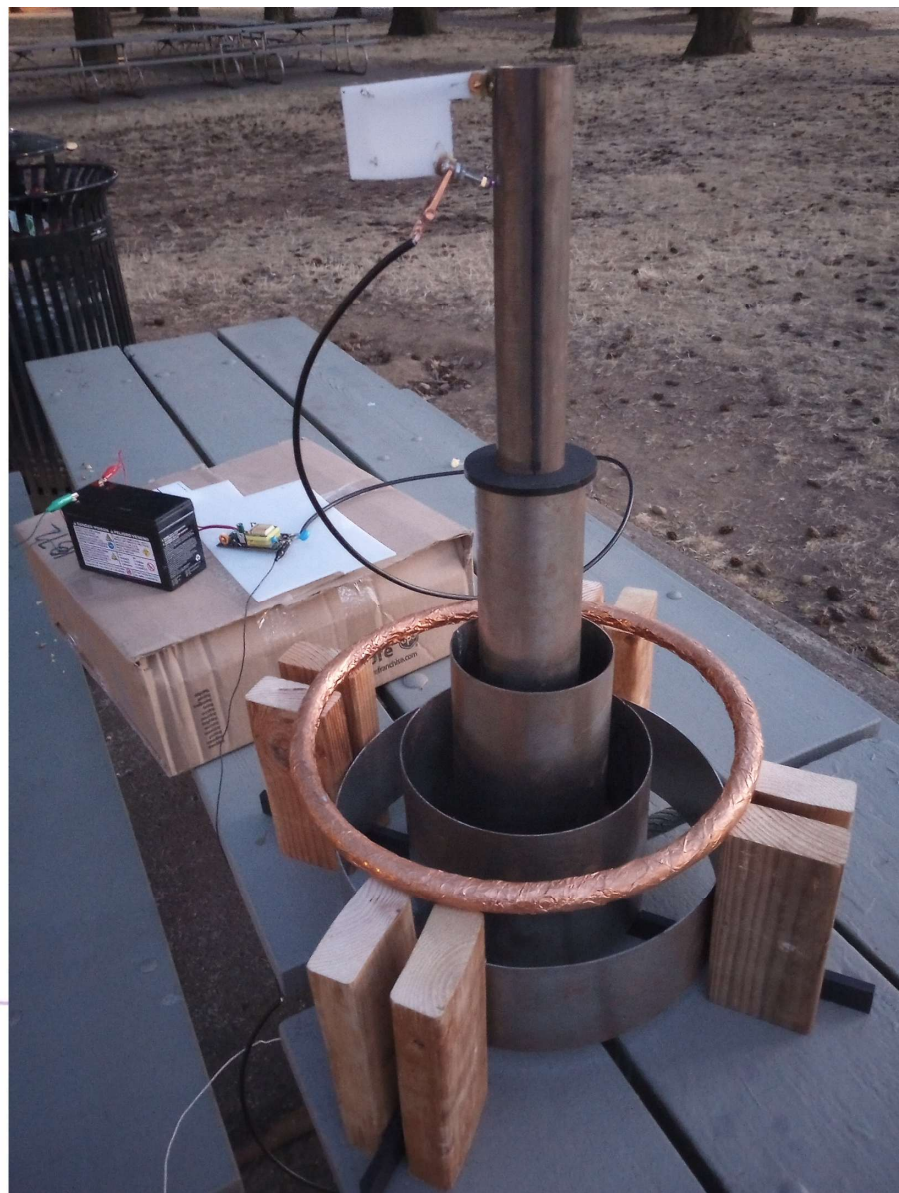
We are working with electric charge. We are varying the surface charge density on the pipe.

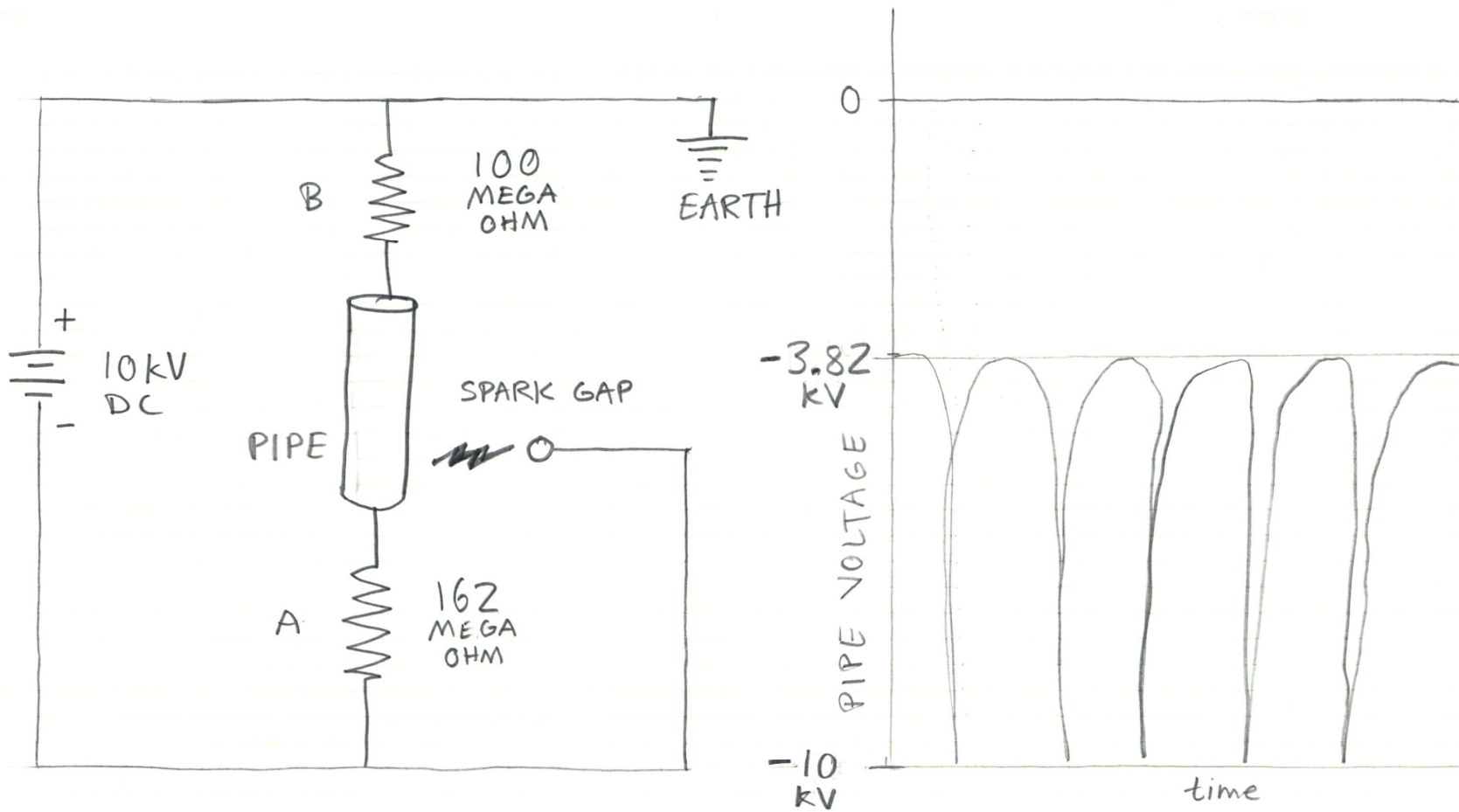
By varying the amount of charge on the pipe, we thus vary the magnitude of the electric potential in the space inside the pipe.





Aharonov Bohm Effect





$$\frac{A}{B} = \frac{1 + \sqrt{5}}{2}$$

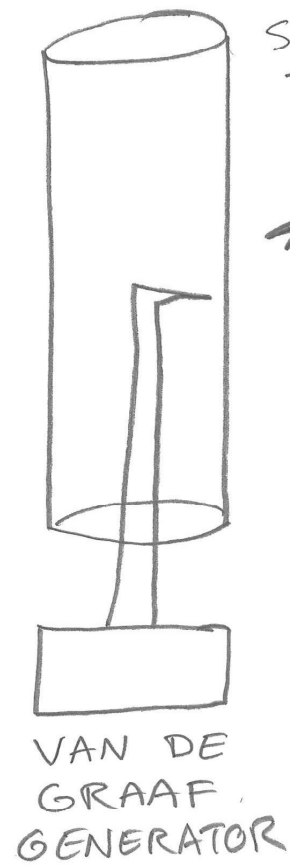
$$\frac{A}{A+B} = \frac{2}{1 + \sqrt{5}}$$

The pipe is always charged negative, just more and less so.



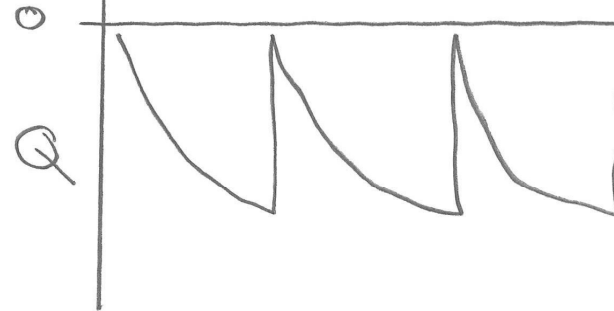
Wiring Diagram

Van de Graaf Generator



STEEL
TUBE

CHARGE ON TUBE



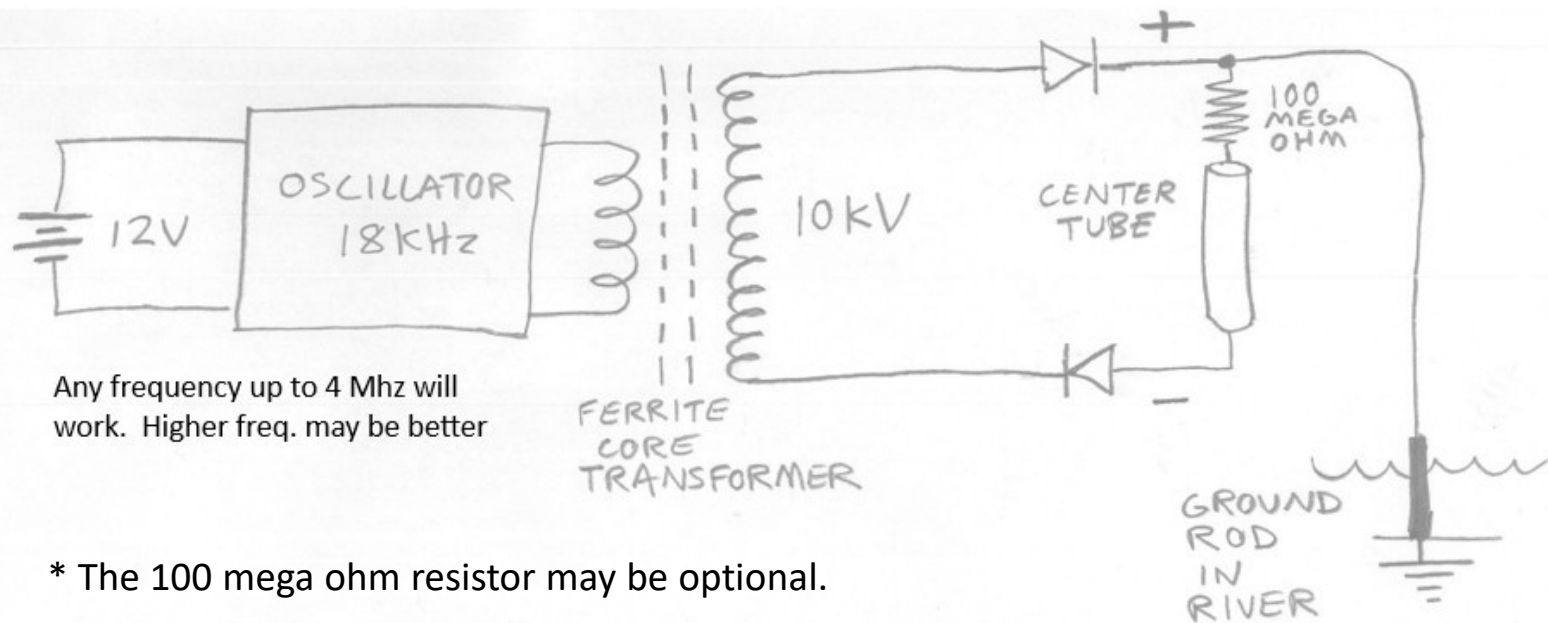
SPARK
GAP

GROUND
ROD IN
RIVER



Wiring Diagram

-10 kV, 18 kHz

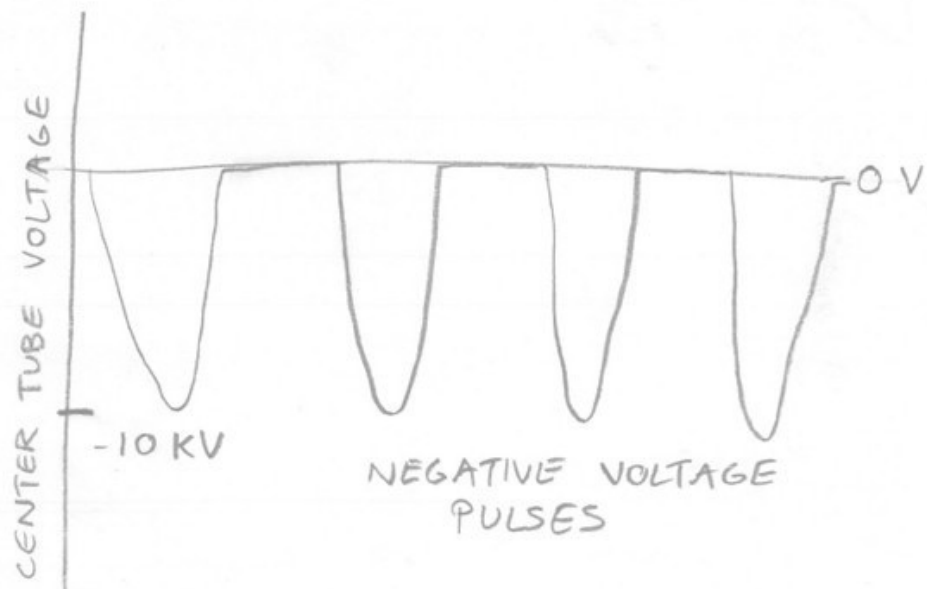


$$Q \propto V$$

$$\Phi \propto Q$$

THE CHARGE ON THE TUBE IS PROPORTIONAL TO THE VOLTAGE-

THE ELECTRIC POTENTIAL INSIDE THE TUBE IS PROPORTIONAL TO THE CHARGE-

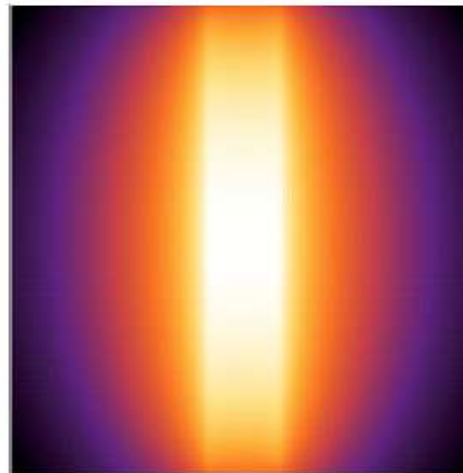
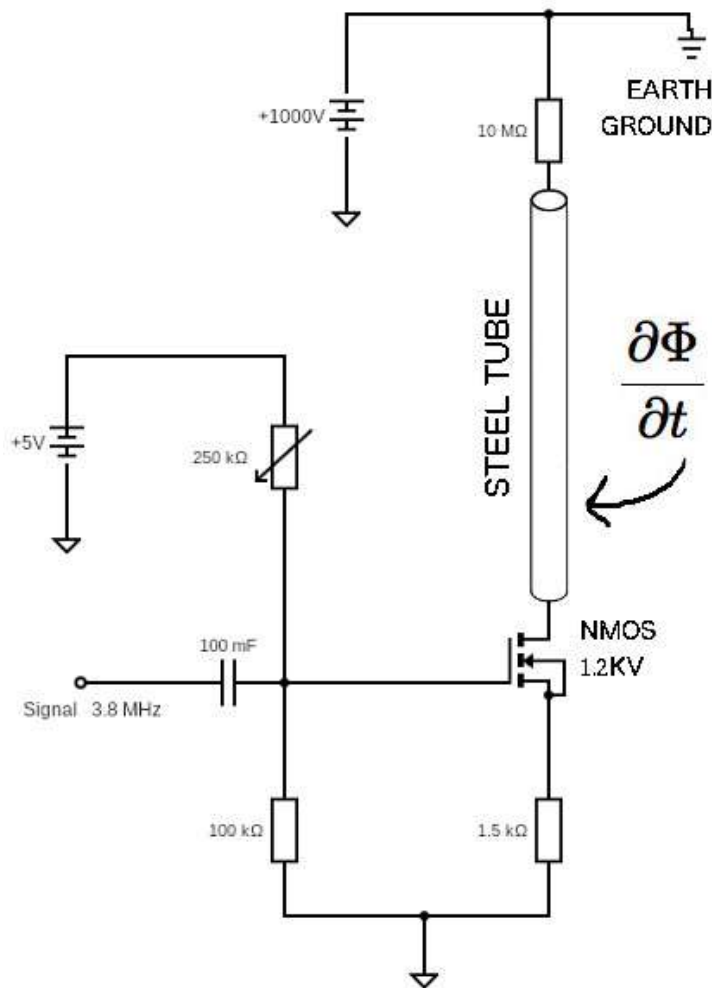




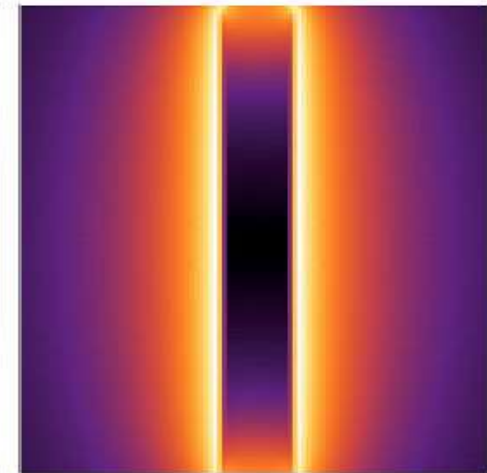
Wiring Diagram

-1 kV, Transistor

Time-Varying Electric Potential of a Metal Tube



Electric Potential



Electric Field

The Charge on the steel tube is varied with respect to time. Thus, the Electric Potential inside the tube is varied.

$$\mathbf{E} = -\nabla \Phi$$

$$\mathbf{E} = \text{Electric Field}$$

$$\Phi = \text{Electric Potential}$$

The circuit varies the amount of charge on the center tube. There are a number of ways to achieve this. It could even be done electro-mechanically. As the surface charge density of the tube is varied, so the Coulomb Potential inside the tube varies.

The tube must at all times be charged negative, just more and less so.

The circuit must be grounded into a flowing river. There is a Life Energy present in flowing water (“living water”), which flows up into the tube, as the charge on the tube is varied.

Higher pulse rates may be more effective. Higher pulse rates may be effective, even at much lower voltages (300 V). I am experimenting with an oscillator using at 3.550 MHz crystal (80 meter ham band), at 300 Vpp.

Maxwell's Equations

Φ = Coulomb Potential

$\mathbf{A}$ = Magnetic Vector Potential

$\mathbf{E}$ = Electric Field

$\mathbf{B}$ = Magnetic Field

$\oint$ = Line

$$\mathbf{E} = -\nabla\Phi - \frac{\partial\mathbf{A}}{\partial t}$$

$$\mathbf{B} = \nabla \times \mathbf{A}$$

$$\oint = \frac{\partial\Phi}{\partial t}$$

$$\nabla \cdot \mathbf{E} \propto \rho$$

$$\nabla \cdot \mathbf{B} \propto 0$$

$$\nabla \times \mathbf{E} \propto \frac{\partial\mathbf{B}}{\partial t}$$

$$\nabla \times \mathbf{B} \propto \frac{\partial\mathbf{E}}{\partial t}$$

Further Information

<https://spaz.org/~magi>

<https://youtube.com/playlist?list=PL-mwgKssk8XgiZ2rml0ywtLjdg4DR9naP>