

Alpha-numeric title of lab

Descriptive title of lab

TITLE Lab 3 (or E3) Project No. _____ Book No. _____

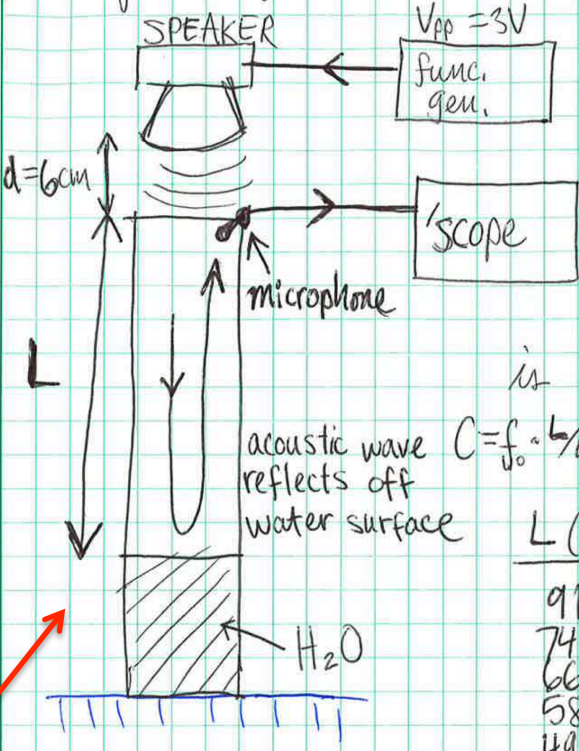
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Brief description of the experiment

August 5, 2016

Acoustic Resonance Tube

Date and time of the experiment



We are measuring the acoustic resonance frequency as a function of the tube length L . The length is adjusted by adding water.

$C = f_0 \cdot \lambda/4 \rightarrow f_0 = 4C/L$

Record your data in tables like this one.

L (cm)	f_0 (kHz)
91	1.605
74	1.735
66	1.914
58	2.156
49.5	2.498
41	4.716
36	5.824

Cross out mistakes with an X or single line. The words or numbers underneath must still be readable.

Schematic drawing of experimental setup

plot $y = 1/f_0$ vs. L

$1/f_0 = L/4C \rightarrow \text{slope } m = 1/4C$

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Witnessed & Understood by me, John Ott Date 8/5/16 Invented by: _____ Date 8/5/16
 Recorded by: Paul Pimlach

Lab Instructor or TA needs to sign here before you leave,

You sign here.

Write the date here.