

# Recording Techniques Post-Strike #3

Alexei Ozerov

## 1 Class Introduction

- Guitars.
- Look at “My Recording Rig” assignment.
- Refresh yourself on how to make spreadsheets.
  - Price, Qty, Subtotal, Tax, Total
  - Use equations.
- Brian is going to be teaching the class next week.
- There will be a few investigations today.

Reflection will be due tomorrow.

Read “Physical and Perceived Elements of Sound”.

## 2 Investigation #1

Acoustic Guitar Mic Placements

## 3 Investigation #4: E. Guitar Placement

- 1. Edge of the Cone - Darker Sound
- 2. Between Edge and Center of the cone - Thinner Sound
- 3. Center of the cone - VERY Brittle
- 4. On edge and angled - Compared to 2, this is slightly brighter, with a more defined low
- 5. Royer - Condensor, more proximity effect, smooth, I like it

Audiofile Calculator.

Measured two wavelengths - set SM57s down at  $1/2$  Wavelength, 1 wavelength, and two wavelengths. The fundamental note was an “E2”.

- Close - Playing ... add further and further away bits
- 1/2 Wavelength - Grainy, Flanger-ish, pretty shitty sound, kills the fundamental because of phase
- 1 Wavelength - Fundamental of Tonic is Reinforced (Sounds like a doubled guitar), sounds sick with the 1 Wavelength added
- 2 Wavelengths - Sounds iffy, a bit too far away, and sounds strange, time delay makes it sound off.

## 4 Investigation #6: Jack Richardson Techniques

Three Microphones On The Cone:

- Shure SM57 - one side of the cone at an angle, close
- Sennheiser 421 - other side of the cone
- Neumann TLM 170 - center

Lots of polarity flipping and messing with relative level. U87 sounded squirrely, 427 sounded clear and powerful. On their own, they were all pretty okay, but it was fantastic when combined. Lots of different things you could do with the tone. 57 and 421 sometimes get the same signal, so you can mess around with polarity.