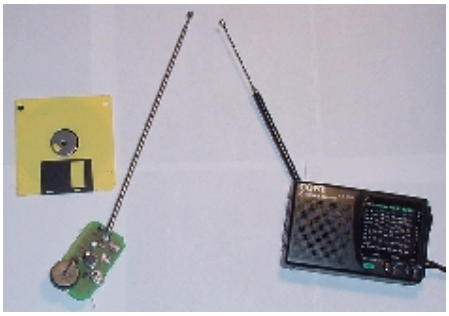
King Fahd University of Petroleum & Minerals
Department of Electrical Engineering
EE370 Communications Engineering I

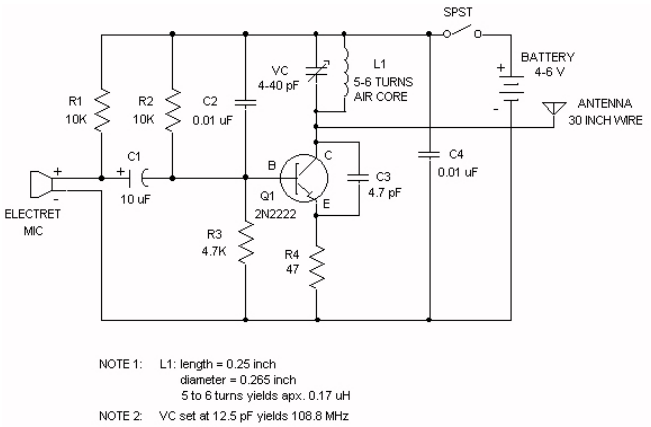
Design Project
Building and Testing Wireless FM Transmitter

Due: Sun. Jan 7, 2007 (Strict Deadline)

As an introduction to this project, read the information provided in this link (see WebCT)

http://www.boondog.com/tutorials/rfTransmitter/rfTransmitter.htm





1. Build the circuit!
2. Test it and make sure it is working!
3. Input a square pulse signal instead of the mic input, show the signal or its spectrum at different points in the circuit. You may do that by measurements (Oscilloscope) **or** by PSPice.
4. Explain in details how the circuit works in light of what you have studied in EE370.

Hints:

1. Your short report should be self contained. The reader should not feel that you are answering questions! (Introduction, body, conclusion)
2. Writing style and organization are very important (Quality not Quantity!)
3. Work in groups (maximum of three)
4. Try to learn from the project by examining the signal in the time and in frequency domain at different locations.
5. You may use the EE 370 lab to test your circuit. For that you need to arrange with the lab technician.
6. Start early to avoid any last minute problem.
7. It will be your sole responsibility to make the components available. You can buy them from Khobar shops or borrow them from EE department store.
8. Project presentations will take place on Jan 8-10 (strict deadline)

Good luck, **EE 370-061 Instructors**