

Memo to: EE 477 Students
From: R.C. Maher
Date: January 14, 2004
Reference: Memo Report Format

Header:

Include a simple, informative header on your report.

To: Prof. R.C. Maher
 From: Your Name
 Regarding: Lab #X—*Lab Title* (Put lab number, then title)
 Date: January 15, 2004 (the date the lab was performed, not the due date)

Summary:

The Summary is intended to be a complete description of the lab experiment, but written succinctly for a knowledgeable reader. Choose your words carefully and *engineer* your summary to be brief, but effective.

Typical Main Body Organization:

- Answer **ALL** questions beyond Section 2 (Warm-up), which will typically be the Exercises and Lab Review Sections. **Clearly label all parts of each question (3.1.a, 3.1.b, etc.) in the memo.** If a particular question doesn't require an answer, i.e., it asks you to “play a sound,” just put **N/A** next to the question part. However, if you are asked to “comment on what you hear,” you should write down your comments. **You will not get credit for sections that are not clearly labeled.**
- It will generally be *much more time efficient* if you write up your lab as you do the lab and generate the figures. This way you won't have to do things twice: just embed the images in your lab report as you create them.
- **Embed the figures you create into the write up that are related to the questions.** You can do this in Microsoft Word by creating a text box (*Insert->Text Box*) and then placing the figure into the text box (*Insert->Picture->From File*). Format the text box so that text flows to the side (*Click on text box and then Format->Text Box->Layout->Square*).
- **All figures must have captions** underneath them that describe what the figure is. As a general rule, all figures in the text should be self-contained: you should be able to understand what is going on in the figure by just looking at the figure and reading the caption.

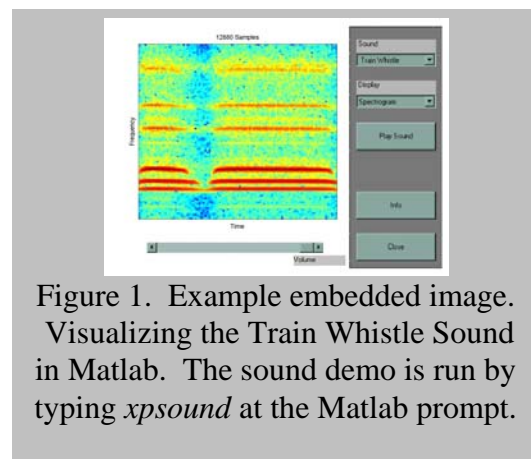


Figure 1. Example embedded image. Visualizing the Train Whistle Sound in Matlab. The sound demo is run by typing *xpsound* at the Matlab prompt.

- If an exercise tells you to measure something from a plot, **give the evidence that you actually measured it**. A good way to do this is to use the Matlab *ginput* function to get x,y coordinates from the plot. Then use these numbers to draw short vertical (horizontal) lines on the plot and then draw arrows between these lines. Use the *hold* and *plot* commands in Matlab to do this. For example, you will need to do this in Lab 1, section 1.3.1.6. You will need to show how you arrived at a particular measurement starting from the x,y coordinates.
- For lab verifications done outside the lab, have a Matlab *script* ready to run that will automate the presentation process (use the function *pause* to separate items and use the function *disp* to tell what is going on). Have a matlab file named **run_lab03.m**, for example, if you are turning in a floppy to be checked for lab 3.
- When turning in a program to be verified, be sure to **test the program by running it from the floppy or zip disk** to make sure that all necessary files have been included. The program you wrote may depend on previous written code that will need to be included if your program is to run. You don't have to include any functions from any of the standard toolboxes.
- Place print-outs of your code in an appendix and **clearly mark what section & problem number(s) the code was for**. **The code should be well commented**.

Concluding Section:

If you wish to expand on the Summary given at the top of the memo, a concluding section might be given. You could entitle it simply *Conclusion*, or *Recommendations for Further Work*, *Summary Comments*, or any other title that tells what the boss is going to see when reading the conclusion. Remember, the goal of any written or oral presentation is to communicate.