PROGRESS REPORT #3

1. Project Name: Super differential amplifier with extra feedback controlled by µC
   Students in group: John Doe, Jane Smith and Michael West
   Date: February 27, 2010

2. This progress report covers the actions taken from February 13 to February 27, 2010

3. Status of items in the last progress report
   The last progress report indicated that we had trouble with the testing of the
   Operational Amplifier, the Multisim simulation and the building of the PCB.
   The testing of the Operational Amplifier has been solved (see #4)
   We are still working on the problems with the Multisim simulation
   The group decided to park the building of the PCB until the design is final.

4. Activities taken by this group during the time covered in this progress report.
   4.1 The group met on February 15, February 19 and February 23. All members of
       the group were present except Michael who was not able to attend the meeting on
       February 19.

   4.2 On February 15, we met in the electronics lab to work with the problem of
       testing the Operational Amplifier. We were able to solve the problems with this
       amplifier. The Lab Notebook details the tests and results of the tests.

   4.3 On February 19, we met in the computer lab to try to solve the problem with
       the Multisim simulation. As shown in the Lab Notebook, there are strong
       differences between the results of the simulation and the experimental results. We
       think that this may be due to using the incorrect model. We have not been unable
       to solve this problem at this time. During the same day, we decided that we
       cannot proceed with building the PCB until we are sure of the circuit. This item
       will be revisited at a later meeting.

   4.4 On February 23 the group met to discuss the next tests that need to be done.
       We decided that we need to test the input impedance and the output impedance of
       the circuit. Michael and Jane will work on developing the tests while John will
       analyze the circuit to calculate the theoretical input and output impedances. After
       the tests are done, we will compare the experimental and theoretical results.

5. Actions for next progress report.
   For the next progress report we expect to report on the following items:
   - Final decision on the problems with Multisim simulation.
   - Experimental values of input and output impedances
   - Theoretical values of input and output impedances
   - Initial decision on main algorithm for microcontroller code
6. Other items.
   The group is starting to feel more comfortable about implementing the control of
   the system with a microcontroller. We are still unsure on the model of
   microcontroller that will be used although we are leaning towards using a PIC