Project Title: Animal Ventilator

Team Members:
Chris Wegener, Team Leader  cjwegener@wisc.edu
608-469-3961
Ashley Anderson, Communicator aandersoniii@wisc.edu
608-212-3462
Matt Smith, BWIG mrsmit4@wisc.edu
414-640-3088
Micah Brown, BSAC micahbrown@wisc.edu

Client: Sean Fain, Ph.D.
Dept. of Medical Physics
UW Medical School
Clinical Sciences Center E3/311
Phone: 263-0090
Page: 265-7000 Ext. 5251
email: sfain@wisc.edu

Advisor: Willis J. Tompkins

Date: 2/16/2007

Problem Statement:
Redesign a MRI-compatible small animal ventilator to deliver a variable volume of hyperpolarized helium and oxygen gas at user-specified frequencies. The device should be compatible with the current system in place.

Restatement of team goals:
1. Calibration and testing of second prototype
   1.a. Volume output
   1.b. Timing
   1.c. Gas mixture

Summary of Team Accomplishments:
1. Finished second generation prototype
2. Began calibration of new prototype

Summary of Individual Accomplishment:
1. Everyone put together the second generation prototype
2. Calibration testing has begun
Statement of Team Goals:
1. Lay out calibration procedures
2. begin and complete calibration
3. begin testing gas mixture
4. animal testing

Project Schedule:
1/26-2/16  Finish construction of second generation device.
2/17-2/23  Software testing and modifications made
2/24-3/16  Written development of test procedures and securing test equipment and sites
3/17-4/6  Non-animal testing of device
4/7-4/27  Write-up of results, final paper, and poster
5/4       Deliver

Difficulties:
None so far, but we’re expecting some as the calibration and testing of the second generation prototype begins.

Activities:
(Since device delivery)
Chris: 2.0 hrs – team meeting, calibration
Ashley: 2.0 hrs – team meeting, calibration, LabVIEW work
Matt: 2.0 hrs – team meeting, testing at Waisman
Micah: 2.0 hrs - team meeting, calibration work, progress report

Team Total Hours for this week: 8 hrs