<u>Gannon University HARD payload</u>
Status Report #3
3/28/2012

1. **Achievements**
    - Designed system to test maximum latching speed of MCU using arduino coding, this is about 650kHz
    - Began design of a MPLAB based program to test its ability to trigger the MCU, this program is not yet completed
    - Arduino based code with parts written in C will compile without any problems meaning we can mix C and Arduino to a point.
    - MCU Serial UART working and performing tasks perfectly.
    - RS232 Adapter circuit tested and implemented
    - MCU programmed with GPS
    - Initial integration testing of GPS and MCU
    - Comparator test program completed and tested successfully with amplifier.
    - Tested the amplifier for amplification functionality
    - Tested the functionality of the photomultipliers
    - The Photomultipliers are in full functioning order
    - Ordered more amplifiers from Photonique

2. **Issues**
    - Testing the rest of the Photomultipliers
    - Photomultiplier with amplifier alone as of right now isn't functioning properly.

3. **Next Activities**
    - Test the remaining photomultipliers/ amplifiers and record any progress
    - Form a plan for the final connections within the payload

4. **Current team members and leader**

    Robby Frantz, Electrical Engineering
    Dan Grasinger, Computer Engineering
    Nichole McGuire, Electrical Engineering (Team Lead)
    Aaron Neiman, Computer Engineering
    Joe Veneri, Electrical Engineering
    Emily Wright, Electrical Engineering

    Dr. Wookwon Lee, ECE Faculty Advisor
    Dr. Nicholas Conklin, Physics Faculty Advisor