

Massachusetts Institute of Technology
Department of Electrical Engineering and Computer Science
6.111 – Introductory Digital Systems Laboratory

Final Project Check Off Sheet

Project Title: Have a Safe Flight: Bon Voyage

Student Names: Mariela Buchin, Wonron Cho, Scott Fisher

TA Name: Theodoros Konstantakopoulos

TA Signature/Date:

Mariela:

- Create a device that will measure the throttle of the airplane and output an 8 bit value to the physics module.
- Interface two angular rate sensors with the FPGA labkit user I/O through the use of two ADC's
- Convert the voltage inputs to angle values to input into the physics module.

Wonron:

- Display an Attitude indicator to the monitor
- Display 5 digit alpha numeric values to the monitor to represent Altitude, Ascent rate, and velocity
- Display the direction of the airplane
- Display for termination of game

Scott:

- Calculate pitch, roll, weight, thrust, drag, lift and direction from the two angle inputs and the throttle input.
- Have text documents of values for WonRon to plug into her ROMs.
- A Correctly working 'Major FSM' to interface all the other modules together

Discussion:

- Briefly describe the physics behind the airplane's motion.
- What are the limitations of this system?