

**Massachusetts Institute of Technology**  
**Department of Aeronautics and Astronautics**  
**16.30 Estimation and Control of Aerospace Systems**  
**Spring 2004**

Please, fill out the following questionnaire and submit it with your lab report. **DO NOT** put your name on this questionnaire (unless you really want to):

1. Have you used Quanser in your other classes prior to 16.30?

Yes            No

2. For 16.30, which lab did you do:

Web lab            Regular Lab

3. How much time did you spend to collect data for the identification part of the lab?

4. For the identification experiment, was it easy to initialize the Quanser (bring it to hover)?

Extremely Easy    1    2    3    4    5    6    7    Extremely Difficult

5. How much time did you spend in the actual lab working on your controller?

6. How accurately did you follow the healthy controller design procedure of:

- (1) obtaining a linear model
- (2) designing the controller
- (3) testing the controller using the model
- (4) testing the controller on the actual equipment

Extremely Closely    1    2    3    4    5    6    7    Quite Loosely

7. How easy was it to access the actual equipment?

Extremely Easy    1    2    3    4    5    6    7    Extremely Difficult

8. Were the lab requirements easy to understand?

Extremely Easy    1    2    3    4    5    6    7    Extremely Difficult

9. Is it easy to do the lab without staff support and presence during the sessions?

Extremely Easy    1    2    3    4    5    6    7    Extremely Difficult

10. How easy was it to figure out which files should be used to run the lab?

Extremely Easy    1    2    3    4    5    6    7    Extremely Difficult

11. How easy was it to understand how to change input parameters?

Extremely Easy    1    2    3    4    5    6    7    Extremely Difficult

12. How easy was it to turn on the data displays (plots of angles and rates)?

Extremely Easy    1       2       3       4       5       6       7       Extremely Difficult

13. How easy was it to manipulate the data displays?

Extremely Easy    1       2       3       4       5       6       7       Extremely Difficult

14. How easy was it to understand the instructions on running the machine?

Extremely Easy    1       2       3       4       5       6       7       Extremely Difficult

15. How easy was it to implement your controller in the final Simulink diagram?

Extremely Easy    1       2       3       4       5       6       7       Extremely Difficult

16. How many times did your Quanser hit the stops/table because of your controller design?

17. How many times did you hard land the machine on the table after finishing the experiment?

18. If you worked with a partner, how easy would it have been to perform the identification lab on your own?

Extremely Easy    1       2       3       4       5       6       7       Extremely Difficult

19. What about the controller design lab?

Extremely Easy    1       2       3       4       5       6       7       Extremely Difficult

20. How did you find the overall lab experience?

Dull                    1       2       3       4       5       6       7       Stimulating

21. How did you find the overall lab experience?

Frustrating            1       2       3       4       5       6       7       Satisfying

22. Please, write below any additional comments about the lab and your experiences: