2.007 Design and Manufacturing I Spring 2009

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.

2.007 -- Introduction to Design and Manufacturing I

Milestone #11 – Reflection and Learning

Dan Frey and Kaitlyn Becker

Deliverable: 3-4 pages in your design notebook.

<u>Due Date:</u> May 11 at 1PM (when we meet for our last regularly scheduled lab).

DESCRIPTION:

This milestone is the last one of the course. As the seeding as progressed and the design contest runs, you have a chance to observe lots of other machines in operation. You also may have some time to reflect on your own design effort and what it meant to you personally. In particular, consider what you have learned and how the experience may change your design approach in the future. Below are some suggestions on elements you may choose to include:

- 1. **A description of the final machine.** What was your machine finally and what does it do? To answer these questions, you might use an annotated photograph and/or solid model and a detailed description of your seeding round results.
- 2. **Some comparisons.** Are there some other machines that help us to understand your machine and your design process? How did other people approach the same tasks that you attempted? Are there any priciples that can be generalized from these comparisons?
- 3. **Use of design tools.** What role did design tools such as CAD and computational tools play in your design? Did these tools every help you to forsee and avoid a problem? Did you make more use of the tools compared to those around you, or less? What was the impact on your design?
- 4. **What you learned.** Please describe in some deatil a few key things you learned. The tings you list might concern machine elements, fabrication, solid mechanics, the creative process, and/or decision making. An insightful analysis of a few things you learned is preferred to a long list.