

Manufacturing Status Review Assignment

ASEN 4028, Senior Projects 2: Design Practicum Spring 2015

1.0 Document Purpose

This document outlines the objectives and deliverables for the Manufacturing Status Review (MSR) assignment.

2.0 MSR Objectives

The MSR serves as a formal interim review on the status of the project. Since the project is primarily in the manufacturing phase, this aspect will dominate, but a complete picture of the project at its current state should be communicated. Accordingly, the MSR presentation should have the following structure:

Overview (10%)

- Brief top level overview of your project purpose and specific objectives (levels of success). Include CONOPS and FBD diagrams (updated as needed) to quickly remind the PAB of the fundamentals of your project.
- Review of the critical project elements, along with any updates on critical issues from CDR, FFR, etc.

Schedule (20%)

- Review the project schedule, showing overall progress toward goals. Discuss any major changes in the project schedule since CDR.

Manufacturing (60%)

- Describe the scope of the manufacturing tasks in the project (what parts are being manufactured vs. purchased, what is involved in their manufacture, where and how they are being manufactured)
- Describe the status of the manufacturing tasks, showing engineering details as needed to convey a solid understanding of the task and what is important for project success.

Budget (10%)

- Provide an update on parts/materials procurement status and the financial budget status.

In this presentation, “manufacturing” encompasses all those elements that you are designing and producing, including mechanical components, electrical components, and software components. Since all projects have these key components, all should be covered. However, use your time wisely to dwell on the most important aspects for success in your project.

The PAB must understand the state of your project relative to its goals. Realize that this understanding can't be conveyed by simple statements like “we are on track” or by superficial graphics that show boxes checked, etc. You must convey your engineering understanding of the design details along with the status of component manufacturing in order for the PAB to assess the true progress toward overall project goals. Said another way, progress is shown as much by building things as by showing further design refinement and deeper understanding of the things that are being built.

3.0 Deliverables

The MSR will be an oral presentation in front of the PAB only. You may attend other group's MSRs, but attendance is necessary only at your own. The presentation will be limited to 30 minutes total, including questions. You should plan for about 20 minutes worth of presentation. In the interest of time, clarification questions may be asked by the PAB at any time. Answer these questions as clearly and directly as possible, but do not become sidetracked. If a point cannot be clarified immediately, move on or decide to omit less important discussion later so you can convey the critical engineering aspects in your project in the time allotted. As in previous presentations, time management and good planning are essential. Confusing descriptions or graphics only raise questions, that will detract from your presentation time. You may bring components to show, but do this judiciously, as this can sometimes distract the PAB from the understanding you wish to convey.

As in the first semester, all group members must contribute to the oral presentations sometime during the term, but not all must speak at every presentation.

Also, as in the first term, all presentation materials are due at the same time, before presentations begin, submitted on D2L. Hardware for show and tell does not have to be submitted beforehand.

Hard copies of the presentations are due at the time of presentation, as before. Nine copies are required, with six slides per page. Do not include more per page, as this makes them impossible to read.

Customers are welcome to attend. If customers have time constraints, contact the course coordinator to try to schedule an appropriate presentation time for our group.

A team grade is given to each group. Since self and peer evaluations are not conducted for the MSR, differential grading within the group will not occur. PAB members will post their comments on D2L soon after the presentations. Grades will be determined according to the weightings shown in the MSR objectives section.