project stands. Including an updated Gantt chart is optional, but can be very illuminating.

Finally, the status report should have the assignments or goals for each member of the team by name, giving the task, numerical estimate of completion, and task title.

2.1.2 Team Members

Each team member needs to send their status reports so that the team leader can send a team status report to their superiors, such as project engineers in industry, or professors and company liaisons in college design programs. Team members have three things they have to report

1. Goals for the week. These are usually assigned by the team leader, or at least with the team leader's cognizance, but you are trying to make their life easy and show them that you understood your tasks.

2. Accomplishments for the week. This could be a percentage of work done for a task that is larger or the whole task if you finished it. Let them know if it is ahead or behind schedule and any positive notes. Be brief (not rambling) but don't cut out important facts. This is a bit of an art, but basically you are trying to let them know the great things you did, and what is going on, but not take so long they don't want to read it. As a good guide try two sentences per task, the first stating what amount is done, the second stating descriptively what was accomplished.

3. Assignments for the next week.

I have included a sample of a good status report in figure 2.1. Note the problem/alteration/roadblock was put in italics to emphasize it.

2.2 Log Book

Log books are a necessary legal documentation of work that are crucial for a variety of cases including patents. To be useful in court the pages must not be removed or inserted (thus no binders). Blank pages cannot be left, and all pages must be used in sequence. You cannot leave any large blank space, as this would allow for future tampering. Items cannot be "whited out" or scribbled over. Any corrections must be done by a single, thin line through the error.

Each entry should have a descriptive heading with the date, and should be legible and understandable. The log book must contain all work done, including: meeting notes, sketches, ideas, concepts, calculations, phone call notes, research notes, test data, etc. Logbooks are primarily a daily record of what you thought and did, what your goals were, and how you were progressing. It ought to be more than a diary of general activity. Make sure you label sketches/drawings. Include relevant dimensions or scale. Include assembly diagram for context. Note block diagrams are particularly useful.

Think of future users, and evaluate your logbook from this perspective. Make sure you add enough detail to the notes of design specifications and estimates to make them

Figure 2.1: Sample Team Member Status Report.

Keith Evan Schubert
Associate Engineer
Widget Project

Goals:
All tasks are from Widget Project Gantt chart, 4-17-08.

1. Finish task 3, model system dynamics widget driven by oscillator circuit.

2. Do 20% of task 4, analyze stability of widget.

3. Do task 8, select widget antenna.

Accomplishments:
All tasks are from Widget Project Gantt chart, 4-17-08.

1. Task 3, model system dynamics widget driven by oscillator circuit is 100% complete. The modeling took one day longer than anticipated because nonlinearities in the oscillator proved to be too large to ignore, necessitating a more complicated model. The non-linearity enters only as an input, but can be handled by augmenting the states. The results are in technical report TR-00743-23: Widget Dynamics.

2. Task 4, analyze stability of widget is 10% done, as the nonlinear states, which handle the inputs, have been analyzed. The non-linear states form a stable, passive manifold that is bounded-input, bounded-output stable. This will still create complexity in calculating the closed loop control law, which might require an extra week to examine robust control methods if the non-linear control proves infeasible.

3. Task 8, select widget antenna is 100% complete. The Antenna Industries, 9" whip antenna model # 91-471128-678 rev B was the best price-performance antenna and is in the middle of its product life.

Assignments:
All tasks are from Widget Project Gantt chart, 4-17-08.

1. Continue task 4, analyze stability of widget. Achievement of 70% completion was the original goal, but *given the alterations in the problem complexity an adjustment to 50% completion is suggested*, which would entail completion up to nonlinear analysis, but not a generation of a candidate control law.