

MAE 311 Miniproject 1

Due March 19, 2003

Worth five per cent of course grade

To be submitted:

A written report with a title page plus 2-3 pages of written description, plus any illustrations or figures. This is to be an individual report, written in your own words. Cite all sources of information. Relate to MAE 311 course material as appropriate.

Choose one of three topics:

1. A recent newsworthy mechanical failure. e.g., the Alaska Airlines crash, recently traced to a maintenance problem. Discuss nature of failure, technical aspects, failure mechanisms or design issues, as appropriate.

2. A commercial mechanical product or component that that has become available within the past ten years. Identify and describe the product or component. What's technically interesting about it? What seems to have prompted the introduction of the product, new materials, demand for the product, cost/technical advantage, innovation, some combination?

3. Document how and why a longstanding product or component has evolved over the past 20 to 60 years. How is the product better? What advances in technology, regulation or competitive pressures have contributed to the evolution?