

AD420 • ME444 • MKTG594 Motorola Project
Fall Semester, 2008**Stephen Melamed**, Industrial Design, College of Architecture+Arts
Michael J. Scott, Engineering, College of Engineering
Albert Page, Marketing, College of Business Administration**Assignment** **No. 2.b** Mechanical Engineering : : Skills Assessment**Project Description**

Engineers working on interdisciplinary product development teams are often responsible for offering opinions about technical feasibility. Suppose that your team is considering making a handheld wireless communication device that will allow the user to send and receive text messages underwater and desires answers to the following questions:

1. Can the transmission and reception be achieved using existing technology? If so, how would you do it? If not, what are the technical issues preventing the use of existing technologies?
2. Assuming that the device will have a keypad and a display screen, what would you propose to ensure that these components function properly underwater?
3. How large a battery would be required to power such a device for a 90 minute dive session? How would your answer differ if the device has a built-in flashlight?

Project Requirements

Provide responses to all the above items in the form of a memo or e-mail to the rest of your team. Your responses should be convincing to both non-engineers and engineers. For each item, tell a story that can be read straight through from beginning to end. Complete sentences are encouraged. It is expected that you will need to consult outside references. Please cite all sources, including people you ask questions and websites you visit.

Submission

Answers must be submitted in hard copy. Additional electronic file would also be appreciated, e-mailed to Prof. Scott.

Due Date

Tuesday, September 2, 2008