

First Written Report:

## What We Expect

This self-contained document should answer the following questions about what you have done in the class up to 14 October.

- *What were the group objectives for the first six weeks' work?*
- *What critical accomplishments from last semester was the group able to bring directly into this semester's effort? What factors made it possible to do this?*
- *Conversely, what critical elements from last semester have been difficult to recover, and why?*
- *What entirely new capabilities has the group developed so far this semester?*
- *For one major component you have personally worked on and completed this fall, what are:*
  - *the role it plays in meeting the Challenge,*
  - *its idea of operation, and*
  - *its level of performance.*

*For example, if you developed code, tell us what it does, why it is needed for the Challenge, and how you have tested it, e.g., how fast it runs and how well it interfaces with other code. If you developed electronics or hardware, be sure to justify your design choices – quantitatively. How does it fit in or on the boat with the other gear that is needed? Will it survive the expected physical or electrical loading environment? What makes it water-resistant? Etc.*

- *Is the set of capabilities in the group sufficient to succeed with the Challenge? What if anything is missing, or still in development?*
- *What is the plan to get from where you are now to achieving the Challenge?*

**Please apply Critical Thought, Good English, and Organization.** Do not give us text that you used last semester. You may use figures as needed. The document is no more than ten pages long – we will not read past the tenth page.