

2.019 Class Meeting
3 October 2005

OBJECTIVE: BOAT TO TRACK A BEACON

CRITICAL CAPABILITIES and THEIR SUBTASKS:

1. Move autonomously
 - a. Mount RipTide on boat 20 hrs low est.
2. Steer autonomously
 - a. Mount azimuthing drive on boat 4
 - b. Finish servo code and troubleshoot 10
3. Locate beacon
 - a. Automatically fire transducer 10
 - b. Process acoustic signals 10
 - c. Control gain on amplifier
 - d. Mount hydrophones and transducer 20
 - e. Troubleshoot/Calibrate/Test 20
4. Control system
 - a. Finish serial comms 10
 - b. The rest
5. Wireless interface
 - a. Establish two-way comms with TT8 3 DONE
6. Seaworthy vessel
 - a. Build internal frames to hold ballast & big batteries 8
 - b. Build platform for electronics 2
 - c. (Install water sensors and alert system)
7. Power system
 - a. Sketch system
 - b. Identify and order the needed items
 - c. Build it up 10
8. Moving the boat on land
 - a. Build frame 8