Abstract Submitted for the DFD13 Meeting of The American Physical Society

Ocean Circulation in a Rotating Tank - An Outreach Project in Fluid Dynamics SHANON RECKINGER, Fairfield University — A rotating water tank was designed and built by two senior mechanical engineering undergraduates at Fairfield University. The project was part of a year long senior design course. The rotating water tank is used to simulate oceanic and atmospheric phenomenon for classroom or outreach use. The following year, the tank was used for outreach as part of Fairfield University's Broadening Access to Science Education (BASE) camp. BASE camp is a two week residential camp for high school woman interested in scientific research. It is designed to inform and excite students by giving them a hands-on, research-based experience in the sciences, engineering, and mathematics. An all female research team composed of one mechanical engineering faculty member, two engineering undergraduates, and three high school students used the tank to explore "how the ocean moves." This talk will explain the design project and the outreach project in detail, in hopes of inspiring new fluids education and outreach ideas.

> Shanon Reckinger Fairfield University

Date submitted: 08 Aug 2013

Electronic form version 1.4