### Title and Subtitle
Construction of a Modular Microstructure Profiler (MMP)

### Authors
Michael C. Gregg/Jack B. Miller

### Performing Organization Name(s) and Address(es)
Applied Physics Laboratory, University of Washington  
1013 N.E. 40th Street  
Seattle, WA 98105

### Sponsoring/Monitoring Agency Name(s) and Address(es)
Scott Harper  
Office of Naval Research, Code 322  
875 North Randolph Street  
Arlington, VA 22203-1995

### Distribution/Availability Statement
Approved for public release; distribution is unlimited.

### Abstract
Funds from this ONR grant were used to fabricate and assemble a nearly identical replacement for a Modular Microstructure Profiler (MMP) lost during ONR-funded AESOP work in Monterey Bay in August 2006. Funds were available to us in September 2007, fabrication began in December 2007, and the MMP was finished in January 2009. The new MMP was successfully tested in Puget Sound and taken on a research cruise in Monterey Bay in April 2009.

### Subject Terms

### Security Classification of:
- **a. Report**: SAR  
- **b. Abstract**: SAR  
- **c. This Page**: SAR

### Limitation of Abstract
SAR

### Number of Pages
1

### Name of Responsible Person
Leslie Harding

### Telephone Number
206-543-7048
Funds from this ONR grant were used to fabricate and assemble a nearly identical replacement for a Modular Microstructure Profiler (MMP) lost during ONR-funded AESOP work in Monterey Bay in August 2006. Funds were available to us in September 2007, fabrication began in December 2007, and the MMP was finished in January 2009. The new MMP was successfully tested in Puget Sound and taken on a research cruise in Monterey Bay in April 2009.

The fabrication took longer than anticipated since the CD-archived electronic drawing files were unreadable and backup printed drawings had to be used. As a result of the extra costs incurred, we omitted the Turbidity Sensor and Dissolved Oxygen sensor. Approximately $42.8K was spent on engineering time, $39.1K spent on machine shop (time and materials), and $11.1 spent on sensors.