Dr. Manuel E. Fiadeiro  
Office of Naval Research Code 322PO  
Ballston Towers One  
800 North Quincy Street  
Arlington  
Virginia  22217-5660  

Dear Manuel:  

I am writing to report the termination of my ONR grant N00014-89-J-1076, the period of which was 10 October 1988 – 12 December 1990. This grant derived from two cruises of the R.R.S. Charles Darwin, which occupied a hydrographic section along the axis of the Arabian Sea in December 1986 – January 1987, during the northeast monsoon, and approximately repeated the section in July – August 1987, during the southwest monsoon. The station work included some sampling for chlorofluorocarbons and tritium-helium, as well as the standard CTD work. The grant provided support for analysis and interpretation of data from these two cruises: to Gregory Johnson, as part of his doctoral dissertation, and to me as well. Our studies concentrated on the deep water, as the upper-ocean data were handled mainly by Miami participants in the cruise, led by Donald Olson.

Major accomplishments of this grant were (1) discovery and description of a broad but thin near-bottom boundary current on the Kenyan continental rise; (2) detection of a deep western-boundary current along the Carlsberg Ridge in the Arabian Basin; (3) some new ideas about the pattern of deep-water circulation in the Arabian Sea; and (4) quantification of property budgets and renewal time in the oxygen-minimum layer of the Arabian Sea.

Publications prepared with full or partial support from this grant are:


Unpublished documents prepared with partial support from this grant are:


Sincerely yours,

Bruce A. Warren

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