Richard E. Payne

Department of Physical Oceanography Woods Hole Oceanographic Institution Woods Hole, Ma 02543 rpayne@whoi.edu 508-289-2550

Education:

B. S., Bowdoin College, 1958; M. S., University of Maryland, 1962; Ph. D., University of Rhode Island, 1971

Positions held:

Research Assistant, 1963--67, 1968--71; Postdoctoral Investigator, 1971--72; Research Associate, 1973--1999; Research Specialist, 1999 to 2001; Oceanographer Emeritus, 2001 to present, Department of Physical Oceanography, Woods Hole Oceanographic Institution.

Physicist, 1961-63, National Bureau of Standards. NATO Postdoctoral Fellow, 1972--73, University of Southampton.

Research Interests:

- a) Measurement of sea surface meteorology: Selection and development of sensors used on ships and buoys.
- b) Sensor calibration: Our lab calibrates most meteorological sensors to the highest standards. I have developed all the software and some of the hardware where it was not commercially available

Publications and Technical Reports:

- Payne, Richard E., 1994. Design and validation of a modified Eppley PSP Pyranometer. *Woods Hole Oceanographic Institution Technical Report* WHOI-94-30, UOP Report 94-5.
- Fairall, C. W., P. O. G. Persson, E. F. Bradley, R. E. Payne, and S. P. Anderson, 1998. A new look at calibration and use of Eppley precision infrared radiometers. Part I: Theory and application. *Journal of Atmospheric and Oceanic Technology*, **15** (6), 1229—1242 pp.
- Payne, R. E., and S. P. Anderson, 1999. A new look at calibration and use of Eppley precision in-frared radiometers. Part II: Calibration and use of the Woods Hole Oceanographic Institution improved meteorology precision infrared radiometer. *Journal of Atmospheric and Oceanic Technology*, **16** (6), 739—751 pp.
- Payne, Richard E., 2002. Recognizing Problems in Shipboard Logging Meteorology Systems. *Woods Hole Oceanographic Institution Technical Report*, WHOI-2002-05, 24 pp.
- Payne, Richard E., Kelan Huang, Robert A. Weller, H. P. Freitag, M. F. Cronin, M. J. McPhaden, C. Meinig, Yoshifumi Kuroda, Norifumi Ushijima, R. Michael Reynolds, 2002. A Comparison of Buoy Meteorological Systems. *Woods Hole Oceanographic Institution Technical Report*, WHOI-2002-10; *UOP Technical Report*, 2002-05, 67 pp.

Collaborators with: Jason Smith, WHOI

Synergistic activities: Tested several new barometric pressure and relative humidity sensors; developed hardware and software for wind tunnel wind speeds and did improved calibrations of short-wave and long-wave ASIMET modules. Rewrote all calibration lab programs in Matlab.