Glenn McDonald

Research Engineer Office: (508) 289-3429 Woods Hole Oceanographic Institution Cell: (508) 566-4206

Bigelow G9 MS#13 E-mail: gmcdonald@whoi.edu

EDUCATION:

B.S. Mechanical Engineering / Design Concentration Rensselaer Polytechnic Institute, Troy, NY, May 1996

A.S. Engineering Gavilan College, Gilroy, CA, June 1994

Commercial Diving Certification Coastal School of Deep Sea Diving, Oakland, CA, June 1987

PROFESSIONAL EXPERIENCE:

Research Engineer, September 2005 – present, Woods Hole Oceanographic Institution, Woods Hole, MA.

Engineer II, June 1998 – August 2005, WHOI Engineer I, August 1996 – June 1998, WHOI Engineering Assistant, Summer 1995, WHOI Commercial Diver, 1987-1993 U.S. Navy, 1982-86

RESEARCH INTERESTS:

Design, fabrication, and testing of oceanographic equipment and systems, instrument development, instrument-level thermal management, finite element analysis in mechanical design, diver-assisted systems and equipment, deep water ceramic pressure vessel and camera housing design and construction.

PROFESSIONAL AFFILIATIONS/ACTIVITIES:

Member, ASME, 1996-present Member, AOP&E Safety Committee, 2004-2013 WHOI Science Diver

PUBLICATIONS:

G. McDonald, Operations to 11,000m: Nereus Ceramic Housing Design and Analysis, Oceans conference paper, October 2013.

The Nereus hybrid underwater robotic vehicle, Bowen, A., Yoerger, D., Taylor, C., McCabe, R., Howland, J., Gomez-Ibanez, D., Kinsey, J., Heintz, M., McDonald, G., Peters, D., Young, C., Buescher, J., Fletcher, B., Whitcomb, L., Martin, S., Webster, S. and Jakuba, M., "Underwater Technology, 28(3): 79-89, 2009.

The Nereus Hybrid Underwater Robotic Vehicle for Global Ocean Science Operations to 11,000m Depth Andrew D. Bowen, D. Yoerger, C. Taylor, R. McCabe, J. Howland, D. Gomez-Ibanez, J. Kinsey, M. Heintz, G. McDonald, D. Peters, B. Fletcher, C. Young, J. Buescher, L. Whitcomb, S. Martin, S. Webster, M. Jakuba. Oceans conference paper, September 2008.

V. Asper, S. Gallager, K. von der Heydt, S. Lerner, A. Girard, K. Peal, E. Miller, G. McDonald, J. Sisson, C. Griner, *Design and Construction of a Polar Remote Interactive Marine Observatory (PRIMO)*, Oceans conference paper, September 2006.

Dr. Jerry Stachiw, D.Peters and G. McDonald, ExternalPressure Housings, Oceans conference paper, September 2006.

Glenn McDonald and M. Naiman, *Heat-transfer Advances for Submerged Oceanographic Systems*, Oceans conference paper, September 2002.

Don Peters, G. McDonald, *Mechanical Systems for the Portable Coastal Observatory*. ONR/MTS Buoy Workshop, May 2000.