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I. PROFESSIONAL PREPARATION:

University of Rhode Island, RI, USA B.S. (Mechanical/Ocean Engineering) 1980

II. APPOINTMENTS:

2011-Present	Principal Engineer, Deep Submergence Laboratory, Department of Applied Ocean Physics and Engineering, Woods Hole Oceanographic Institution
1998-2011	Research Specialist, Deep Submergence Laboratory, Department of Applied Ocean Physics and Engineering, Woods Hole Oceanographic Institution
1985-1998	Research Engineer, Deep Submergence Laboratory, Department of Applied Ocean Physics and Engineering, Woods Hole Oceanographic Institution
1981-1985	Mechanical Engineer, Benthos, Inc.
1980-1981	Mechanical Engineer, Hydro Products, Inc.
1978-1980	Research Assistant, Department of Physical Oceanography, Graduate School of Oceanography

III. MOST RELEVANT PRODUCTS:

[1] Bowen, A. D., D. R. Yoerger, C. C. German, J. C. Kinsey, M. V. Jakuba, D. Gomez-Ibanez, C. L. Taylor, C. Machado, J. C. Howland, C. L. Kaiser, M. Heintz, C. Pontbriand, S. Suman, L. O'hara, L. L. Whitcomb, C.J. McFarland, and L. Mayer. Design and preliminary engineering trials of Nereid-UI: A remotely operated underwater vehicle for oceanographic access under ice. In Proceedings IEEE/MTS Oceans Conference and Exhibition, St. Johns, Canada, Sept. 2014.

[2] Bowen, A.D., M.V. Jakuba, N.E. Farr, J. Ware, C. Taylor, D. Gomez-Ibanez, C.R. Machado, and C. Pontbriand "An Un-Tethered ROV for Routine Access and Intervention in the Deep Sea." MTS/IEEE OCEANS 2013 Conference, San Diego, CA, 23-26 Sept.

[3] Bowen, A., Jakuba, M., Yoerger, D., Whitcomb, L.L., Kinsey, J.C., Mayer, L., and German, C.R. Nereid UI: A light-tethered remotely operated vehicle for under-ice telepresence. In Proceedings Arctic Technology Conference, Houston TX, December 2012.

[4] Bowen, A., Jakuba, M., Yoerger, D., German, C., Kinsey, J.C., Whitcomb, L.L., Mayer, L. (2012). Lightly tethered unmanned underwater vehicle for under-ice exploration. *Aerospace Conference, 2012 IEEE*, pp.1-12, 3-10 March 2012, doi: 10.1109/AERO.2012.6187038.

[5] Camilli, R., Di Iorio, D., Bowen, A., Reddy, C.M., Techet, A.H., Yoerger, D.R., Whitcomb, L.L., Seewald, J.S., Sylva, S.P., Fenwick, J. (2011) Acoustic measurement of the Deepwater Horizon Macondo well flow rate. Proceedings of the National Academy of Sciences; published as part of Science Applications in the Deepwater Horizon Oil Spill Special Feature at http://www.pnas.org/ on September 8, 2011 (doi: 10.1073/pnas.1100385108).

IV. OTHER PRODUCTS:

[1] Bowen, A., Yoerger, D., Fletcher, B., Whitcomb, L. (2009). Journey to the Challenger Deep: Fifty Years Later with the Nereus Hybrid Remotely Operated Vehicle. *Journal of the Marine Technology Society*, 43(5): 65-76.

[2] 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. (2009). The Nereus hybrid underwater robotic vehicle", *Underwater Technology*, 28(3): 79-89.

[3] Bowen, A., Yoerger, D., Taylor, C., McCabe, R., Howland, J., Gomez-Ibanez, D., Kinsey, J., Heintz, M., McDonald, G., Peters, D., Fletcher, B., Young, C., Buescher, J., Whitcomb, L., Martin, S., Webster, S., Jakuba, M. (2008). The Nereus Hybrid Underwater Robotic Vehicle for Global Ocean Science Operations to 11,000 m Depth. In *Proceedings of IEEE/MTS Oceans 2008, Quebec*, September 15-18, 2008, pp. 1-10.

[4] Young, C., Whitcomb, L.L., Yoerger, D., Bowen, A., Grosenbaugh, M., Bingham, B. The Hybrid Remotely Operated Vehicle (HROV): New Challenges and Opportunities (2005). Underwater Intervention 2005 Conference Proceedings, Association of Diving Contractors, Marine Technology Society, Washington, D.C.

[5] Bowen, A., Yoerger, D., Whitcomb, L., Fornari, D. (2004). Exploring the Deepest Depths: Preliminary Design of a Novel Light-Tethered Hybrid ROV for Global Science in Extreme Environments. *Journal of the Marine Technology Society*, 38(2): 92-101.

V. SYNERGISTIC ACTIVITIES:

1. Manager Unmanned Deep Submergence Operations Group
2. PI Gordon and Betty Moore Foundation Accelerating the Pace of Innovation in Ocean Observing
3. Project Engineer for Hybrid Remotely Operated Vehicle
4. Project Engineer for JASON II and Isis
5. Mechanical Design Engineer for JASON Junior Remotely Operated Vehicle System
6. Over 40 oceanographic ROV/AUV cruises as an Expedition Leader or senior team member