TERRY J. BUCKLEY, P. ENG.

Senior Mechanical Engineer, Buckley Consulting Inc.

Education: B.Eng. (Mechanical), Memorial University, 1974
Graduate Studies, (Ocean Engineering), Memorial University, 1976-1978

Employment History:

Organization	Position	Period
Buckley Consulting	Senior Mechanical Engineer	2000 - Present
Axiom Engineering Limited	President	1989 - 2000
National Petroleum and Marine Consultants	Chief Mechanical Engineer	1987 - 1989
Nordco Ltd.	Senior Mechanical Engineer	1980 - 1986
Self Employed	Construction Industry	1979
Memorial University of Newfoundland - Faculty of Engineering	Project Engineer	1978
Centre for Cold Ocean Resources Engineering (C- CORE)	Project Engineer	1977
Memorial University of Newfoundland - Faculty of Engineering	Project Engineer	1974 - 1977

Project Experience:

Designed and developed the oil spill containment and recovery systems currently in use by White Rose.

Designed and developed the oil spill containment and recovery system currently in use by Terra Nova.

Designed and developed the oil spill containment and recovery systems currently in use by Hibernia.

Designed and developed a heavy oil belt skimmer currently in use by ECRC and the Canadian Coast Guard.

Design of a wide range of specialized equipment used by the National Research Council for performing advanced research and testing on models of ocean going

vessels at the Institute for Marine Dynamics.

Design and developed multi-functional hydraulic power packs for use with oil spill response equipment.

Design and modification of various oil spill response equipment for East Coast Spill Response Inc. and ECRC, Newfoundland Region to improve performance and effectiveness of respond to accidental oil spills in the North Atlantic.

Development of a delivery system (AquaMate 136) to add the ability of breaking water-in-oil emulsions to any oil skimmer thereby improving the effectiveness of oil skimming operations.

Chief Mechanical Engineer responsible for the design, fabrication and testing of the Gear/Catch Monitoring System, a hydro acoustic monitoring system for providing real-time data on the performance of the trawl of a deep-sea trawler for DRIE.

Engineering Supervisor, NORDCO Machine Shop.

Design and fabrication of a deep sea geotechnical in-situ cone penetrometer system for Atlantic Geosciences Centre.

Through extensive research into the use of breaking water-in-oil emulsions in oil spill recovery operations and attempting to identify markets for this technology throughout the world, the oil spill response techniques used by response agencies in the United States, Canada, Europe and the Middle East were investigated with respect to offshore, coastline and in-land oil spill containment and clean-up.

Development and testing of SEADRILL II, a deep sea geotechnical sampling tool capable of augering through 6 meters of compacted sub-bottom and obtaining bottom sediment or bed rock cores for Atlantic Geosciences Centre.

Production engineering and fabrication of sub-sea submersible rock core drill for taking hard rock cores from a surface vessel for IKV, Norway; National Institute of Oceanography, India.

Project Manager for numerous ice/iceberg management and environment monitoring services for the support of offshore oil exploration in the Labrador Sea, Grand Banks, Gulf of St. Lawrence and Scotian Shelf for Petro-Canada Inc.; Chevron Canada Resources; and Canterra Energy Ltd.

Participated in the software development for the HYDROBALL ocean current profiling system, an expendable hydro-acoustic current/temperature profiling system capable of operating from a moving vessel for DRIE.

Project Manager and principal researcher in a study of underwater iceberg geometry. The work involved review and evaluation of previously undertaken iceberg measurement programs and the development of alternative underwater iceberg

measurement techniques for Environmental Study Revolving Fund, COGLA.

Project Engineer in the research of the dynamic response of composite anistropic shells and pipes in a marine environment for the National Research Council.

Development and operational implementation of a computerized iceberg management and drift prediction system in support of offshore oil exploration for NORDCO Limited.

Project engineer in the research of aqueous foams as a means to prevent or retard the growth of sea ice around a drilling rig in the Canadian Arctic for CanMar Ltd.

Project manager of various oceanographic measurement programs involving logistics, mooring design, data reports, instrumentation and evaluation for Petro-Canada Inc.; Canterra Energy Ltd.; Chevron Canada Resources Ltd.; and National Petroleum and Marine Consultants.

Publications:

Buckley, T.J. et al 1986. Operations and Maintenance Manual for the Underwater Electrical Rock Core Drill Model 7001/50. NORDCO.

Buckley, T.J. et. al. 1985. Underwater Iceberg Geometry. Environmental Studies Revolving Fund. Report No. 014.

Buckley, T.J., N. Riggs, J. Newell, 1982. Tactical Iceberg Management I. ”In• Proceedings of a Workshop on Iceberg Management in Offshore Exploration, Production and Transportation, Department of Continuing Education, Memorial University.

Buckley, T.J., D.B. Muggeridge, 1977. Flexural Vibration of Anosotropic Cylindrical Shells in a Fluid Medium. ”In• Proceedings of the Sixth Canadian Congress of Applied Mechanics, Vancouver, May 29-June 3.

Gustijtis, A., T.J. Buckley, 1977. A Seasonal Iceberg Density Distribution Along the Labrador Coast. ”In• Proceedings of the International Conference on Port and Ocean Engineering Under Arctic Conditions.

Muggeridge, D.B., T.J. Buckley, 1979. Dynamics of a Fluid Conveying Fibre - Reinforced Shell. ”In• American Institute of Aeronautics and Astronautics Journal 17(6).

Muggeridge, D.B., T.J. Buckley, 1979. Flexural Vibration of Orthratropic Cylindrical Shells in a Fluid Medium. ”In• American Institute of Aeronautics and Astronautics Journal 17(9).