



Dr. McFarlane served in the Canadian Armed Forces, both afloat and ashore. During this 18 year period he held among others the positions of Special Projects Officer, Senior Structural Engineer and Staff Officer Construction on the staff of the Canadian Naval Submarine Technical Representatives with technical responsibilities related to the Canada Oberon Class submarines built in England. Dr. McFarlane also obtained bridge and engine room watch keeping tickets. On his return from England Dr. McFarlane was appointed Senior Structural Engineer and Project System Engineer for a diving tender and Project Manager for the SDL-I Diver Lockout Submersible.

Following his retirement from the Canadian Forces as a Lieutenant Commander, Dr. McFarlane joined International Hydrodynamics as Vice President of Engineering and Operations. In this capacity he had personal responsibility for development, construction, trials and operations of the company's submersibles, their ancillary equipment and launch and recovery systems.

Dr. McFarlane is the founder and current president of ISE since 1974 and has been involved with the design, construction, and operation of manned, tethered and untethered Remotely Operated Vehicles as well as subsystems of these vehicles which includes manipulators and computer control systems. Since that time, Dr. McFarlane has been a part of engineering teams that have built over 400 robotic manipulators and over 200 vehicles.

Dr. McFarlane is the author of many papers on submarines, manned submersibles, ROVs and AUVs (Autonomous Underwater Vehicles). He has also made keynote presentations in Europe, Southeast Asia, USA and Canada. Dr. McFarlane has served on many committees for international meeting and as a guest speaker at many conferences. He has also received many awards. His Curriculum Vitae includes:

Degrees:

B.Sc. Mechanical Engineer Degree, University of New Brunswick	1960
The Degree of Master of Science in Naval Architecture and Marine Engineering, MIT	1965
The Degree of Naval Engineer, MIT	1965
Honorary Doctor of Engineering, University of Victoria, BC	1988
Scientiae Machinalis Doctor, Royal Military College, Kingston, ON	1988
Doctor of Military Science, Royal Roads Military College, Victoria, BC	1991
Doctoris In Scientia, University of New Brunswick, NB	1992

Awards & Medals:

British Columbia Export Award	1983
MTS Compass Industrial Award	1984
Canada Award for Excellence in Export Marketing	1984
Canada Award for Excellence in Innovation	1985
Ernest C. Manning Award of Innovation	1987
IEEE Technical Achievement Award	1987
Professional Engineers of BC Meritorious Achievement Award	1987
Officer of the Order of Canada	1989
BC Science Council Award for Industrial Innovation	1989

BC Science & Engineering Gold Medal	1989
Julian C. Smith Medal	1990
Confederation of Canada Medal	1992
MTS Chairman's Award	1995
Angus Medal – CSME	1995
IEEE Engineer of the Year	1998
Joseph F. Engelberger Award for Technology Development	2000
Queen Elizabeth II Golden Jubilee Medal	2002
MTS Compass Distinguished Achievement Award	2008
MTS Compass International Award	2008
OEC Hall of Fame, Houston, TX as Technology Pioneer	2009
IEEE-Vancouver Centennial Award for a Lifetime of Contributions to Underwater Vehicles and Robotics and the Canadian Advanced Technology Sector	2011
Diver Certification Board of Canada Technical Excellence Award	2011
Queen Elizabeth II Diamond Jubilee Medal	2012

Named Lecturer:

Robert Bruce Wallace Lecturer – MIT	1986
IEEE-OES India Chapter Inaugural Technical Lecturer	2008
IIT Madras, India Lecturer “The Use of AUVs in Arctic Operations”	2012
David Packard Distinguished Lecturer, Monterey Bay Aquarium Research Institute	2013

Visiting Scholar:

H. Burr Steinbach Visiting Scholar – MIT, Woods Hole	1989
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Other:

Member – Federal Government Meech Lake, Ontario Think Tank – Off Shore	1984
Member – Nova Scotia Government Think Tank – The Nova Scotia Economy, Orchard Inn, Nova Scotia	1985
Member – Canada Awards for Excellence Committee	1985-1986
Contributing Author – MTS “ROV Guidelines”	1985
Member – Federal Minister’s Task Force on the Oceans	1986
Founding Member – Canadian Academy of Engineering (FCAE)	1987
Founding Member – PreCarn	1987
Visiting Committee – MIT Department of Ocean Engineering	1989-1993
Founding Member – Canadian Institute of Advanced Research	1986
Member – National Marine Council	1986-1988
Member - University of Victoria ME Chairman Search Committee	1987
Member - Memorial University Advisory Council on Ocean Studies	1987
Member – Canadian ODP Evaluation Committee	1988
Member – Canada Awards for Excellence Committee	1988-1989
Member – Science Council of British Columbia	1988
Prime Ministers National Conference on Technology and Innovation	1988
Adjunct Professor – Simon Fraser University School of Engineering	1988-1994
Director – BC Trade Development Corporation	1989
Member – BC Delegation and Speaker at the World Economic Forum Davos, Switzerland	1989
Member – Visiting Committee Alumni Representative, MIT Department	1989-1993

of Ocean Engineering	
Convocation Speaker – BCIT	1990
Convocation Speaker – Royal Roads Military College	1991
Board Member – NRCC Canadian Institute of Industrial Technology	1990-1992
Member – Defence Staff, Science Advisory Board	1990-1992
Chairman – SPARK Committee on Ocean Industry Science & Technology	1992-1995
Member – US National Research Council Committee on Undersea Vehicle Systems and National Needs	1992-1995
Life Member (Corporate) – Mine Warfare Association (MINWARA)	1995-Ever
Director – Canadian Ocean Frontier Initiative	1995-1997
Member – NRC Institute of Marine Dynamics Advisory Board	2001-2003
Director – Historical Diving Society (Canada)	2001-2006
Chairman – Oceans 2007 MTS/IEEE Vancouver Conference	2003-2007
Member – Woods Hole Oceanographic HROV Advisory Committee	2004-2006
Member – UVIC Oceans Network Canada Board	2007-2009
Member – Defence Science Advisory Board	2010-2011

Dr. McFarlane is an Officer of the Order of Canada, a Member of the Canadian Academy of Engineering, Sigma Xi, MTS, IEEE, a Life Member (Corporate) of MINWARA, and is a Professional Engineer in the Province of British Columbia.