

DONALD HUGH MacDONALD (1922–2007)

By Victor Milligan, 2008

Family, friends and colleagues of Don MacDonald are saddened by his death at St. Michael's Hospital, Toronto on November 2, 2007. His loss is marked as one of the last of the early significant figures in the development of geotechnical engineering in Canada where his support in the formative years of the Canadian Geotechnical Society and the Tunnelling Association of Canada was invaluable. Throughout his career, he has also been widely recognized for his significant contributions to the design and construction of major civil engineering works across Canada and overseas; his papers on the technical issues involved in these projects still form part of current engineering practice.

Don MacDonald was born and educated in Ontario, graduating in civil engineering from the University of Toronto in 1945 (B.A.Sc.). He subsequently took graduate work at Cornell University and Imperial College of Science and Technology (D.I.C.), finishing with a Ph.D. from the University of London. (Arising from his doctoral studies was the notable paper on "The allowable settlement of buildings" written jointly with Professor A.W. Skempton which then created widespread interest and discussion and is still widely referenced to this day.)

Except for four years spent on the design and construction of Toronto's first subway (Yonge Street) working partly under the guidance of Dr. R.F. Legget, his entire career since 1955 was spent with H.G. Acres & Co., Ltd., subsequently Acres International Limited, where he worked in a variety of technical and executive roles including serving as Vice-President and Director of Acres International Limited and its related companies. In his association with Acres Limited, he has been involved in numerous hydro-power and water resource projects in all parts of Canada and in many countries abroad. Noteworthy among these are the Churchill Falls project in Labrador, Mica Dam in British Columbia, the Nelson River project and the Red River Floodway structures in Manitoba, the thermal station in St. John and the Thorold rail tunnel below the Welland Canal. Of particular technical interest are the innovative engineering solutions, largely unprecedented to that time, used in the design and construction of dykes on permafrost foundations in northern Manitoba and in the construction of a seepage cut-off in a deep irregularly shaped buried valley below the Lower Notch Dam in northern Ontario.

His technical excellence and his service to the engineering profession has been marked by many professional honours and awards. These include election as a Fellow of the Engineering Institute of Canada and of the American Society of Engineers in 1973, the award of the Association of Professional Engineers of Ontario Gold Medal in 1978 and, in the same year, the R.F. Legget Award of the Canadian Geotechnical Society (its highest award.) He was also honoured in 1989 as a member of the Hall of Distinction of the Engineering Alumni of the University of Toronto.

In addition to these awards, he has served as one of the initial Associate Editors of the Canadian Geotechnical Journal, founded in 1965; as the first President of the fledgling Tunnelling Association of Canada in 1980-81 and has been active in the International Commission on Large Dams and the International Society for Soil Mechanics and Foundation Engineering where he represented the Society in the UNESCO Working Group on Seismic Phenomena associated with Large Reservoirs. In public service, he served as Chairman of

the Board of Governors of the Niagara College of Applied Arts and Technology and as a Board Member of the Shaw Festival, Niagara-on-the-Lake.

This resume provides but a partial and inadequate sense of Don MacDonald. In all his long and productive career, his intelligence and competence was always balanced by his courteous behaviour to both clients and colleagues. Modest by nature, considerate to all, friend and mentor to many, he epitomized the words of the poet, Alexander Pope –

*“--- Friend to truth; of soul sincere,
In action faithful and in honour clear;
Who broke no promise, served no private end,
Who sought no title and who lost no friend.”*

He will be missed by many. The Society extends its sympathies to Don's wife Barbara, their children and the extended family.