

Maurice William Perwick

Citation of Professional Excellence Award

Canterbury Branch, S+SNZ

Maurice William Perwick hails from Gore in Southland and went to Otago University in 1970 at the age of 16 to become a surveyor after encouragement from his Maths teacher at Gore High School. He was always known for an alternate solution or getting things done.

His Diploma of Surveying took a longer path than usual as he had some growing up to do amongst his older peers but this allowed him to pursue maths and chemistry before being accepted into the School of surveying where even that was a challenge.

His return to Gore to work for Neil Clark was rewarding especially to be in a firm looking towards technology. Munroe 1880 and HP 4805 distance measurement.

He then found employment with Barry Greig at Davis Ogilvie in Christchurch and worked towards his Survey Registration projects. On Mt Hutt skifield he set out the quad chairlift pylons along a crested alignment in the summer and perpetual fog on the mountain.

He joined Eliot Sinclair in 1980 and gained much experience and encouragement from both Marton and Bruce Sinclair. He was branch treasurer and treasurer for a period of time and was NZIS Annual conference convenor in 1995 'People the Resource' The early 80s saw the introduction of electronic theodolites, data-recorders and survey software through Sokkisha and Datacom Software research. Maurice assisted the new survey company Geosystems Ltd in demonstrations and travelling road shows from time to time. 1986-87 saw Eliot Sinclair pioneer a hydrographic system to survey Lyttelton Harbour with Maurice at the testing and execution helm. By 1989 he was using Differential GPS for navigation and setting up systems to survey the Westport Bar in real-time and dredge the Clyde Dam tailrace. He joined the Australasian Hydrographic Society in 1991 and began his preparation for hydrographic certification. In 1994 he carried out the first RTK-Hydro project along the Canterbury Coastline for ECAN's liquifaction study.

In 1992 he flew to Hong Kong to carry out hydrographic surveys for the construction of the new airport at Ckek Lap Kok and trained local nationals in advanced survey methods. He returned in Mid-1993 to bring his newfound experience back to NZ and began surveying the Southern Lakes, namely Lake Roxburgh, Dunstan, Pukaki. This work generated many articles for the survey Quarterly and annual conferences. In later years he delivered less technical presentations for all to understand and appreciate. He developed along with Beech Communications a telemetry system for Real-time RTK GPS corrections utilising addressable stations and repeaters within the time domain now part of modern-day radio systems.

In 1996 he became a partner/director of Eliot Sinclair and joined CSNZ to learn the business and responsibilities of ownership of a survey engineering consultancy. He has promoted graduates getting proper training and experience before presenting to registration and licencing Boards. He chaired a workshop session discussing responsibilities to graduates and staff training. He made great effort to mentor his staff and other members of the profession to be the 'best they can' with an emphasis of getting things right by planning a task well and providing support and technology to

achieve that goal. He has been on the governance and working teams for the NZ Diploma of Land Surveying and Diploma of Hydrographic Surveying.

He gained his Level One hydrographic Surveyor status in 2002 and was conference convenor in Christchurch for the International HYDRO 2003 promoting Surveying, Christchurch and New Zealand to the international delegates.

He joined the Hydrographic Professional Steam at the outset and has only recently retired from that group though is providing seminar support for an upcoming event in Wellington should Covid allow.

The earthquakes of 2010 and 2011 provided an opportunity to respond to the recovery of the Lyttelton Port and to support Christchurch surveyors with an additional CORS station loaned by Trimble at the Wigram Tower. Eliot Sinclair was able to provide LINZ with a local reference receiver in the heart of the city but well connected to their network. The use and promotion of geoid correction models has seen Maurice present this in papers and at conferences to bring the professional skill levels to the fore especially in time of adverse events. He has contributed to the Resilience Stream protocols.

In 2016 Maurice took a team of surveyors to South Bay in Kaikoura to investigate the status of the navigability of the Whale Watch Marina for the support of the local townsfolk using the latest technology, setting up a CORS to support the ongoing survey operation from the Tunnels in the south to Waipapa Bay in the north. Photogrammetry and scanning and geodetic connections saw the re-establishment of the vertical tidal datum in the area and the process of recovery begin. Maurice and a seven man team from Eliot Sinclair developed a method of surveying the inhospitable coastal reefs using a heavy lift drone and a 'lead line'. This has been well documented at conferences and publications and youtube (Drone dipping....Kaikoura) and was a finalist at NZSEA for innovation.

He has continued his hydrographic career with his boats Orion-Cat and Orion-Rib until his recent retirement at various ports around the country. This work also supported dredging companies through customising software, training and real-time Tidal and GNSS data streaming for their operations.

Maurice has appreciated the support of the Canterbury and National members of NZIS, S+SNZ over his years in the profession and tried to give as much encouragement for others to offer their time, knowledge and expertise to the profession and the public.