NOMINATION FOR S+SNZ FELLOWSHIP

DR CHRIS FERENS PEARSON

CITATION

With regard to service to S+S New Zealand, Chris has undertaken the following.

1. He has acted as Chair of the NTC (National Technical Committee) for each of our national conferences since 2017.

2. In collaboration with Bill Robertson, he was responsible for developing the successful Participation (PIC) Fund application to the Ministry of Foreign Affairs and Trade so as to fund geospatial professionals from Pacific Island countries to attend the 2016 S+SNZ national conference. At that conference, he played a key role in organizing the Reference Frames in Practice seminar.

3. He played a leading role in developing the MOU between the Pacific Geomatics and Surveying Council, and S+SNZ.

4. He has been a member of the board of the Positioning Stream since its formation in 2015. In the period since its formation, he has been a presenter at two webinars sponsored by the stream and contributed directly to board initiatives.

On the professional front, Chris has been something of a pioneer with his professional work benefitting members for almost 30 years. In 1991, he was responsible for the first GPS based earth deformation surveys in the South Island of New Zealand. This was precise GPS positioning in its very earliest days. Chris' role in the project involved network reconnaissance, data processing and final publication of results. Over the next decade, he played a vital role in all of the earth deformation and post-earthquake surveys carried in the South Island. The data collected in those days played a crucial role in developing the first detailed earth deformation model for New Zealand.

Between 2001 and 2011, Chris worked for the US National Geodetic Survey where he continued to extend some of the ideas he had developed in New Zealand. He played a crucial role in developing the HTDP software, which corrects coordinates and measurements for crustal deformation in a similar way to the NZ deformation model. Chris also served as geodetic advisor to the state of Illinois where he played a key role in securing funding for the IL height modernisation program which funded several thousand km of new levelling in Illinois and also developed the first state-wide projection for the state. Chris's contributions were recognized by an honorary membership in the Illinois Professional Land Surveyors Association and an Illinois GIS association service award.

Upon his return to New Zealand, in 2012, he continued to show his innovative flair by developing the first working prototype of the GPS processing module supporting PostionNZ-PP. which was provided in partnership with LINZ He became part of the team that collaborated with Trimble Navigation in Christchurch and Paris to develop software to allow Trimble programs to support both dynamic and semi-dynamic datums such as NZGD2000. This was the first time that such software had been available in high precision, commercial GPS systems.

In addition, and in collaboration with LINZ, Chris developed the conversion routines needed to move data between ITRF2008 and NZGD2000.

If one looks beyond our own borders, we find that between 2015 and 2018 Chris was responsible for the MFAT funded program that assisted the Survey Department of Nepal in reconstituting its geodetic reference system after the 2015 Gorka Earthquake. During this time, Chris spent 6 months in Kathmandu developing the first deformation model for Nepal and adapting the LINZ programs SNAP and CONORD for Nepali conditions. He conducted the first post-earthquake readjustment of the Nepal First Order network. The success of this work was recognized by awards in four consecutive years from the New Zealand High Commission in India.

Apart from his work in Nepal, Chris has played a key role in developing an MOU between the University of Otago and University of the South Pacific (USP) to support their geomatics program.

In total, Chris has made an outstanding contribution both to S+SNZ and to its international standing. He is certainly deserving of a Fellowship.