CITATION FOR HONORARY DOCTORATE OF ENGINEERING

DR FRANCIS JOSEPH LEAHY, BSurv Melb LS PhD FISAust

Dr Frank Leahy enrolled into the Faculty of Engineering, University of Melbourne in 1956 and chose to take the Bachelor of Surveying degree on the flimsy rationale that the course material looked interesting and the qualification might afford the opportunity of working out of doors. In a recent reflection, Frank commented that some of our best decisions are made simplistically and where the subconscious is allowed free reign. Not for a moment has he regretted the decision.

On graduation Frank was engaged for two years in land title surveys with the Victorian Lands Department and qualified as a Licensed (Title) Surveyor. But his subsequent appointment in the Commonwealth Department of National Development proved to be seminal as it was centred on geodesy and geodetic surveying. It laid the foundation for his later career. The time was revolutionary as new technology was rapidly replacing old practices. Frank was involved in the ancient practice of fixing position by astronomical means and computing using 7-figure logarithms on one hand, and with airborne electronic distance measurement, satellite geodesy and computer programming on the other. It also brought a surfeit of the sought after "out of doors" activity in what, was then, some of the most isolated areas of Australia.

The prospect of marriage brought with it the view that working in the outback, despite its multiple attractions, was not the best career for the longer term and Frank applied for a lecturing position back in the Faculty of Engineering. In 1965 he was offered a 2-year contract appointment and 40 years later, almost to the day, he retired. Along the way Frank was Head of the Department of Surveying (now Geomatics) from 1980 to 1986, served for two 3-year terms as a member of the Victorian Surveyors Board, served as the Vice-President of the Institute of Surveyors Victoria in 1983 and was appointed in 1993 to the position of Assistant Dean (looking after the interests of undergraduate students) and in 2000 to Deputy Dean of the Faculty of Engineering.

Dr Leahy's PhD and formal research was cantered on computer algorithms for geodetic computations. The research for which he is most proud is the development of software packages for the adjustment of large geodetic networks and the establishment of Australia's maritime boundaries. The former is now in use by Geoscience Australia in the Australian Government's Department of Resources, Energy and Tourism and in most State Geodetic Agencies. The latter is in use internationally, including The United Nations Division of Ocean Affairs and Law of the Sea.

At the age of 14 Frank read Clune's book "Dig" – the first popular publication on the Burke and Wills Expedition. He can still clearly remember being startled by the sentence: "About here Wills buried his instruments …". Ten years later he was working as a surveyor in that very area traversed by Burke and Wills and identifying the "blazed trees" left by the surveyors who marked the Queensland/NSW border in 1875. He began to think it might also be possible to find the trees blazed to mark the Burke and Wills camp sites just 15 years earlier and thus the location of where Wills "buried his instruments". And so began the intermittent searching, visiting of libraries and re-computation of Wills' navigation records (see Leahy, 2007). On a trip to outback Queensland in 1984 a blazed tree was found at the location indicated by Wills to be the "Plant Camp" and where the astronomical instruments were deposited. Repeated visits over the next 20 years failed to find any definitive artifacts until the well publicized discoveries in 2007.

Above all, it is his university teaching that Frank found most continuously rewarding. He has often been heard espousing the privilege of lecturing to people in their early 20's when history shows they will become leaders in the community and in their profession. Many of his students remember hearing his categorization of lecturers as being either in the group who "mystifies" or who "de-mystifies". The records show that Frank has remained an outstanding teacher and a life-long demystifier.

Since retirement Frank has continued to publish, lecture in the Department of Geomatics and consult with industry – and, of course, continue to search out aspects of the Burke and Wills Expedition.