

Mr Louis Challis AM

For his outstanding contribution beyond the expectations of the person's particular field of endeavour which has influenced the thinking or general well-being of the wider community.

*Doctor of Engineering (honoris causa) [Hon DEng]
Conferring ceremony: 1 May 2015*

Citation

Chancellor, it gives me great pleasure to present Louis Aron Challis AM to you for admission to the degree of Doctor of Engineering (honoris causa).

Louis Challis holds a Bachelor of Engineering and Master of Architectural Science from this University. He has made an outstanding contribution in the area of acoustics. His work over the last 50 years has influenced the thinking and general well-being of the wider community.

Louis provided outstanding acoustical designs for some of Australia's most important and prestigious buildings. Many people now enjoy greater comfort and speech privacy in their work environment because of his exceptional work in designing, testing and monitoring public buildings. Foremost amongst these was the design and supervision of New Parliament House in Canberra. Other landmark public buildings and infrastructure projects includes the Parliament Houses of New South Wales, Queensland and Papua New Guinea; the Olympics 2000 project at Homebush Bay, and Sydney Harbour Tunnel.

He also made a remarkable contribution to sight and hearing impaired people. Louis designed and developed an audio-tactile push-button signalling system, so pedestrians who are sight- and/or hearing-impaired can easily determine whether the signal is displaying 'Walk' or 'Don't Walk' simply by touching the button. Although the New South Wales Department of Main Roads offered Louis the right to patent his invention, he declined to do so on the basis that he believed the innovation should be made widely available at the lowest possible cost. The system he designed is used not only in all Australian cities but also in many overseas cities around the world.

Louis' pioneering work forms the basis for most of the acoustical work performed in Australia today, whereby all State and Federal environmental protection authorities have now adopted the acoustical test methodologies and data presentation format Louis developed for assessing community noise. His development of inexpensive, automated noise monitoring systems has facilitated an accessible approach to both the measurement and specification of environmental noise goals and guidelines for our society, providing an effective means to assess, predict and manage environmental noise and its impacts.

He has had a voluntary involvement for over 40 years on Australian and International Standards Committees. When Louis established himself as a consulting acoustical engineer in the mid-1960s, there was very little objective analysis of noise or related environmental issues. One of Louis's primary contributions to the field of acoustics and vibration has been through his efforts to develop objective acoustical standards and testing methodologies. This has been partially achieved through his constructing his own acoustics laboratory including the first aero-acoustic laboratory in Australia.

Louis also served in the Royal Australian Air Force Reserve as a specialist advisor in acoustics, where he attained the rank of Wing Commander. He was also a specialist advisor on forensic assessment of tapes for ASIO, the New South Wales Independent Commission against Corruption and the New South Wales Crime Commission. He has also served in a specialist role in various academic institutions and for governmental bodies, including this University.

He has received numerous awards including an Honorary Fellow of the Institution of Engineers (its highest award) in 1998, Fellow of the Australian Academy of Technological Sciences & Engineering in 2000, Centenary Medal in 2001, and Membership of the Order of Australia in 2005. Over the course of his career, he received an unprecedented nine Association of Consulting Engineers Australia Engineering Excellence Awards and three Institution of Engineers Australia excellence awards.

Chancellor, I present Louis Aron Challis for admission to the degree of Doctor of Engineering (honoris causa), and I invite you to confer the degree upon him.