Engineers Australia South Australia Hall of Fame Inductees

2006 **Malcolm Kinnaird** AC FTSE HonFIEAust CPEng 2006 **Rex Whaddon Parsons** OBE (1894-1961) 2006 **Sir Eric Neal** AC CVO FTSE HonFIEAust CPEng

2006 **Dr Andrew Thomas** AO HonFIEAust CPEng

2006 Frank Bertram Bull OBE (1917-2003) 2006 **Sir Arvi Parbo** AC FTSE HonFIEAust CPEng

2006 **Keith William Lewis** AO CB FTSE HonFIEAust CPEng 2006 Sir Robert Chapman CMG (1866-1942

2008 Sir Charles Todd KCMG MA FRS FRAS FBMS FIEE (1826-1910)

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Engineers Australia South Australia Hall of Fame Inductees

2008 **Dr Ronald John Fitch** OBE FIEAust CPEng 2012 **B. C. (Skip) Tonkin** AM HonFIEAust CPEng (1925-2012)

2013 **David Klingberg** AO FTSE HonFIEAust FAusIMM FAICD

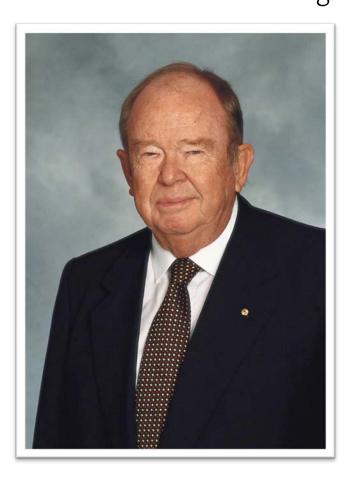
2009 Alfred Traeger OBE (1895-1980) 2012 Dr Don Woods OBE Dphil(Oxon) FIEAust BE BSc FTS CEng FRAes (1911-1981)

2009 **Walter John Stamm** AM FTSE HonFIEAust CPEng (Ret) 2013 **Dr Donald Williams** AO HonFIEAust CPEng FTSE (1937 – 2001) Room Naming Structure

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ENGINEERS

Malcolm Kinnaird AC FTSE HonFIEAust CPEng



BACK TO MAIN MENU

Malcolm Kinnaird was the founder of the Australian professional engineering company, Kinhill. As both an engineer and a businessman he has been a driving force behind many major developments in South Australia.

Kinnaird has demonstrated incredible enthusiasm and a strong passion for South Australia and played an active role in developing business in the state.

Kinnaird was made an Officer in the Order of Australia (AO) in 1991 for services to engineering and the community. He was awarded an Honorary Doctorate by the University of South Australia in 2000.

Kinnaird is Chairman of Adelaide Brighton Pty Ltd and of Asia Pacific Transport, the consortium that constructed the Adelaide – Darwin Rail Link. Malcolm was the Australian representative for the APEC Business Advisory Council from 1996 – 2001 and has been recognised for the extensive work in furthering Australian industry opportunities abroad.

Kinnaird was recognised as the 2003 South Australian of the Year and is an Honorary Fellow of Engineers Australia.

Dr Andrew Thomas AO HonFIEAust CPEng



BACK TO MAIN MENU

Andy Thomas joined the National Aeronautics and Space Administration (NASA) in 1992 with a Masters Degree (1973) and Doctorate (1978) in Mechanical Engineering from the University of Adelaide.

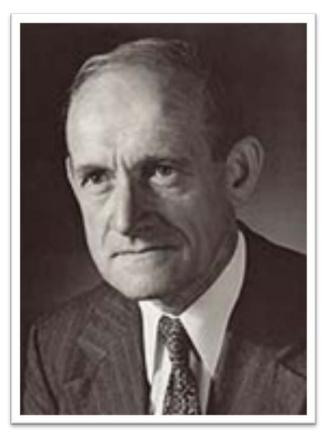
Thomas joined the Lockheed company in 1977, focused on advanced aerodynamics, and became manager of the Flight Sciences Division. In 1989 he joined the Jet Propulsion Laboratory (JPL) and led the program for microgravity materials processing in space as well as technology studies to support the development of space flight hardware for shuttle missions.

Thomas made his first space flight aboard Endeavour in 1996. Following training at the Yuri Gagarin Cosmonaut Training Centre in Russia, Andy boarded Endeavour to dock at the MIR space station, where he worked as Flight Engineer 2 and completed 141 days in space. In 2001, from Discovery, he became the first Australian to perform a space walk spending some six hours working on the outside of the International Space Station and has spent a total of 178 days in space on four shuttle missions – STS-77, STS-89, STS-102 and STS-114.

Thomas has served as Deputy Chief of the Astronaut Office at NASA, and has been honoured with the Order of Australia, the NASA Exceptional Service Medal; the Yuri Gagarin Medal; the Order of Friendship from Russia and Kazakhstan; and South Australian of the Year.

Frank Bertram Bull

OBE (1917 – 2003)



BACK TO MAIN MENU

Frank Bull, 'the Prof', valued hard work, education and enquiry, modest living and joy in everyday things. A man of quiet dignity and authority he was an inspiring teacher whose lectures stirred his students to a vision of what they might achieve.

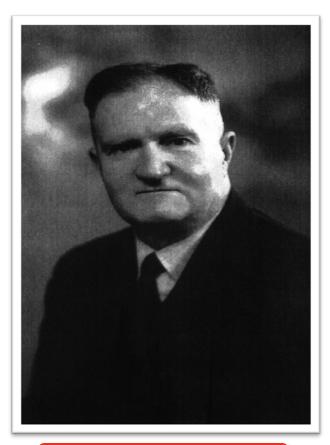
A graduate of London University, Bull led a wartime team establishing why Liberty ships were breaking up and sinking. His work saved many lives. He was appointed professor of civil engineering at the University of Adelaide (1952) and the die was cast for him to influence engineering education and practice in Australia for 50 years. Bull served on the councils of both the University of Adelaide and the SA Institute of Technology and was active in the planning and establishment of Flinders University.

In 1970 Bull was appointed to the Royal Commission into the collapse of the West Gate Bridge, Melbourne VIC. The report became a model for defining the obligations of the professional engineer.

In 1981 Bull was awarded an Order of the British Empire (OBE) for his services to engineering and to education. He was made an Honorary Fellow of the Institution of Engineers Australia and awarded that institution's Chapman Medal. Further awards included the Andrews Prize of the Institution of Structural Engineers UK; the Gold Medal of the (former) North East Coast Institution of Engineers and Shipbuilders; and a Premium Award by the Royal Institution of Naval Architects.

Rex Whaddon Parsons

OBE (1894 – 1961)



BACK TO MAIN MENU

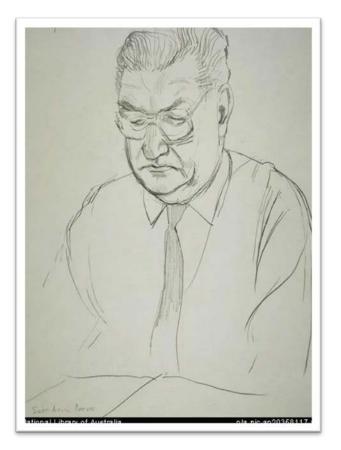
Rex Parsons was born in Adelaide and studied engineering at the SA School of Mines and Industries and the University of Adelaide from which he received his bachelors degree (1914). Following one year as a cadet with the Adelaide Electric Supply Company he enlisted in the Australian Imperial Force, serving with the Royal Australian Engineers in the Australian Mounted Division in Palestine and Syria during WW2.

After the war Parsons worked with the British Thomson-Houston Coy at Rugby and for a short period with GEC, New York State. Back in Australia in 1921 he was appointed head of the Electrical Engineering Dept at the SA School of Mines and Industries. He obtained his Masters degree in 1926.

After a sabbatical working on the Central England section of the British Electricity Grid, Parsons was appointed Principal of the SA School of Mines and Industries in 1940.

Parsons was Chairman of the SA Division of the Institution of Engineers Australia in 1943 and President of the Institution in 1955. He was awarded an Order of the British Empire (OBE) in 1953 for his services to technical education. He is remembered by many for his frugal management and his leadership in matters related to technical colleges and the training of engineers.

Sir Arvi Parbo AC FTSE HonFIEAust CPEng



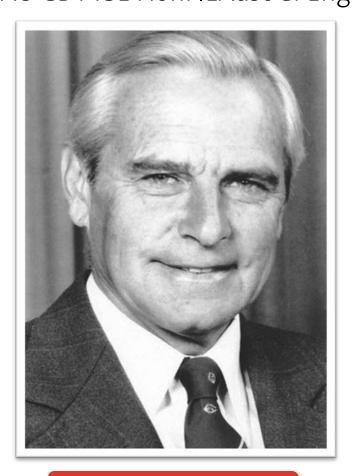
BACK TO MAIN MENU

Sir Arvi Parbo was born in Estonia and fled to a German refugee camp as an 18 year old. Post WW2 he attended the Clausthal Mining Academy in Germany and migrated to Australia in 1949. While working in a quarry near Adelaide he progressed to a 1955 honours degree in mining engineering from the University of Adelaide.

Parbo joined Western Mining Corporation Limited as an Underground Surveyor at Bullfinch, WA in 1956. His strengths surfaced quickly, and his career advanced rapidly, from technical assistant to Managing Director and finally Chairman of WMC. He retired from this position in 1999 after forty years of distinguished work in the Australian minerals industry. Major corporations including Alcoa, Alcan, Zurich, Hoescht, Chase AMP and BHP Ltd, all felt the influence of Parbo as a director and, in some cases, chairman. He was the founding President of the Business Council of Australia (1983), President of the Australasian Institute of Mining and Metallurgy (1990) and the Australian Academy of Technological Sciences and Engineering (1995 – 97).

Parbo was widely honoured. He was made a Knight Bachelor in 1978 and a Companion of the Order of Australia in 1993. He holds the Queen's Jubilee Medal, and honours from the Federal Republic of Germany, Japan and Estonia. He has Honorary Doctorates in Science, Engineering, Business and Law.

Keith William Lewis AO CB FTSE HonFIEAust CPEng



BACK TO MAIN MENU

Keith Lewis was chief executive of the Engineering and Water Supply Department of South Australia from 1970 to 1987. During that period he exercised leadership of one of Australia's largest water authorities, putting into effect programs nationally recognised as innovative.

At the national level Lewis made effective and revolutionary contributions to bodies such as the Australian Water Resources Council and the successive institutions responsible for the management of the Murray Darling Basin.

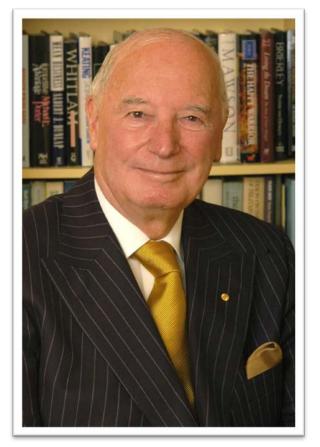
Lewis was recognised as the leading influence in the water industry in Australia for a decade.

For this work, in 1982, Lewis was appointed Companion of the Order of the Bath and, in 1994, appointed an Officer in the General Division of the Order of Australia.

Lewis always encouraged young engineers to be active in the Institution of Engineers and was SA Division Chairman in 1970.

Lewis is an Honorary Fellow of Engineers Australia.

Sir Eric Neal AC CVO FTSE HonFIEAust CPEng



BACK TO MAIN MENU

Sir Eric Neal AC CVO became Chancellor of Flinders University in March 2002, five months after completing a five-year term as Governor of South Australia.

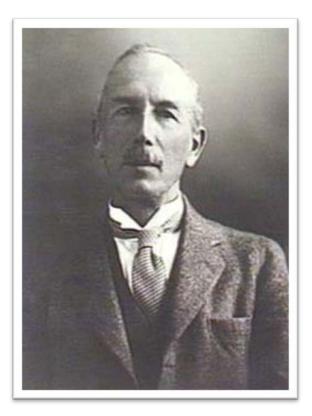
Neal was born in London and arrived in South Australia at the age of two. He was educated in Adelaide and completed tertiary studies at the South Australian School of Mines, now part of the University of South Australia. He holds professional engineering qualifications in both Australia and the United Kingdom, and has Honorary Doctorates from the University of Sydney, University of South Australia, and Flinders University. He worked in the gas industry in Broken Hill and Ballarat and joined Boral Ltd in 1963. Neal served 14 years as Chief Executive Officer and Managing Director of Boral Ltd and as a director of its subsidiaries in Australia, the UK, USA and Pacific Islands.

Neal has served on many corporate boards of directors and on government advisory bodies on defence, prices and incomes, water resources and the sugar industry. He was Chief Commissioner of the City of Sydney in 1987-88.

Neal was National Chairman of the Duke of Edinburgh's Award Scheme in Australia from 1984 to 1992 and a Trustee of the International Award Association for 11 years until 1997. He was Chairman of the Organising Committee for HRH The Duke of Edinburgh's sixth Commonwealth Study Conference in 1986. He has served as chairman of organisations supportive of the arts and of reeducating youth at risk.

Sir Robert Chapman

CMG (1866 – 1942)



BACK TO MAIN MENU

Sir Robert Chapman made it his personal concern that engineering should be given professional status. He argued strongly that engineering should move beyond an apprenticeship approach to formal courses. Under his encouragement, joint courses, commenced in 1903, were developed by the University of Adelaide and the School of Mines and Industries. Degree courses in several branches of engineering, in particular Civil Engineering, were subsequently developed.

Chapman promoted professionalism as a founding member of the SA Institute of Engineers (1913) and as President of the Institution of Engineers Australia (1922). Many bodies benefited from his expertise and he consulted on a wide range of projects including bridges, roads, jetties, railways and breakwaters.

Chapman was a council member of the University of Adelaide from 1919 (occasionally acting as vice chancellor), was president of the council of the School of Mines and Industries (1939 – 1942), was President of the SA Institute of Surveyors (1917-29) and a fellow of the Royal Astronomical Society from 1909. He was awarded the Institution of Engineers Australia Peter Nicol Russell memorial medal (1928), and the (W. C.) Kernot memorial medal of the University of Melbourne (1931).

RW CHAPMAN MEDAL

RW Chapman Medal

The medal was first awarded in 1935 and perpetuates the memory of Sir Robert Chapman, a former Professor of Engineering at the University of Adelaide and a member of the inaugural Council of the Institution. He was Chairman of the former Adelaide Division in 1920 and was President of the Institution in 1922.



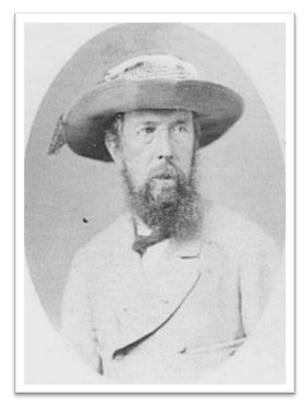
SIR ROBERT CHAPMAN BIOGRAPHY

BACK TO MAIN MENU

Sir Charles Todd

KCMG MA FRS FRAS FBMS FIEE

(1826 - 1910)



BACK TO MAIN MENU

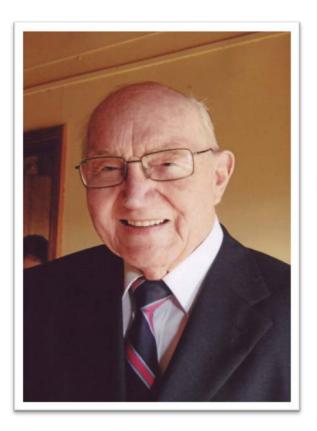
Sir Charles Todd exemplifies the creative, optimistic and farsighted engineering leadership that built Australia. Together with McGowan of Victoria he visualised a national telecommunications system, based on Samuel Morse's telegraphic system, connected to India and Europe. The cornerstone of this scheme became the Overland Telegraph line from Pt Augusta to Darwin; an epic construction project of some 2900 kilometres (1800 miles) completed in 1872 and connecting land and sea cable to England. Todd's communications vision for South Australia, formed after his arrival in the colony in 1855, also included telegraph lines crossing Australia from Adelaide to Melbourne, Sydney and Perth and to many large country towns in the state.

Todd - astronomer, meteorologist and electrical engineer used his wide knowledge to establish a network of meteorological observation stations throughout South Australia connected by telegraph. As Postmaster-General and Government Astronomer and Meteorologist, he supervised the collection and dispatch of weather information, and prepared weather maps and bulletins. His meteorological system spread to all colonies and New Zealand. By the 1880s Todd had organised a time service, constant astronomical observations and a standard point for geodetic surveys.

Todd was a holder of an honorary MA degree from the University of Cambridge as well as being a Fellow of the Royal Society, the Royal Astronomical Society, the Royal Meteorological Society and the Society of Electrical Engineers.

Dr Ronald John Fitch

OBE FIEAust CPEng



BACK TO MAIN MENU

Dr Ron Fitch was born in June 1910 in Melbourne. In 1927 he entered the University of Western Australia under a cadetship from the Western Australian Government Railways (WAGR). After graduation Fitch commenced work with the WAGR.

In 1949 Fitch was awarded his Master of Engineering degree and in the same year joined the Commonwealth Railways as Chief Civil Engineer. In his new role, Fitch had significant close personal contact with, and respect for, the men and women located in remote Australia. In 1954 Fitch joined the South Australian Railways as Assistant to the Railways Commissioner and, in 1965, was appointed Railways Commissioner. In 1973 Fitch retired to travel and become 'Station Master' at the non existent Kingscote railway station.

Fitch wrote 2 books between 1986 and 1993 and, as his wife's health began to fail, he dedicated himself to caring for her and began work on his PhD thesis from home. The University of New South Wales awarded his PhD in 2002. His award at the age of 92 is recorded by Guinness World Records Ltd. as the "..oldest person to be awarded a doctorate(PhD).."

Fitch has been a member of Engineers Australia since 1932. He has been involved in all aspects of the engineering profession and practiced the belief that life long learning, understanding the importance of the role of all members of a team, and respect for everyone, is necessary for the achievement of engineering excellence.

Alfred Traeger OBE 1895 – 1980



BACK TO MAIN MENU

Traeger was born in Dimboola, Victoria, but grew up in the Balaklava, SA. He studied mechanical and electrical engineering at the South Australian School of Mines from 1912 to 1915 and worked for the Metropolitan Tramways Trust and the Post Master General's Department.

Traeger transformed the lives of many outback Australians through his development of the famous 'pedal radio' an essential underpinning of the successful operation of the Flying Doctor Service established by the Rev. John Flynn and a contributor to the success of the School of the Air. Intrigued by Marconi's work Traeger became an amateur radio operator (VK5AX) and formed a company, Traeger Transceiver Pty Ltd. His genius was to develop, in 1928, a portable, high frequency radio transceiver that could be used by non-technical people. The sets were cheap, durable, small and easy to operate. Bicycle pedals drove a generator which produced about 20 watts at around 200 volts.

In 1931 Traeger went on to develop a Morse code keyboard which enabled people to send perfect code over the radio regardless of their skill level. In the mid 1930s voice transmissions became increasingly common. The first pedal sets, introduced into Queensland in 1929, revolutionised communications in outback Australia and linked people with essential medical, educational and social support - reducing the sense of loneliness so much a feature of outback life. Traeger was a member of the Institution of Radio Engineers Australia. He was appointed to the Order of the British Empire in 1944.

Walter John Stamm

AM FTSE HonFIEAust CPEng (Ret)



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Walter Stamm graduated from the University of Sydney, BE Mechanical and Electrical in 1947 and later an Advanced Management Program at Harvard University USA.

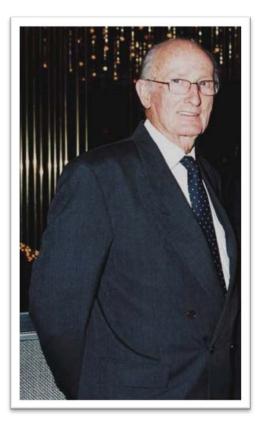
In 1948 Stamm joined Email at Orange, becoming Works Manager – Fans and Motor Division in 1960 and in 1961 he joined Pope Products Limited as Chief Production Engineer. Following a merger and the formation of Simpson Pope Limited he held positions of Product Development Manager, Commonwealth Commercial Sales Manager, General Manager of the Electric Motor Division, and Group General Manager, Industrial Products. In 1979 he became Managing Director of John Shearer Limited and was awarded the prestigious Jack Finlay National Award by the Institution of Production Engineers. In 1985 he retired and formed Bishop Stamm Associates.

Stamm joined Engineers Australia as a Student Member in 1955, became a Fellow in 1970, an Honorary Fellow in 1991 and he has held numerous executive positions since 1967. He was active in the South Australian Institute of Technology, as a member of the: Council's Education Committee; Institutes Centenary Commission; and Advisory Committee in Mechanical Engineering. He became chairman of the Mechanical and Aeronautical Branch in 1970, and State Division Chairman in 1978. Walter was elected to the Executive Committee in 1980 and served until 1987 while serving as Vice President from 1982 to 1984, Senior Vice President in 1985, and President in 1986.

Walter was a Fellow of the Academy of Technological Sciences and Engineering; a member of the Council, and was Vice President in 1992. He was a member of the Australian Council of Professions from 1985 and was President in 1990 and 1991. Walter was also a member of the Australian Committee of the International Cooperation in Advanced Manufacturing and a member of the Prime Ministers Science Council Committee on Manufacturing Technology.

B. C. (Skip) Tonkin

AM HonFIEAust CPEng (1925-2012)



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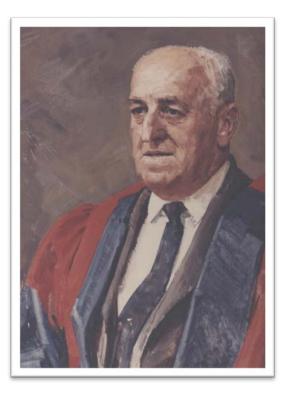
Skip was born and raised in Wallaroo, South Australia. He attended the Adelaide Technical High School and the South Australian School of Mines and Industry (now The University of South Australia) from which he received the Graduate Diploma of Civil Engineering in 1955.

On turning 18 Skip Tonkin joined the RAAF as aircrew and served in the South West Pacific area until his discharge at the end of the war. He continued his engineering studies and in 1948 joined the City of Woodville as Assistant Engineer. His establishment of the consulting firm BC Tonkin & Associates in 1955 cemented his life's future direction as the firm grew its practice in civil structural, marine, traffic, environment, transport, and local government engineering, as well as in meteorology.

He became President of the South Australia Division in 1983 and National President of The Institution of Engineers Australia in 1989. In this role he worked to increase the Institution's profile to reflect the pervasiveness of engineering in almost all fields of endeavour and the role it should play on issues of national importance.

Skip Tonkin built a successful South Australian enterprise by being innovative, by developing new solutions to local problems based upon world best practice and by building partnerships with clients based upon mutual trust and respect. Throughout his life he has been an exemplary member of the engineering profession at local, state and national levels.

Dr Don Woods OBE DPhil(Oxon) FIEAust BE BSc FTS Ceng FRAes (1911-1981)



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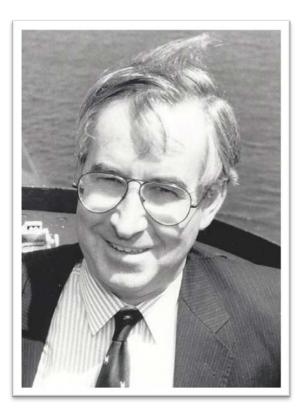
In 1951, Don Woods was appointed Superintendent of the High Speed Aerodynamics Laboratory at the Weapons Research Establishment (WRE) having moved to Adelaide from the Commonwealth Scientific and Industrial Research Organisation in Melbourne. In 1965, he was appointed Director of WRE (later the Defence Science and Technology Organisation) based in Salisbury and Woomera, South Australia. As Director, Woods was responsible for developing theoretical and experimental research programs in high speed aerodynamics, rocket propulsion, and weapon systems development and evaluation. Highlights included the Ikara antisubmarine weapon system and WRESAT, Australia becoming the third nation to put a satellite into earth orbit with the successful 1967 Woomera launch of an experimental satellite.

Woods was a member of the Council of The Institution of Engineers Australia for 18 years, was President of the South Australia Division in 1961 and was National President in 1972-3. He took a keen interest in technical education, chaired the Salisbury High School from 1959-63, was president of the Council of the South Australian Institute of Technology (SAIT) from 1979 to 1981, and was a member of the South Australian Government's Water Resources Appeal Tribunal. He was a Foundation Fellow in 1976 of the Academy of Technological Sciences.

In 1971, Don Woods was awarded the Order of the British Empire (OBE). In 1978 he was the inaugural winner of The Institution of Engineers Australia's AGM Michell Medal in recognition of his eminence and sustained leadership in mechanical engineering. In 1979, he was presented with the Institution's most prestigious award, the Peter Nicol Russell Memorial Medal for notable contributions to the engineering profession in Australia.

Dr Donald Williams

AO HonFIEAust CPEng FTSE (1937-2001)



BACK TO MAIN MENU

Don Williams was employed by the Western Australian Government Railways as a student and graduate Civil Engineer. In 1971 Williams took up a senior management role on the West Gate Bridge construction project in Melbourne following its collapse, where he gained great credit for his work in reconstruction.

He then returned to railways as Assistant General Manager Engineering and Planning of the Australian National Railways Commission, located in Adelaide and, in 1979, became the Chief Executive. While remaining Chairman of Australian National Railways, in 1987 Williams accepted the role of the first Chief Executive Officer of the newly formed Australian Submarine Corporation charged with executing the \$3.9billion contract to build six new submarines for the Royal Australian Navy. This challenging role leading the then most expensive contract for Australian Defence equipment meant balancing the cultural differences among the Swedish, American and Australian shareholders; dealing with multi-cultural staff; and with the political ramifications, at both the State and federal levels, of the project.

The core of Don Williams' efforts was to create an Australian business enterprise of strategic magnitude and to foster the raising of standards and the active participation of Australian industry in the submarine project. Don Williams' contribution during this period to the quality standards of South Australian industry are noted by his insistence on quality accreditation of suppliers to ASC. This lead to a large increase in quality accredited companies, which is an enduring legacy to this day.

Don Williams left an enduring heritage at ASC and in South Australia. He firmly believed that the South Australian industry would prosper through ASC's growth as borne out by the subsequent development of Australia's premier shipyard at the Techport submarine and shipbuilding facility at Port Adelaide.

David Klingberg AO FTSE HonFIEAust FAusIMM FAICD



BACK TO MAIN MENU

David Klingberg was born in 1944 in Loxton, South Australia. He attended Unley High School and, as a Cadet Engineer with the Electricity Trust of South Australia, graduated from the South Australian Institute of Technology with a Bachelor of Technology (Civil) in 1964.

On graduation he joined the fledgling consulting firm Kinhill Engineers commencing a career spanning 34 years, 12 of which he spent as Managing Director. He played a major role developing a small, Adelaide-based group into a successful Engineering Consulting firm operating in Australia and South East Asia. Following retirement from Kinhill in 1998, David was appointed Chancellor of the University of South Australia. Over the next decade he played a significant governance role overseeing the new institution's rapid growth. He also served as inaugural Chair of the National Universities Chancellors Council for three years. He was awarded an Honorary Doctor of the University of South Australia in 2009.

In 2008 Engineers Australia named David Klingberg Professional Engineer of the Year and he has been acknowledged as one of Australia's 100 most influential Engineers. David Klingberg was admitted to the Order of Australia in 2003 as a Member and in 2009 as an Officer for service to the community, for his contributions to governance policy in the tertiary education sector and for his contribution to commercial and economic development.

David Klingberg is a leading figure in the commercial and industrial life of Australia and is a member of a number of mining and industrial Boards. He served on the Premier's Climate Change Council and is a Director of WorkCover Corporation of South Australia. David is an Honorary Fellow of Engineers Australia and a Fellow of the Australian Academy of Technological Sciences and Engineering, the Australasian Institute of Mining and Metallurgy and the Australian Institute of Company Directors.

Room Naming Structure

Division Committee in conjunction with the Honours and Awards Committee developed the rationale that the rooms would be named after past National Presidents from the South Australia Division. It was also declared that the tenure of the room names would be ten years. These four room names are:

Sir Robert Chapman Theatre

Sir Robert was National President of the Institution of Engineers Australia in 1922.

He was a Member of the inaugural Council of the Institution of Engineers Australia and Chairman of the former Adelaide Division in 1920.

The Grant Hosking Room

(1925 - 2011) Grant was South Australia Division President in 1968 and National President of Engineers Australia in 1978.

He joined the Institution of Engineers Australia in 1943 and was awarded Honorary Fellowship in 1984.



Room Naming Structure

The Walter Stamm Room

Walter was South Australia Division President in 1978 and National President of Engineers Australia in 1986.

He joined the Institution of Engineers Australia in 1955 and was awarded Honorary Fellowship in 1991.

The BC (Skip) Tonkin Room

Skip was South Australia Division President in 1983 and National President of Engineers Australia in 1989.

He joined the Institution of Engineers Australia in 1968 and was awarded Honorary Fellowship in 1993.

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