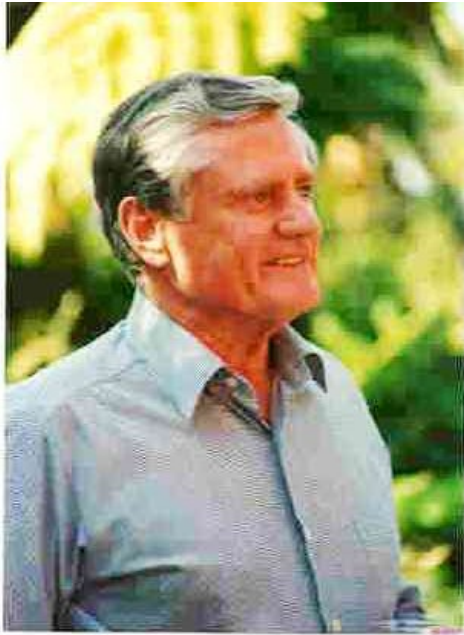


MEMORIES OF LINDSAY INGALL



Lindsay Ingall passed away at his home in the Blue Mountains of New South Wales on 21 May 1999 whilst working on the affairs of the Australian Institute of Geoscientists (AIG) as he had done for 20 years. Among many scientific achievements, Lindsay's contribution to the completion of the gravity map of Australia is memorable. Lindsay always volunteered to help others.

Lindsay attended Sydney Technical High School, where he was School Captain in 1943, and won the Turner Prize as the Dux of the School. He was also the School's Senior Athletics Champion in 1943, having been age athletics champion in 1940, 1941 and 1942.

Lindsay graduated in Geology and Physics from the University of Sydney in 1947, and commenced his practical professional career with the Zinc Corporation in Broken Hill. He then worked for the Bureau of Mineral Resources (now Geoscience Australia) in Canberra. A major assignment was management of the Geophysical Observatory on Heard Island. A few observations from this time record that he was the team dog handler, and was the winner of the site's most aesthetic beard. A government telegram dated 6th October 1952 states "Owing to splendid efforts of magnetician Ingall, Heard Island magnetic variation has been forced over fifty degrees west".

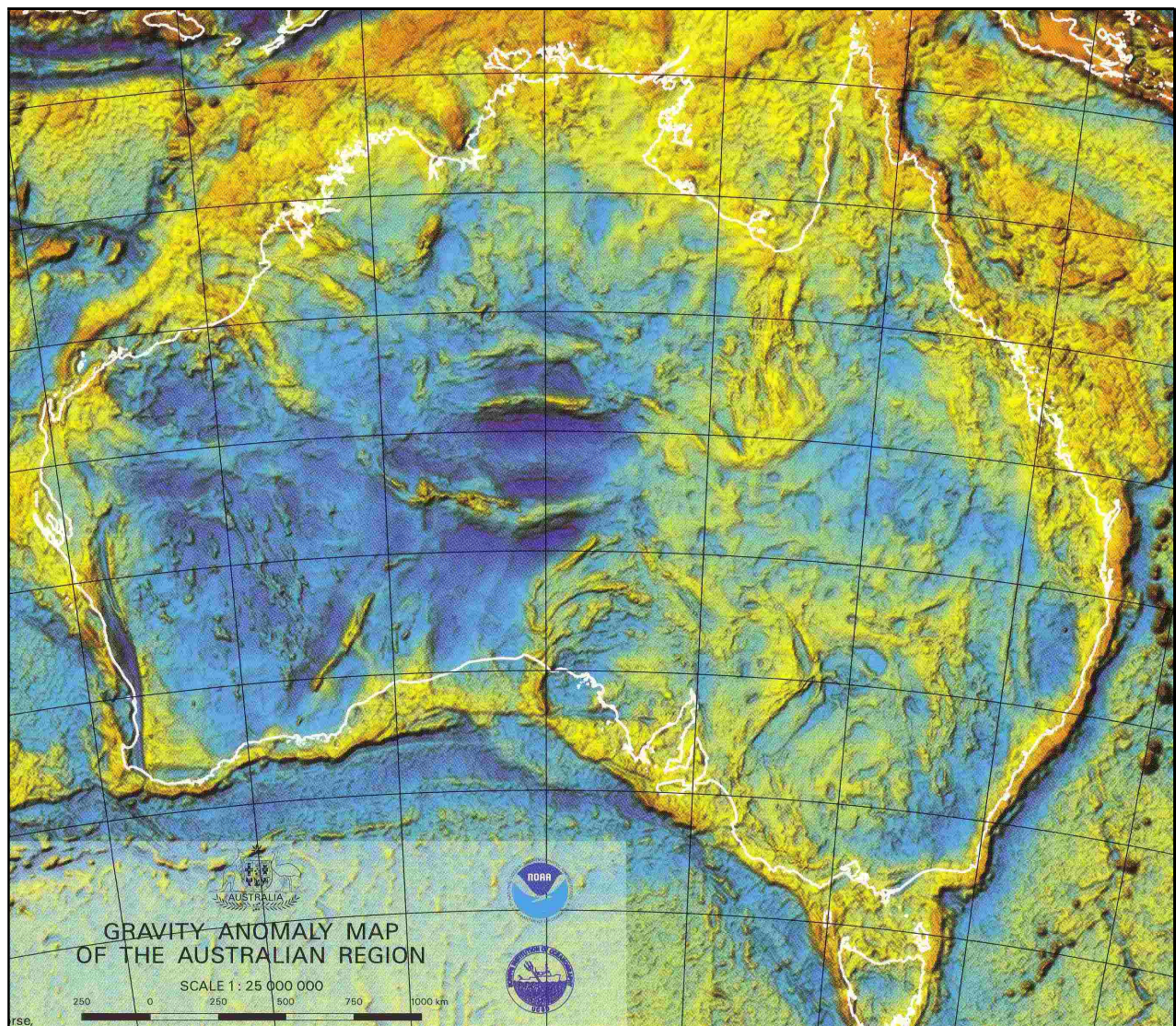


He spent significant time in the Canadian Arctic on oil exploration projects.

He is most remembered as the founder and the chief executive officer of the geophysical service company Wongela Geophysical Pty Ltd – which provided contract data acquisition throughout Australia and southeast Asia. Doug Morrison first worked with Lindsay in 1962/63 on petroleum aeromagnetic surveys just after he had returned from Canada, and he recalls "Lindsay still had a

North American twang to his accent. He was a ball of energy, always climbed stairs 2 or 3 at a time wearing tweed jacket and matching tweed hat”. Doug has located a comprehensive report by Wongela on the Strzelecki Creek and Lake Gregory Gravity Survey in northeastern South Australia completed on behalf of Delhi Petroleum, which describes gravity operations of that time. The survey covered over 50,000 square miles and generated 3,184 new gravity stations during December 1964 to April 1965. The work employed two Worden meters and one LaCoste Romberg meter with Mechanism Limited micro-barometers. Lindsay describes the “cell method” of surveying, each cell being 650 square miles, which was the area normally covered by one helicopter in one day. Each cell yielded 44 stations with one station per 16 square miles!

The gravity map of Australia (shown below) is among Lindsay’s great achievements. Largely due to Lindsay’s leadership and excellent organisational skills, Wongela was awarded most of the BMR contracts over a period of ten years to carry out the first continent-wide gravity survey of Australia. The result is to a large degree testimony to Lindsay’s dedication to his work and his organisational proficiency.



Lindsay helped to found the Australian Society of Exploration Geophysicists (ASEG) in 1970 and was one of the signatory's to the ASEG's constitution. He served as ASEG President in 1971/72 and 1978/79. He was on the ASEG Federal Executive Committee for most of the Society's formative years from 1971 to 1980.

During this time, he worked with others from several institutions to establish the Australian Institute of Geoscientists (AIG) as the professional institute representing geoscientists from all fields of practice. Lindsay was one of the founding AIG councillors in 1981, and was an AIG Councillor from 1981 to 1999. He served as AIG President in 1989/90, and as the long-term Honorary Treasurer 1990-96 (shown reporting to an AGM on right) and Chairman of the AIG Membership Committee from 1996-99.



Many senior geoscientists will have fond memories of monthly AIG Council meetings held at Lindsay's home in Kurraba Road, North Sydney, with his beloved dogs in constant attendance. Lindsay is remembered as articulate, persuasive, dedicated, inspirational, witty and a geoscientist who crossed borders. His regular utterances of phrases like "C'est le vie, c'est si bon" reflected his international career.

In 1988, Lindsay was made an Honorary Member of the ASEG, and he later received a citation for the ASEG Service Medal for extraordinary service over many years. He had great communication skills, which contributed to his capacity to relate technically and effectively with other professionals, regardless of their own understanding of the principles of geophysics. Andrew Mutton recalls that he was also a wonderful mentor to many younger geophysicists trying to get a foothold in the industry.

In 2001, the ASEG established the Lindsay Ingall Memorial Award to honour Lindsay Ingall for his capacity to comfortably cross geoscience boundaries and for his enduring commitment to assisting all geoscientists in Australia. The formal purpose of the award is "For the promotion of geophysics to the wider community". The award recognises the work of Australian geoscientists in promoting geophysical applications, technologies or education within the non-geophysical community, including geologists, geochemists, engineers, managers, politicians, the media or the general public. In so doing, it acknowledges in perpetuity Lindsay's significant impact on geoscientists and the geoscience profession throughout his lifetime.

ATTACHMENTS

CITATION: ASEG Service Medal 1998

Unfortunately, it has not been possible yet to recover a citation for Lindsay's award of **Honorary Membership of the ASEG**. Perhaps a reader of this text may be able to find it.

CITATION FOR THE AWARD OF THE A.S.E.G. SERVICE MEDAL
(for outstanding service to the ASEG)

Presented to
Lindsay Ingall
Hobart, November 1998

Lindsay's association with the ASEG has spanned over 25 years, and he has had an active involvement on the Federal Executive or as a member of various sub-committees continuously over that period. To many members, Lindsay could be regarded as the 'father' of the Society, having been instrumental in the foundation of the ASEG in 1970, formalising the original Articles of Association, and incorporating the Society as a public company in August 1971.

Lindsay was a member of the original Executive Committee, and was President of the ASEG in 1971/72 and 1978/79. He is currently Chairman of the Honours and Awards Committee, but has recently advised his desire to hand this over to Bill Peters. Lindsay was made an Honorary Member of the ASEG in 1988.

Lindsay has intertwined his ASEG involvement with an active and varied career as a practicing geophysicist. He graduated with a B.Sc degree in Geology and Physics from Sydney University in 1947. Soon after he joined the Zinc Corporation in Broken Hill and spent 18 months carrying out regional magnetic, gravity and electrical surveys around the Broken Hill. In 1949, Lindsay joined the Bureau of Mineral Resources (now AGSO) with the objective of getting down to the Sub-Antarctic. He was first assigned to work on the pendulum gravity survey of Australia, before setting off for a 12 month stay on Heard Island where he looked after the operation of the magnetic and seismological observatories.

Shortly after returning to Australia, Lindsay decided to go to Canada, where he carried out seismic and gravity surveys from Quebec to the Northwest Territories. The most challenging time was spent in the Canadian Arctic, where Lindsay pioneered geophysical exploration for his company.

Lindsay returned to Australia in 1962, and formed the Wongela Geophysical company, which was actively involved in gravity exploration for oil, coal, oil shale and base metals, and was also responsible for a large proportion of the regional helicopter gravity coverage of Australia for the BMR between 1964 and 1974. A little known fact is Lindsay's role in the delineation using gravity surveying of the Stuart oil shale deposits in central Queensland during this time.

Lindsay was always keen on helicopters and he teamed up with a pilot and engineer to set up in 1963 a helicopter company, which was a major component of the helicopter gravity contract work carried out by Wongela. Lindsay also became involved in overseas assistance work in Thailand, South Korea and Sri Lanka between 1977 and 1980.

Lindsay now lives in the Blue Mountains west of Sydney, but maintains his active interest in geophysics through his consulting work, and of course through the ASEG. Lindsay is also well known to hundreds of other geoscientists who are not members of the ASEG through his long-standing involvement with the Australian Institute of Geoscientists (AIG), which was formed in 1981. Lindsay was on the original committee of the AIG, was President in 1989/90, and is currently an AIG Councilor and Chairman of the membership committee.

Nominated by the ASEG Federal Executive.