



Australian
Hearing
Services

50 years of helping people hear



National
Acoustic
Laboratories

Australian Hearing Services (AHS) is celebrating 50 years of operation under various names (Commonwealth Acoustic Laboratories, National Acoustic Laboratories, Australian Hearing Services). With the most recent name change in 1992, the name National Acoustic Laboratories (NAL) was retained for the Research Division of AHS which includes the engineering, prevention services, and Acoustic Test Facilities sections as well as the research staff. The main areas of research concern hearing and hearing aids, and noise and hearing loss prevention. The Managing Director of AHS is Philip Bert and the Research Director of NAL is Denis Byrne. The following information, from a brochure prepared for 50th anniversary celebrations, summarises the history of AHS in "milestone" form:-

- 1947** Commonwealth Acoustic Laboratory (CAL) established by the Health Department in Sydney for hearing and noise research and to provide hearing services to school children and war veterans. CAL emerged from the Acoustic Research Laboratory, set up in 1943 to investigate problems in noise and communication in the defence services. First CAL Centre has a staff of four.
- 1949** Branch centres established in every Australian Capital City. The first hearing aid developed and produced by CAL was issued (simply known as the CALAID).
- 1954** 1,120 hearing aids fitted. First visit to a NT aboriginal community (from the Adelaide Laboratory).
- 1955** Transistor hearing aids, the body-worn Calaid T, replace the cumbersome valve-type aids, requiring only one-tenth of the battery supply.
- 1960** Minister for Health approves extension of hearing services scheme to include all children up to the age of 21.
- 1961** Induction coils incorporated into Calaid T model allowing clients to use loop systems, and CAL assists many schools to install loops. All Commonwealth Hearing Compensation cases now seen by CAL.
- 1963** CAL Research now at Hickson Road at The Rocks, and the Hearing Centre to Grace Building, Sydney. CAL develops individually moulded ear protectors extensively used by the Defence Forces and industry.
- 1964** CAL now has 17 hearing centres, including 10 country centres. A regular visiting service commenced to the Northern Territory.
- 1965** Introduction of the Calaid E, an in-the-ear hearing aid suitable for children and adults with mild losses.
- 1967** CAL now has 115 full-time staff. 1,250 Calaid T's and 2,500 Calaid E's fitted this year.
- 1968** Commonwealth hearing services scheme extended to pensioners. 6,500 hearing aids fitted this year.
- 1972** CAL becomes National Acoustic Laboratories (NAL). A new testing procedure for infants (COR audiometry) introduced into the clinics using sophisticated equipment designed by NAL.
- 1973** 100,000th Calaid issued and 250,000th new client tested this year. Binaural (two) hearing aids now fitted routinely to children after NAL research demonstrates the benefits.
- 1974** First BTE hearing aid developed by NAL, the Calaid H. Mobile Noise Evaluation Unit is acquired for major noise work in the field. NAL researchers develop procedure for selecting hearing aids which maximise intelligibility of speech. 17,700 hearing aids issued this year.
- 1975** High powered behind-the-ear hearing aids purchased to enable severely and profoundly deaf clients to benefit from the ear level model. NAL the only hearing service to children in the world fitting BTE aids routinely. 24,500 hearing aid fitted this year.
- 1978** NAL introduces the high powered behind-the-ear Calaid P, suitable for children and adults with severe and profound losses.
- 1982** New improved behind-the-ear range of hearing aids, designed and produced by NAL - the Calaid V. New Paediatric specialist audiologist positions improve services to children. Investigations into community reaction to aircraft noise results in ANEF criteria which are later adopted by the Australian Government.

- 1983** Number of Hearing Centres is now 26. 42,000 hearing aids fitted this year.
- 1985** Program to routinely fit vibrotactile aids (which convert sounds into vibrations) was introduced for profoundly deaf clients. Rehabilitation specialist positions created to strengthen adult rehabilitation services.
- 1986** NAL moved from The Rocks to new purpose-built premises at Chatswood. New BTE output compression hearing aid, the VLK, offers greatly improved sound quality. Unique Calaid FM wireless system now available for children. NAL aid selection procedure further modified and improved.
- 1988** New technique known as 'insertion gain measurement' introduced to improve hearing aid fitting evaluation. The number of Hearing Centres climbed to 35, with 65 visiting sites.
- 1990** Unique Sound Field Amplification system trialed in an Alice Springs Aboriginal community school, resulting in improved listening conditions for children with mild hearing loss.
- 1991** NAL aid selection procedure incorporates adjustments for severe and profound losses. Joint venture with Bernafon commenced to design programmable hearing aids.
- 1992** AHS becomes a Statutory Authority. NAL becomes Australian Hearing Services (AHS), with "NAL" retained for Research Division. AHS enters agreement to supply repairs and spare parts for clients with Cochlear Implants. NAL becomes a core participant in the Co-operative Research Centre for Cochlear Implant, Speech and Hearing Research.
- 1993** Programmable in-the-ear hearing aid, the IT312, and remote controls are introduced, and AHS becomes the only Government service offering such sophisticated technology as part of a standard service, anywhere in the world. AHS services extended to part-pensioners.
- 1994** Medium powered BTE, the SB13, added to the range of programmable products. As a result from investigation into community response to impulse noise from large calibre weapons and explosions, NAL develops criterion for Department of Defence.
- 1995** High powered programmable hearing aid, the PB675, introduced and large numbers exported by Bernafon. Memorandum of Understanding signed with Office of Aboriginal and Torres Strait Islander Health Services to train health workers and provide audiometric equipment.

1996 AHS, in collaboration with Macquarie University, establishes the first School of Audiology in Beijing, China. With several million hearing impaired people, there is a great need for audiologists in China.

1997 AHS celebrates 50 years of commitment and service to the Australian community. Number of Hearing Centres is now 60, with over 200 visiting sites, and 700 staff. 100,000 hearing aids fitted this year.

AHS is still undergoing changes. From 1 November 1997 adults who are eligible for government Hearing Services may choose to obtain those services from any of a number of accredited providers, including AHS. AHS will remain the sole provider of services to children and some other specified groups of clients. NAL's research activities are not directly affected by the change; they are funded as a community obligation. To celebrate 50 years of research (in fact a few years more, counting the work of the Acoustic Research Laboratory) NAL has compiled a complete set of research publications (about 620) into sets of bound volumes which have been presented to the National Library and to universities providing courses in acoustics or audiology.



ACOUSTIC & NOISE SPECIALISTS
Superb Anechoic and Reverberant Test Facilities Servicing:

- Transmission, Sound Power and Absorption testing
- General Acoustic Testing
- Comprehensive Analysis of Sound and Vibration
- Measurement and Control of Occupational Noise
- Electro-Acoustic Calibration • Vibrational Analysis

Experts in Noise Management and other Services - including:

- Measurement and Control of Occupational Noise
- Reference and Monitoring Audiometry
- Residential and Environmental Noise
- Education and Training • Acoustic Research

126 Greville Street, Chatswood, NSW 2067
Phone: (02) 9412 6800

National Acoustic Laboratories is a Division of
 Commonwealth Hearing Services
 a Commonwealth Government Authority