

**Curriculum Vitae
ROB BULLEN**



BSc (Hons) PhD MAAS

Position Principal, Wilkinson Murray

Qualifications & Affiliations

- PhD (Acoustics)
- Bachelor of Science (Hons, Physics)
- Member of Australian Acoustical Society
- Representative for the Australian Acoustical Society on the Australian Standards Committee EV-011 Aircraft & Helicopter Noise

Special Expertise

- Environmental noise assessment – mines, quarries and industry
- Transportation noise assessment – road, railway & aircraft
- Design of noise controls for transportation and industrial sources
- Noise impact description and assistance in development of Environmental Noise Policy
- Computer modelling of noise propagation
- Monitoring and assessment of vibration & blasting
- Design of noise controls in buildings
- Acoustical software development (Noiseworks, BarnOwl)

Employment History

1979 – 1985	Scientific Officer, National Acoustic Laboratories
1985 – 1987	Scientific Officer, Electricity Commission of NSW
1987 – 1992	Senior Acoustic Engineer, Renzo Tonin & Associates
1992 – 1999	Principal and National Practice Leader, (Acoustics) ERM Mitchell McCotter Pty Ltd
1999 – June 2010	Director, Wilkinson Murray
July 2010 – Present	Principal, Wilkinson Murray

Other Activities

- Member of Australian Standards Committee EV-011 - Aircraft & Helicopter Noise
- Received Excellence in Acoustics Award, 1995 for Sydney Airport Noise Management Plan
- Lecturer at UNSW & UTS

RESEARCH & POLICY EXPERIENCE

- Conducted internationally-recognised research on reaction to noise from aircraft, road traffic and impulsive sources
- Co-author of the National Acoustic Laboratories study which forms the basis of the ANEF system for land use planning around Australian airports
- Provided advice to bodies including the NSW Department of Environment, Climate Change & Water (DECCW), WA Environmental Protection Authority (EPA), Queensland Department of Environment and Heritage, NSW Roads and Traffic Authority, Main Roads WA and NSW Minerals Council on noise policy issues
- Published over 20 papers in refereed journals on noise impact assessment

PROJECT EXPERIENCE

Responsible for noise impact assessments and/or noise control design advice in numerous projects including:

ROAD

- M2 Motorway
- M4 Motorway widening
- Eastern Distributor barrier design
- Five Islands Bridge upgrading
- Bulahdelah Bypass
- Bookham Bypass
- Pacific Highway, Karuah - Bulahdelah

RAIL

- Parramatta Rail Link – EIS and detailed design of vibration isolation
- Perth MetroRail – detailed design of vibration isolation treatments
- WestRail project, Hong Kong
- London Underground noise level calculations
- Rail noise measurement survey and development of rail noise database

AIRCRAFT

- Brisbane Airport New Parallel Runway EIS
- Gold Coast Airport Runway Extension EIS
- Sydney Airport Master Plan
- Precision Runway Monitor noise trial, Sydney Airport
- Domestic Common User Terminal Noise Impact Study, Sydney Airport
- Second Sydney Airport EIS
- Sydney Airport Noise Management Plan
- ANEF for Melbourne Airport
- ANEF for Brisbane Airport
- Noise impact survey, Jandakot Airport

MINES & QUARRIES

- Anvil Hill Coal Mine
- Mount Arthur North Coal Mine
- Mount Pleasant Coal Mine
- Bulga Coal Mine
- Ravensworth East Coal Mine
- Penrith Lakes Quarry
- Mt Flora Quarry
- North Boambee Quarry

INDUSTRIAL NOISE

- BHP Eastern Gas Pipeline
- Tomago Aluminium Plant
- CSR Oberon Timber Processing Plant

ARCHITECTURAL

- 2EA Radio Studios
- Ritz-Carlton Hotel, Sydney
- Observatory Hotel, Sydney
- Quay West Apartments, Sydney

PUBLICATIONS IN REFEREED JOURNALS

- R. Bullen & F. Fricke, 1976 – *Jnl Sound & Vibn* **46**(1), 33-42. Sound propagation in a street
- R. Bullen & F. Fricke, 1977 – *Jnl Sound & Vibn* **54**(1), 123-129. Sound propagation at a street intersection in an urban environment
- R. Bullen, 1979 – *Jnl Sound & Vibn* **65**(1), 11-28. Statistical evaluation of the accuracy of external sound level predictions arising from models
- R. Bullen & F. Fricke, 1982 – *Jnl Sound & Vibn* **80**(1), 11-23. Sound propagation through vegetation
- R. Bullen & F. Fricke, 1982 – *Jnl Sound & Vibn* **80**(1), 25-30. Time distribution of impulse noise in an enclosure
- R. Bullen, 1983 – *Jnl Sound & Vibn* **89**(2), 287-289. A mathematical model for noise propagation between buildings - comments
- R.B. Bullen & A.J. Hede, 1983 – *Jnl Acoust. Soc Am* **73**(5), 1624-1630. Time-of-day corrections in measures of aircraft noise exposure
- R.B. Bullen & A.J. Hede, 1982 – *Jnl Sound & Vibn* **82**(1), 29-37. Assessment of community noise exposure from rifle shooting
- A.J. Hede & R.B. Bullen, 1982 – *Jnl Sound & Vibn* **82**(1), 39-49. Community reaction to noise from a suburban rifle range

- R.B. Bullen & R.F.S. Job, 1985 – *Jnl Acoust. Soc Am* **78**(2), 799-800. Community response to blasting – re-analysis of data
- R.F.S. Job & R.B. Bullen, 1985 – *Jnl Sound & Vibn* **100**(1), 127-129. Demand characteristics in experimental comparisons of the effects of noise and vibration
- R.B. Bullen, A.J. Hede & E. Kyriacos, 1986 – *Jnl Sound & Vibn* **108**(2), 199-225. Reaction to aircraft noise around Australian airports
- R.B. Bullen & A.J. Hede, 1986 – *Jnl Sound & Vibn* **108**(2), 227-245. Comparison of the effectiveness of measures of aircraft noise using social survey data
- R.F.S. Job & R.B. Bullen, 1987 – *Jnl Sound & Vibn* **116**(1), 161-168. The effects of a face to face interview vs. a group administered questionnaire in determining reaction to noise in the workplace
- R.B. Bullen, A. J. Hede & R.F.S. Job, 1991 – *Noise Control Engineering* **37**(3), 115-125. Community reaction to noise from an artillery range
- R.B. Bullen, A.J. Hede & T. Williams 1996 – *Acoustics Australia*. Sleep disturbance due to environmental noise: A proposed assessment index
- A.L. Brown & R.B. Bullen, 2003 – *Acoustics Australia*. Road Traffic Noise Exposure in Australian Capital Cities
- R. Bullen, 2003 – *Acoustics Australia*. Long-Term Environmental Monitoring and Noise Source Identification

OTHER

- Rob has presented numerous conference papers, talks and lectures.
- He gives courses in acoustics for Architecture and Interior Design students at the University of Technology Sydney and the University of NSW.