



CURRICULUM VITA

STEVEN E. COOPER - DIRECTOR

DATE OF BIRTH: 15 June 1952

QUALIFICATIONS: Bachelor of Science Engineering
(Electrical) 1978, University of NSW

Master of Science (Architecture) 1990,
University of Sydney

MEMBERSHIPS: Fellow, Institution of Engineers, Australia
Chartered Professional Engineer

Member, Institute of Noise Control Engineering
Member, Australian Acoustical Society
Member, Acoustical Society of America

Member of Standards Association of Australia
Committee AV/10 – Whole Body Vibration (1986 to
2013), Committee EV/11 – Aircraft & Helicopter Noise
(1986 to 2013), AV/4 – Architectural Acoustics (1996
– 2000), and Committee EV/10/4 – Railway Noise
(1998 to October 2007)

NSW Division, Australian Acoustical Society
Membership Committee 1978 to 1997

EXPERIENCE: The Acoustic Group Pty Ltd
Incorporated in 2003

Steven Cooper Acoustics Pty Ltd
Incorporated in 1995

James Madden Cooper Atkins Pty Ltd
Incorporated in 1981

James A. Madden Associates Pty Ltd
Appointed Associate Director 1980
Appointed Associate 1979
Appointed Engineer 1978

The Acoustic Group was formed to provide specialised services and research in Acoustics and Vibration and draws on the considerable experience of Mr. Cooper from his position from 1982-1995 as Principal and Partner of James Madden Cooper Atkins and from 1995-2003 as Principal of Steven Cooper Acoustics. His particular areas of acoustical expertise include machine and vibration monitoring, acoustical design of auditoria, studios and entertainment venues, traffic and helicopter noise, laboratory instrumentation, precision analysis system, legal assignments and expert witness.

He has considerable experience in vibration measurement and assessment in industry for both Machinery Operating Condition and Occupational Exposure Levels.

His experience in the measurement and assessment of noise emission from industry and licensed premises is extensive having produced numerous assessment reports and noise control designs for clients, statutory bodies and courts. He has been an invited Guest Lecturer on Noise Assessment to NSW Policy Academy for their Noise Familiarisation Course run by the State Pollution Control Commission, a guest lecturer for the Faculty of Architecture at the University of NSW, and a lecturer on noise issues for seminars/workshops run by the Australian Industries Group, the Australian Environment Network and NEERG Seminars.

He is the acknowledged leader in the measurement, assessment and design of helipad/heliport operations, military aircraft noise assessments, and is a major contributor to various Australian Standards. Mr. Cooper is the recipient of an Engineering Excellence Award in the Environment Category from the Institution of Engineers in 1997 for the TRW No. 2 Forge Project.

Projects in which he has been involved include the ICI Botany Complex (Noise and Vibration), APM Matraville Paper Mill (Site noise control), Manildra Flour Mill, Sydney CBD, Granville & Gosford Heliports, ANEF Validation and NPD testing for F111, FA-18, JSF aircraft, Iroquois, Squirrel, Sea King, Sea Hawk, Blackhawk, Super Seasprite, Tiger and MRH90 helicopters, acoustical assessments for Licensed Premises, Studios, Auditorias etc.

PAPERS & PUBLICATIONS

“Design for Noise Reduction – Dual Occupancies” 5th Annual Conference, Local Government Planners Association of NSW, November 1979

“Is Exposure to High Levels of ‘Rock’ Music a Major Health Hazard to Patrons and Staff” 10th International Congress on Acoustics – Sydney, July, 1980

“Hornsby Shire’s General Sound Insulation Code for Residential Flat Buildings” 10th International Congress on Acoustics – Sydney, July, 1980

“Archiving Reproducing Piano Rolls” 10th International Congress on Acoustics – Sydney, July, 1980

“Road Traffic Noise and Local Government Controls”, Graduate School of the Built Environment, University of NSW, February, 1981

“Noise Levels of Rock Music and Possible Effects on Young People’s Hearing” Scientific Meeting NSW Division, Australian Acoustical Society, April, 1981

“Noise Assessment of Licensed Premises” NSW Police Noise Familiarisation Course, Policy Academy Sydney, July, 1981



“Noise Effects on Staff in Entertainment Venues” Australian Live Theatre Council, May, 1983

“Noise Pollution” Shout – August 1987, Journal of the Registered Clubs Association of NSW

“The Roles and Needs of Expert Witnesses”, Development, Local Government and Environmental Seminar for Sly & Russell, Sydney, November, 1987

“Noise Limits for Helicopters”, “Helicopters Noise and the Community”, “Flight Techniques to Reduce Noise”, Helicopter Noise Seminar – NSW Branch of the Helicopter Association of Australia, April, 1988

“Intensity Measurements of the Ampico/Duo Arts Parts 1 & 2” The AMICA News Bulletin (USA), Vol 25 No. 4, July, 1988

“Community Perceptions, Case Studies and Control of Noise” – Australian Conservation Foundation – Sydney Branch, September, 1988

“Helicopter Noise Assessment”, Australian Acoustical Society Conference, Victor Harbour, South Australia, November, 1988

“Noise Considerations for the Establishment of Helipads/Heliports”, Rotortech ‘89, Sydney, October, 1989

“An Investigation of the Alternatives to Sabine’s Equation in the Determination of Absorption Coefficients using the Room Method”, Master of Science Thesis, University of Sydney, March, 1990

“Noise Control – Decibels per dollars. A Practical Approach”, The Stock Feed Manufacturers’ Association of Australia Conference, Canberra, March, 1990

“Community Response to Aircraft & Helicopter Noise – Proposed PhD Research”, Technical Meeting of the Australian Acoustical Society, NSW Division being a Review of Acoustics Research at Sydney University, May, 1991

“A Practical Method for the Assessment of Noise Controls for Aircraft Noise Intrusion”, Second Sydney Airport Coalition Public Meeting, Petersham Town Hall, Sydney, September, 1991

“Are Regulatory Noise Limits in Australia Exterminating the Helicopter Industry?”, Inter-Noise 91, Sydney, December, 1991

“Consideration of Alternative Acoustic Criteria for Assessment of Aircraft Noise in Wilderness & National Park Areas”, Progress Report of Noise Criteria Working Group, Blue Mountains Fly Neighbourly Advice, July, 1994

“Are Regulatory Noise Limits in Australia Exterminating the Helicopter Industry?”, Second Pacific International Conference on Aerospace Science & Technology, Melbourne, March, 1995

“Sound Proofing of a Forge”, Acoustics Australia, Vol 26 (1998), No 2

“AS2021 – What Does it Mean Now?”, Australian Mayoral Aviation Council Conference 1998



“Upgraded Plants and Retrospective Application of Modified Noise Criteria – Case Studies”, Australian Industry Group, January, 1999

“Revision of Australian Standard AS2021”, Airport Operators Conference, Melbourne, May, 1999

“Living with Your Neighbour's Noise”, Neighbourhood Disputes Seminar, LAAMS, Sydney, May, 2000

“What Triggers the New EPA Noise Policies – Tips & Traps”, Australian Environment Business Network Noise Pollution Seminar, June, 2001

“Practical Environment Management – Noise Issues”, Australian Environment Business Network Environment Management Practitioners Workshop, August 2002, November 2002, February 2003, May 2003, August 2003

“Environmental Issues Management – Noise”, Australian Industries Group Practical Methods and Technologies Seminar, October, 2002

“The INM Program is a much better program than HNM for helicopter modelling, but ...”, SAE A-21 Helicopter Noise Working Group Meeting, Las Vegas, March, 2004

“Noise Certification, is the Helicopter Industry selling itself short?”, HeliExpo 2004, Las Vegas, March, 2004

“Derivation & Use of NPD Curves for the INM”, Helicopter Noise Workshop, American Helicopter Society Conference, June, 2005

“Problems with the INM: Part 1 – Lateral Attenuation”, Noise of Progress Acoustics Conference 2006, New Zealand

“Problems with the INM: Part 2 – Atmospheric Attenuation”, Noise of Progress Acoustics Conference 2006, New Zealand

“Problems with the INM: Part 3 – Derivation of NPD Curves”, Noise of Progress Acoustics Conference 2006, New Zealand

“Problems with the INM: Part 4 – INM Inaccuracies”, Noise of Progress Acoustics Conference, 2006, New Zealand

“Reviewing the Role of the Expert in Land & Environment Court Cases”, NEERG Seminars, Sydney, August 2007

“JSF Aircraft Noise Issues for Australia”, F35 ESOH Working Group Meeting, Washington, September 2007

“Acoustic Experts - Noise Under Pressure?” Getting it Together in the Land & Environment Court: Compiling Joint Expert Reports, NEERG Seminars, Sydney, October 2007

“What can go wrong acoustically”, NEERG Seminar Dealing with DAs in 2009, Sydney, May 2009

“Community Response to Impulse Noise & Vibration”, Training Area Noise & Vibration Workshop, Department of Defence, Canberra, June 2009



“Acoustics & Noise”. Regulations & Implementation of DAs & SEPP65, NEERG Seminars, Sydney, March 2010

“INM Getting it to work Acoustically”, 20th International Congress on Acoustics, Sydney, August 2010.

“Military Aircraft Noise in the Community”, 20th International Congress on Acoustics, Sydney, August 2010.

“Sound Therapy Restores hearing – Fact or fiction? A personal experience of an acoustician”, 20th International Congress on Acoustics, Sydney, August 2010.

“Alternative Aircraft Metrics – Useful or like moving the deck chairs on the Titanic”, 20th International Congress on Acoustics, Sydney, August 2010.

“Issues arising from Incorrect Acoustic Conditions”, Getting it Just Right, NEERG Seminars, Sydney, September 2010

“Avoiding/repairing acoustic disasters in DAs”, Managing the DA Process from Go to Whoa, NEERG Seminars, Sydney, March 2011

“Aircraft Noise Measurements can be fun”, Australian Acoustical Society NSW Division, August 2011

“INM Problems, Military Operations and AS2021 and the JSF”, Australian Acoustical Society Victorian Division, September 2011

“Wind Farm Noise – An ethical dilemma for the Australian Acoustical Society?”, Acoustics Australia, Vol 40, No. 2, August 2012

“Are Wind Farms too Close to Communities?”, Australian Environment Foundation 2012 Annual Conference, October 2012

“Noise”, OLGR Compliance Branch Symposium, Sydney June 2013

“The Measurement of Infrasound and Low Frequency Noise for Wind Farms (Amended)”, 5th International Conference on Wind Turbine Noise, Denver 2013

“Hiding Wind Farm Noise in Ambient Measurements – Noise Floor, Wind Direction and Frequency Limitations”, 5th International Conference on Wind Turbine Noise, Denver 2013

SPONSORED TECHNICAL REPORTS (Brief Selection only):

Noise Radiation and Reduction on a Fibreglass Minesweeper – HMAS Rushcutter for Carrington Slipways P/L, JMCA Report 16.1650.R1

Occupational Vibration Exposure Levels on Euclid Dump Trucks and Coal Haulers at Utah Blackall Mine Queensland, JMCA Report 16.1648.R1-R3

Thermal Expansion and Misalignment on a Gas Turbine Alternator at Shell Clyde Refinery, JMCA Report 17.1716.R1-R3

Acoustic Appraisal and Control – ABC Perth TV & Radio Studio Complex, JMCA Report 17.1607.R3



Southern Arterial Route – Pymont to St. Peters for NSW Department of Main Roads, JMCA Report 16.1647.R1

Building Structure Vibration Department of Social Security, East Point Centre Computer Installation, JMCA Report 15.1542.R2

Blower House Acoustic Controls (Building and Silencer Designs) St. Marys, Quakers Hill, Glenfield, Macquarie Fields and Hornsby Heights Pollution Control Plants, JMCA Reports 10.1014 & 14.1416

The Application and Use of ANEF Contours for Aircraft Noise Control, SCA Report 25.3127.R3 for Submission to the Senate Inquiry into Aircraft Noise at KSA

An Acoustical & Vibration Investigation into Freight Rail Operations in the Hunter Valley, SCA Report 26.3387.R1-R41

TRW No 2 Forge Noise Minimisation Study, SCA Reports 26.3314.R12-R19

Acoustical Assessment, Proposed Extension of Dock Hours, Westfield Shoppingtown, Parramatta SCA Reports 28.3766.R8-R12

Noise Impact Assessment, Proposed Service Centre, Cnr Cowpasture Road & Hoxton Park Road, Hoxton Park, SCA Report 30.3934.R1

Acoustical Assessment, Proposed Extension of Operating Hours, Westfield Shoppingtown Hornsby, SCA Report 30.3928.R3

Acoustical Assessment Aircraft Operations, RAAF Williamtown and Salt Ash Weapons Range, SCA Report 32.4190.R6

Acoustical Assessment Pollution Reduction Program No. 7, Shoalhaven Starches Plant, Bombaderry, SCA Report 32.3849.R17

HMAS ALBATROSS 2013 ANEF, Derivation of NPD Curves, SCA Report 33.4185.R11

Acoustical Assessment, Proposed Residential Development, Glenning Valley, Wyong, SCA Report 33.4303.R1

Acoustic Assessment, Proposed Groundwater Cleanup Project, Botany Industrial Park, TAG Report 34.4372.R3

Acoustic Design Report, Stage 1 Development Application for Bathurst Hospital, TAG Report 35.4477.R2

Acoustic Assessment, SCT Freight Complex - Stage 1, Brolgan Road, Parkes, TAG Report 36.4523.R1

Noise Disturbance in Residential Apartments as a Result of Building Expansion/Contraction, Bluewater Point Apartment Complex, Minyma, Queensland, TAG Report 36.4578.R1

Acoustic Design Report, Westfield Centrepont Refurbishment, TAG Report 37.4472.R5

Construction Noise and Vibration Impact Assessment, Westfield Sydney City Refurbishment, TAG Report 37.4472.R6



Proposed Shao Lin Temple Development Site Near HMAS Albatross: Noise Assessment Report, TAG Report 37.4586.R1

TIGER ARH NPD Curves, TAG Report 37.4510.R15

Acoustical Assessment, Point Piper Marina, TAG Report 38.4705.R9

Rail Traffic Noise Impacts, Residential Sub-division, Isedale Road, Braemar, TAG Report 40.4865.R1

Acoustic Compliance Testing, New Buildings, RMAF BASE Butterworth, TAG Report 40.4386.R3

Acoustic Compliance Assessment, RAAF Base Williamtown – Off Base NMT Calibration, TAG Report 40.4421.R18

Acoustic Compliance Assessment, Royal Crown Hotel, Dudley, TAG Report 41.4902.R12

Occupational Noise Assessment, Qantas Freight Terminal, Sydney Airport, Mascot, TAG Report 41.4934.R1

Southern Highlands Regional Shooting Complex, Wattle Ridge Road, Hill Top, TAG Reports 40.4883.R1-8

Submission to the Senate Environment and Communications/Legislation Committee in the matter of Renewable Energy (Electricity) Amendment (Excessive Noise from Wind Farms) Bill 2012, 42.5006.R2

Supplementary Submission in the matter of Renewable Energy (Electricity) Amendment (Excessive Noise from Wind Farms) Bill 2012, 42.5006.R4

