

# THE UNIVERSITY OF NEW SOUTH WALES



## CONFERRING OF DEGREES AND AWARDS SCIENCE AND ENGINEERING

**Wednesday 13 December 1995—4.00 p.m.**

AUSTRALIAN DEFENCE  
FORCE ACADEMY



# THE BAND OF THE CORPS OF OFFICER CADETS

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BANDMASTER: Warrant Officer Class 2 G. S. Grey, Dip Mus Mgt

BAND CADET CAPTAIN: Midshipman P. Hay

DRUM MAJOR: Midshipman N.P. Barrie

The Band of the Corps of Officer Cadets was established to provide music for ceremonial parades, functions and other activities held at the Australian Defence Force Academy. The COOC Band consists of officer cadets from the three services and is run on a volunteer basis.

The origin of the COOC Band dates back to early 1986. Starting as a Drum Corps, it consisted of four side drummers and a bass drummer. In June of that year a full time Bandmaster provided by the Australian Army Band Corps was appointed. With the recruitment of both brass and woodwind players, a Military Band was soon raised. Since its formation the Band has included bagpipes in its ranks, making it unique among military bands in Australia.

The Band rehearses three afternoons a week in the cadets' free time, and maintains a strength of approximately 55 members, all of whom enjoy the opportunity of being able to continue their interest in music.

# AUSTRALIAN NATIONAL ANTHEM

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Australians all let us rejoice  
For we are young and free;  
We've golden soil and wealth for toil,  
Our home is girt by sea;  
Our land abounds in nature's gifts  
Of beauty rich and rare;  
In history's page, let every stage  
Advance Australia Fair.

In joyful strains then let us sing  
Advance Australia Fair.

# ORDER OF PROCEEDINGS

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The Academic Procession proceeds to the dais, the Assembly standing

**National Anthem:** Advance Australia Fair

The Chancellor, the Hon. Sir Anthony Mason,  
AC, KBE, BA LLB *Syd.*, Hon. LLD *A.N.U., Syd. and Melb.*, Hon. DCL *Oxon.*,  
extends a welcome to those present

Mrs S-A Phillips, BA *Monash*,  
Deputy College Secretary (Academic)

Professor C. S. Newton, Cand. Scient. *Copenhagen*, PhD *A.N.U.*,  
Presiding Member of University College Academic Board,  
presents candidates to the Chancellor

Professor John Niland, AO, MCom *UNSW*, PhD *Ill.*, FASSA,  
Vice-Chancellor and Principal

Lieutenant-General John Sanderson, AC,  
Chief of the General Staff,  
delivers the Occasional Address

Professor H. P. Heseltine, AO, BA *W.Aust.*, MA PhD *Louisiana State*,  
Rector of the University College

**The Mace Bearer:** Emeritus Professor E. C. Daniels,  
MArch *UNSW*, ASTC(Hon.), LFRAIA, Hon MIES

The Academic Procession retires, the Assembly standing



# CONFERRING OF DEGREES

## UNIVERSITY COLLEGE

PRESENTED BY PROFESSOR C. S. NEWTON

PRESIDING MEMBER OF UNIVERSITY COLLEGE ACADEMIC BOARD

### BACHELOR OF SCIENCE BSc

Daniel John ANDERSEN

Jacob Anthony ANTUNOVICH

Andrew Ross McGregor BARNES

Richard Nathan BEAN

Andrew William BLACK

Anthony John BURKE

Alida Noral BYATT

Sally Clare COATES

James Leonard COLLISSON

Leigh Scott CRAWFORD

Dru Geoffrey DAVIDSON

David Bruce DI IORIO

Katherine Frances DITCHFIELD

Scott Anthony DIXON

Jason Earle DUGGAN

John Alexander Daniel EVA

Damion Peter FAUSER

Gregory Stephen FERGUSON

Susana FERNANDEZ

Mathew Anthony FROST

Alexander Richard GIBBS

Tyron Israel GIULIANI

Darren James GOLDIE

Glenn James GOODWIN

Bruce Jon HANKINSON

James Raymond HARRAP

Phillipa HAY

Jared Spencer Dean HIGGERSON

Philip Thomas James HIGGINS

Adam David HOGAN

Bradley Paul JOHNSON

Michael Kenneth JOHNSON

Jayson Todd LIVINGSTONE

David Bruce LOHSE

Matthew Wesley MACPHERSON

Luke Anthony MCMAHON

Steven George Thomas MOTT

Adam John MUCKALT

Aaron Walter NYE

Steven James O'HARA

Paul Michael O'NEILL

Scott Christopher PALMER

Jonathan Wesley PHEASANT

Joseph Mark POWER

Kim Louise RACKEMANN

Michael REES

Benjamin Ross RICHARDSON

Aaron Leigh ROSS

Anna Kristina SANDQUEST

Paul Charles SEDGMAN

Adam SHORTIS

Paul Simon SMITH

Andrew Craig Peter STEVENS

Louise Elizabeth STEVENS

Stephen Robert TAYLOR

Cameron Heath THORLEY

Shannon Lee TUCKWELL

Upan SUPACHAI

Tamara Peta VAN DE WATERBEEMD

Kritda VAVNILANON

Jeffrey Stuart VELLA

Luke Carlyle WARNER

Chris Robert WHITE

Benjamin James WHITHAM

Samuel John WRIGHT

Aaron Christopher YOUNG

Michael Llewellyn YOUNG

## **Honours Class 2 Division 1**

### **CHEMISTRY**

Tina Michelle BALDWIN  
Marcus Robert David BROMET  
Glenn Peter BRUHN

### **GEOGRAPHY**

Allan Edward HOLLINK  
Timothy Anthony HOOGWERF  
Kim Jane WETTERN

### **MATHEMATICS**

Phillip John HOGLIN

## **Honours Class 1**

### **CHEMISTRY**

Alistair James DICKIE  
Matthew James HETHERINGTON

### **PHYSICS**

Benjamin John LAWLER  
Adrian Bernard MASO  
Russell James MILLS

## **Honours Class 1 and University Medal**

### **PHYSICS**

Michael MASTUS

## **BACHELOR OF TECHNOLOGY BTech**

### **AERONAUTICAL ENGINEERING**

Michael Stuart BANNERMAN  
James Arthur EWART  
James Andrew KIRA  
Matthew David LEACH  
Benjamin Samuel LUTHER  
Adrian Edward NOONAN  
Paul Dunstan RYDER  
Tony Allen SOUTHWOOD  
Andrew Gordon WHITWORTH

## **BACHELOR OF ENGINEERING BE**

### **AERONAUTICAL ENGINEERING**

Collette BAM  
Mark Andrew BETTS  
Simon Robert GREIG  
Brendan John ROBERTS  
Claire Louise STEVENS

### **Honours Class 2 Division 2**

Leanne Patricia BOURKE  
Grant James FIFIELD  
Scott James MCPHERSON  
Benjamin James NUNAN  
Simon Daniel VAN DER WIJNGAART

### **Honours Class 2 Division 1**

Christopher Adam ELLISON  
Adrian Paul MACKENZIE  
Dennis Ian NOTHDURFT  
Malcolm Mojica SCHULSTAD

### **CIVIL ENGINEERING**

Steven Mark GOODALL  
Supot KRAISAKDAWAT

### **Honours Class 2 Division 2**

Hany Anthony HANNA  
Howard Robert PETTS  
Michael Thomas John SNARE  
Matthew Grant THORPE

### **Honours Class 2 Division 1**

Stephen John FORREST  
Paul Anthony HOBBS  
Philip James MILES  
Simone Michelle RENNIE  
Steven Adrian VANDERDONK

### **ELECTRICAL ENGINEERING**

Wendy BLYTH  
Raymond Ashley FORRYAN  
Nathan Jon HABERMEHL

Bradley Myles HARTWIG  
Harry Sydney LONGWORTH  
Alison Jane MACCARTHY  
Grant Colin MCLENNAN  
Ian Douglas NAPTHALI  
Grant Edwin NEWMAN  
Mardi Jane PATERSON  
Naomi Peta PHILLIPS  
Vince POLITO  
Darren John ROSS  
Jonathon Stuart SCIORTINO

### **Honours Class 2 Division 2**

Matthew James COLBERT  
Troy Bruce DENLEY  
David Charles HAFNER  
Andrew Duncan MCRAE  
John Edward SHARP

### **Honours Class 2 Division 1**

Tomas John COUCH  
Charles Andrew HERDY  
Denis John JORGENSEN, BSc

### **Honours Class 1**

Andrew Michael PEDRAZZINI  
Dean Pierre REYNIERS

### **MECHANICAL ENGINEERING**

Dylan Warren FINDLATER  
Heath Gordon PRATT  
Belinda-Jane SMITH  
Tim James WILSON

### **Honours Class 2 Division 2**

Graeme Peter TOMS

### **Honours Class 2 Division 1**

Scott Robert BRETHERTON  
Deborah Lee HOBBS

## **GRADUATE DIPLOMA GradDip**

### **ELECTRICAL ENGINEERING**

John Charles Thomas LEE, BE *N.S.W.I.T.*, GDipMgt *C.Q.U.*

### **INFORMATION SCIENCE**

Shane Thomas WALL, BA *Canberra*

## **MASTER OF ENGINEERING SCIENCE MEngSc**

### **CIVIL ENGINEERING**

Derek Russell ANDERSON, BE  
Gary Frank BARKER, BE *Swinburne*  
Geoffrey Peter BURCHELL, BE  
David Philip COWPER, BE *Syd.*, GDipComp *Canberra C.A.E.*  
Tarek Mustafa EL-ANSARY, BE *W'gong.*  
Anton Reginald KANDIAH, BE *Southbank Poly.*  
Sukhjinder Singh SANDHU, BSc *Guru Nanak Eng.Coll.*  
John Francis Henry SMELTINK. BE  
Hamid MIRFENDERESK, BSc *Tehran Univ.*

### **ELECTRICAL ENGINEERING**

John Andrew BATEMAN, BE  
Zoran MILUTINOVIC, Dipl *Nis.*  
Peter Damien O'DONOGHUE, BE  
Bradley James SCOLAR, BE *Syd.*  
Harry TAGARIS, BE *Melb.*  
Abedin VAHEDIAN MAZLOUM,  
BE *Mashad*

## **MASTER OF INFORMATION SCIENCE MInfSc**

Robert Allan GRANT, BSc *A.N.U.*,  
GDipCompSci *Canberra C.A.E.*  
Jaspal KHAIRA, BSc *Lough*  
Wei LEI, BSc *Jiangyang Tch.Inst.*, GDipMgt *China B'cast & TV Univ.*, GDipSc *A.N.U.*  
Gregory John MCDUGALL, BA(Mil) *UNSW*, GDipComp *Chis.I.T.*  
Roger Philip NEWBURY, BA *UNSW*, GDipBus *Monash*  
Neil OWENS, BBus *Q.I.T.*  
John Michael STRODE SMITH, BA GDipLib *UNSW*, GDipAppComp *C.Q.U.*  
Archana VERMA, BSc *Delhi*  
Jin Cheng WANG, BSc *Beijing Univ.*, PhD *A.N.U.*

## MASTER OF TECHNOLOGY MANAGEMENT MTechMgt

Patrick Alexander BYRNE, BA

## MASTER OF ENGINEERING

### CIVIL ENGINEERING

Christopher ZOPPOU, BE *F.I.T.*, MEngSc PhD *Melb.*

### ELECTRICAL ENGINEERING

Yaqiang WANG, BS ME *Beijing Posts & Tel.*

## MASTER OF SCIENCE MSc

### PHYSICS

Paulus Justiananda Wisatadjaja SIWABESSY, BSc *Pattimura*

## DOCTOR OF PHILOSOPHY PhD

### AERONAUTICAL AND MECHANICAL ENGINEERING

Samuel George MALLINSON, BSc *A.N.U.*

**Thesis:** Shock Wave/Boundary Layer Interaction at a Compression Corner in Hypervelocity Flows

### CHEMISTRY

Nigel Wesley MORIARTY, BEd *Avondale Coll.*, BSc *N'cle (N.S.W.)*

**Thesis:** A Computational Study of Single Ligand Complexes of First Row Transition Metals

### COMPUTER SCIENCE

Mashallah ABBASI-DEZFOULI, BSc *Jundi Shapur*, ME *Utah*

**Thesis:** Patch-Base Matching Method for Stereo-Images

Salin BOONBRAHM, BSc *Pr. Songkla Univ.*, MS *Nat. Inst. Devt. Admin.*

**Thesis:** Factors Determining the Design and Decision Support Systems for the Universities of Thailand

Ric JENTZSCH, BSc *Weber*, MSc *Colorado*

**Thesis:** A Formalised Business Forms Driven Object Oriented User Approach

Christopher John Stanley VANCE, BSc *A.N.U.*

**Thesis:** Aspects of Distributed Operating System Design and Distributed Execution

## **ELECTRICAL ENGINEERING**

Yunhan DONG, MEngSc *Sichuan Union University*

**Thesis:** A Long Wavelength Radar Backscatter Model for Forests

Ganesh KOTHAPALLI, BE *B'lore*, MSc *Alta*

**Thesis:** Internal Positive Feedback Operational Transconductance Amplifiers

Mark Richard PICKERING, BE *C.I.A.E.*, ME

**Thesis:** A VBR Rate Control Algorithm for Video Coders Incorporating Perceptually Adaptive Quantisation and Traffic Shaping

Weijian WAN, BE *Beijing Poly. Univ.*

**Thesis:** A Multiple Self-Organising Map Framework for Pattern Classification and Scene Analysis, with Application to Remote Sensing Image Classification

## **GEOGRAPHY**

Russell Neil DRYSDALE, BA *N.E.*

**Thesis:** Tufa Deposits at Louie Creek, Northwestern Queensland: modern processes and palaeoenvironments in a tropical karst

# ACADEMIC PRIZES AWARDED 1995

## BOARDS OF STUDIES PRIZES

### HUMANITIES AND SOCIAL SCIENCES

First Year:	Luke Trebor Jones
Second Year (shared):	Kian Ngiap Goh Chelsea McCubbery
Third Year (shared):	Fiona Catherine Duggan Belinda Elizabeth Scott

### SCIENCE

First Year (shared):	Simon Alan Squires Christopher Mark Unwin
Second Year (shared):	Jan Michel Belza Michael Donald Champion Timothy David St. Quintin
Third Year:	Paul Michael O'Neill

### ENGINEERING

First Year:	James Edward Hyde
Second Year:	Darren McLeod Clare
Third Year:	Neil Jeffery Glasson

### DONATED PRIZES

The E R Bryan Prize (English 1):	John George Papalitsas
The Alan Carter Prize (Oceanography 1):	Christopher Mark Unwin
The Alan & Unwin History Prize:	David Allingham
The Sir Leslie Martin Prize (First Year Physics):	James Edward Hyde
The Rockwell Australia Limited Award (Electrical Engineering 1):	Anthony Mark Tancredi
The Royal Australian Chemical Institute Prize:	Nicholas Peter Rose
The Australian Institute of Physics Prize (Second Year Physics):	Timothy David St. Quintin
The Second Year Computer Science Prize, donated by Ansett:	Jan Michel Belza
The Second Year Information Systems Prize, donated by the Australian Computer Society (shared):	Glenn William Canfield David Andrew Rendell

The Barry Andrews Shakespeare Prize (shared):	Chelsea McCubbery Benjamin Alexander Pronk
The Creative Writing Prizes, donated by Reprographic Centre:	
First Prize:	Justin Rye Baguley
Second Prize:	Chelsea McCubbery
Third Prize (shared):	Benjamin Alexander Pronk Elizabeth Anne Walker
The Professor Grahame Johnston Prize (Australian Literature):	Fiona Catherine Duggan
The Australian Institute of Management Prize (shared):	Karen Louise Piscopo Chelsea McCubbery
The Military Historical Society of Australia Prize:	Tavis John Campbell
The Most Outstanding Computer Project Prize, donated by ITRACE, (shared):	Timothy George Koopmans Mackenzie Anthony Muir
The Highly Commended Computing Project Prize, donated by ITRACE, (shared):	Rachel Emma Byrne David James Hodder
The Commended Computing Project Prize donated by ITRACE, (shared):	Darren James Goldie Glenn James Ryan
The AISC Steel Design Prize:	Toby John Garafillisi
The Institution of Engineers Australia Electrical College Prize (Third Year Electrical Engineering) (shared):	Michael John Papaphotis Christopher James Rule
The R J A Barnard Memorial Prize (Three Years of Mathematics):	Luke Carlyle Warner
The Science Prize, donated by British Aerospace Australia:	Paul Michael O'Neill
The L W Cairns Memorial Prize (Final Year Bachelor of Technology):	Matthew David Leach
The Dorothy Green Prize (Australian Literature):	Glenn Edward McPhee
The L C F Turner Prize (History):	Gavin Michael Keating
The Institution of Radio and Electronic Engineers Australia (Canberra Division) Prize (shared):	Charles Andrew Herdy Andrew Michael Pedrazzini
The Institution of Electrical Engineers (UK) Prize:	Dean Pierre Reyniers
The Wing Commander John Yeaman Prize (Transportation Engineering):	Paul Anthony Hobbs
The Air Vice Marshal Noble Prize (Fourth Year Aeronautical Engineering):	Dennis Ian Nothdurft
The Siemens-Plessey Award in Electrical Engineering (Communications and Electronics) (shared):	Troy Bruce Denley Andrew Michael Pedrazzini
The A H Corbett Prize (Top Graduate in Engineering):	Andrew Michael Pedrazzini

# ACADEMIC DEPARTMENT PRIZES

## AEROSPACE AND MECHANICAL ENGINEERING

Second Year Bachelor of Technology  
(Aeronautical Engineering):

Darren McLeod Clare

Second Year Mechanical Engineering:

Marilyn Anne Batterson

Fourth Year Mechanical Engineering:

Deborah Lee Hobbs

## CHEMISTRY

First Year:

Nathan John Paul Bracken

Second Year:

Michael Donald Campion

Third Year:

Anna Kristina Sandquest

Fourth Year (shared):

Alistair James Dickie

Matthew James Hetherington

## CIVIL ENGINEERING

First Year:

James Colin Dugdell

Second Year:

Gideon Karl Scrimgeour

Third Year:

Neil Jeffery Glasson

Fourth Year:

Paul Anthony Hobbs

Top Graduate in Civil Engineering:

Philip James Miles

## COMPUTER SCIENCE

Third Year Information Systems (shared):

Timothy George Koopmans

Mackenzie Anthony Muir

Third Year Computer Science:

Darren James Goldie

## ECONOMICS AND MANAGEMENT

First Year Economics:

Luke Trebor Jones

Third Year Economics:

Louise Michele Hooper

## GEOGRAPHY AND OCEANOGRAPHY

Third Year Geography:

Nicolas Jon Davy

Third Year Oceanography:

Adam Shortis

## HISTORY

Third Year (C.E.W. Bean Prize):

Olivia Isobel Baden-Clay

## **MATHEMATICS**

First Year:  
Second Year:

Ian Malcolm McPherson  
Timothy David St. Quintin

## **PHYSICS**

First Year:  
Third Year:

Derek Edgar Thresher  
Paul Michael O'Neill

## **POLITICS**

First Year:  
Second Year:  
Third Year:

Steven Nicholas Long  
Stuart James Watters  
Michael Peter Hall

## **GRADUATE PRIZES**

The Master of Information Science  
Computer Associates Prize:  
The Oxford University Press Master of Arts  
(English) Prize:  
The Defence Studies (Petro Fedorczenko) Prize:  
The Ria de Groot Prize:  
The Royal Aeronautical Society  
Canberra Graduate Prize:

John Michael Strode Smith  
  
Gabrielle Helen Grime  
Ian Gordon Robert Wing  
Catherine Cecilia Pratt  
  
Samuel George Mallinson



## THE UNIVERSITY MACE

The Mace is a symbol of the dignity and authority of the University. Originally it was a weapon capable of breaking through the strongest armour, and, according to the Encyclopaedia Britannica, was carried in battle by mediaeval bishops so as to conform to the canonical rule that forbade priests to shed blood. Later, maces began to have a ceremonial function, though they were still intended to provide protection, usually to the king's person, and were carried by sergeants-at-arms.

The University's Mace is of simple form, constructed of stainless steel and embellished with silver. The head, of sixteen satin-finished stainless steel ribs, is surmounted with a silver waratah, the floral emblem of the State of New South Wales, and on its horizontal bar are mounted four silver shields, two engraved with the arms of the University and two with the arms of the State. The inner core has a scarlet velvet lining.

The shaft is of eumung, a New South Wales timber, dark in colour, and terminates in a stainless steel tail.

The Mace was presented to the University on 6 December 1962 by the Broken Hill Proprietary Company Ltd.

## **THE HISTORY AND SIGNIFICANCE OF ACADEMIC DRESS**

The history of academic dress reaches far back into the early days of the oldest universities. A statute of 1321 required that all “Doctors, Licentiates, and Bachelors” of the University of Coimbra wear gowns. It is still a vexed question whether academic dress finds its sources chiefly in ecclesiastical or in civilian dress. Gowns may have been counted necessary for warmth in the unheated buildings frequented by mediaeval scholars, and the hood currently in use is the remnant of a garment, also a device against the cold, which could be pulled up over the head and kept in position with the tail wound around the throat. The type of academic headgear most commonly worn by graduates today is the mortar-board cap, also called the trencher cap, which dates back to the seventeenth century. It is also the custom of many universities for Doctors to be allowed to wear a distinctive type of headgear, either a round velvet bonnet or a black velvet mortar-board, with the full dress gown.

As universities developed throughout the Commonwealth countries they mostly prescribed academic costume based on that established for the members of Oxford and Cambridge Universities, where the Chancellor and often other senior members wear a distinctive official gown and hat. Graduates are identified by the wearing of a gown and hood specially prescribed for each degree and undergraduate students wear a distinctive gown and hat.

Notwithstanding the importance of the Oxford and Cambridge tradition of the gown and cap, it is the wearing of a hood by the graduate to indicate his or her degree which is the principal feature of the academic costume code.

The tradition of wearing academic dress continues in universities around the world and it is customary that on ceremonial occasions such as the Conferring of Degrees Ceremony today that the distinctive official costume of each person concerned be worn.

## **UNIVERSITY MEDAL**

The University Medal is a recognition by the University of outstanding academic achievement at the undergraduate level.

The Bronze Medal carries on its face an engraving of the Arms of the University and on the reverse, within a wreath of laurels, is engraved the name of the recipient.