NEWCASTLE SPECIAL RESEARCH CENTRE - $2,100,000 INITIAL GRANT

This year sees the new Centre for Industrial Control Science (CICS) established in the Department of Electrical and Computer Engineering.

The Department gained "centre of excellence" status when the Federal Government announced large on-going research grants to seven Australian universities under the aegis of the Universities Special Research Centres Program.

The Commonwealth has assured funding of $670,000 a year each year until 1990, to carry out research in general areas of control systems design.

In addition, the research team will be seeking support from other sources including industry and expects to operate on an annual research budget of $1 million per year for the next six years.

The general area of the proposed research work is control systems design. In broad terms, control is concerned with the manipulation of the inputs to a system so that it performs in some desired fashion. Simple examples of control systems include automatic braking systems in cars, flight control systems in aircraft, and control systems in industry which regulate the operation of various processes including, for example, blast furnaces, rolling mills, chemical plants, etc.

The Centre for Industrial Control Science is led by Professor Graham Goodwin and Professor Robin Evans. Professor Goodwin's main interests are in the areas of industrial control, adaptive control and estimation theory, while Professor Evans' interests are on industrial control, radar systems, fault tolerant computing and computer control applications. CICS has also appointed an Administrative Assistant, Great Davis, who has been seconded from the Department of Electrical and Computer Engineering to assist in the administration of the Research Centre.

Other members of CICS have research interests in electrical machine control, real-time software, numerical analysis, power systems control and security assessment, theory of nonlinear interconnected systems, dynamic routing of telephone signals, and VLSI design.

Professor Goodwin explained that control was crucial in extending the performance of microelectronics, "there was also a flow-through to the educational programmes conducted at the University. For example, the availability of high technology laboratories in the area of control systems and microelectronics will allow new courses to be developed, both for undergraduate students and as continuing education programmes for practising engineers."

The research team is currently involved in some 20 major design projects many of which involve collaboration with industry. One project, for example, is concerned with the design of an inclined orbit satellite tracking system. Professor Goodwin said both the hardware and software for this system would be designed and built at the University. The project is being carried out in collaboration with CSIRO and OTC and is an evolution of the group's previous activities in the design and construction of the servo systems for the new Australian Radio Telescope project, he said.

A second project concerns the design and construction of a vehicle for automatic crack detection in underground pipelines. The project uses advanced computer technology to detect small cracks in pipes and the information back to a central location.

"In Professor Goodwin's words: 'This work is being carried out in conjunction with a local Hunter Valley company, for the construction of an Australian gas pipeline project, and has world-wide significance for the maintenance of industrial control systems'. CICS's involvement in the project incorporates a range of activities including the design of the motor drive for the vehicle, the computer systems design for data analysis, and the communication system linking the remote vehicle to the central location."

A third project concerns the development of a computer based power load scheduler. This system facilitates scheduling of loads, including water heaters, in order to optimise power utilisation and has evolved from an undergraduate project which won a control system prize from the Institution of Measurement and Control in 1987.

Professor Goodwin said that in addition to industrial-related projects, CICS was engaged in collaborative research with various government bodies, including the Department of Defence. Some examples were a manoeuvre autopilot which allowed aircraft to be flown through pre-specified manoeuvres, a technique for predicting the rolling motion of ships in heavy seas to facilitate the landing of helicopters, and techniques for fault detection and diagnosis for gas turbine aircraft engines.

A final project of interest is the development of an industrial adaptive controller. Professor Goodwin explained that an adaptive controller monitored its own performance and adjusted itself so as to ensure that the control system operated at optimal efficiency. Such systems used ideas from artificial intelligence and self-learning systems.

"It is important to point out that such high technology applications could not be possible without a strong parallel commitment to basic research in the area of control and systems science. 'All of the projects listed involve the use of new ideas and design paradigms which have been the subject of theoretical research work over the last six years. The commercial adaptive controller, for example, is based on some 20 man years of theoretical research work on the dynamics and performance of self-tuning control algorithms."

The basic research work carried out by members of the CICS has appeared in several hundred international publications produced by the group, as well as a number of books. (Indeed, one of these books was selected as the best textbook in the area of control engineering over the past three years by the International Federation of Automatic Control at its 1987 World Congress.)

At the end of the day, the members of CICS not only hoped to have contributed to basic scientific and theoretical research, but to its application in the development of new industrial control products. Professor Goodwin added.

Software for adaptive control is used for many applications including robot joint control, g-robots to rehearse surgeons, some of the members of the Control Centre team are: L-R (back row) Carlos de Silva, Jav Masell, Alan Cooke, Rick Deans, Chris Middleton and Ian Webster. Front (L-R): Andrew Mears, Brett Alness, Steve Weller, Ross Cockel, Peter Stephen and Professor Graham Goodwin.
PROFILE: MAUREEN STRAZZARI

Maureen Strazzari was appointed Hunter Region Ethnic Aged Services Co-ordinator last year. She is a wife and mother and has a BA degree in this University, with Honours Class I and the University Medal.

Maureen Strazzari mused that her career in migrant health and care was the result of a providential appointment as a secretary at the University.

Embarking on a degree was not an obvious path for a young mother who came from a working class Catholic background and whose widowed mother had struggled to raise a family of seven. She left school because she hated school. But she is a rare soul — a vital, intelligent person who has an all-in-one interest in people.

As an undergraduate she threw herself into subjects about people, mapping in sociology and the process of re-evaluating the learning process and her own personality.

At the time she spoke to The Gazetteur, Maureen was working with the Ethnic Aged Services Office in Beaumont Street, Hamilton, under the Hunter Region Ethnic Aged Care and Community Care (HACC) programme.

The people I deal with have a lot of problems, Maureen said, in the Hunter Region, we have a fast growing multicultural community because of thousands of displaced men and women moving into the region after the war. They receive the tough jobs. Many of them are now retired and isolated, suffering from depression and feeling sad. Their assistance to cope in their older years and the need for services which are available. Often these services do not cater for people from culturally different backgrounds.

Maureen became a Migrant Health Education Officer with the Department of Health while she was still writing her honours thesis. She confesses it was蛮 proud of her poor, working class background, this had led to a feeling of inadequacy when dealing with people in authority.

Consequently, she was determined to get a job which would test her abilities as both an individual and a fully-trained professional.

Nowadays, she has much more self-confidence and is coordinating HACC workers, health workers, the Ethnic Diabetes Support Groups, programmed for Ethnic Day Care Centres and ethnic caring groups and organising the extension of the HACC programme to many of small communities such as groups from China and eastern Europe.

Some people are getting sick of hearing about multi-culturalism, because they claim their communities are a melting pot, nobody but many service providers are often very upset by these non-English speaking backgrounds are not gaining access to them.

The communication problem is very real, mainly because professional workers are not often trained in helping to understand the difference between the migrants’ cultural and social background.

For example, people from a small village background have learnt to rely on their families or priests for assistance. This may be totally appropriate here, especially as they grow old, but it’s often very difficult for these people to communicate.

There must be help through our formal health and welfare services.

Reflecting about how important higher education was to her, she tells how she often had a dream that she would go to university and get very upset because she was sitting in an exam which she couldn’t do. After commencing the Open Foundation Course, she stopped having the dream.

Maureen then transferred to External Degree Studies (she was Professor C. Tisdell’s secretary) she became inspired by the University Library, finding the staff friendly and the academics helpful. As she became more confident about her work and working for that, for the first time, she was forming her own opinions.

‘Just loved studying at the Uni. It opened up a wonderful new world,’ Maureen Strazzari added.
WHAT HAPPENED TO?

Graduates are partners in specialist business ventures

In the four years since Ted Harkness left the University to embark upon a business career his companies have had some interesting achievements, especially in the areas of sunscreen design, acoustics and marina development.

And three University of Newcastle Architecture graduates are playing a big part in the companies' successes.

Dr Harkness was a member of staff in the Department of Architecture from 1967 until 1984. The three former students who have joined him in business are Mr Andrew Tweedie (BArch 1986), Mr Hisham Noori (BArch 1985), and Mr John Bailey (BArch 1986). Mr Richard Jacobson, a member of staff in the Computing Centre, is a Director.

Mrs Shirley Byron, formerly a secretary in the Department of Psychology is also employed as secretary.

Dr Harkness is being helped by the others to develop his architectural, acoustical, energy and solar specialisations. They form the core of the effort to develop the Black Marlin Marina at Nelson Bay, a $6 million port development project.

Dr Harkness said he could see in hindsight that his business and professional career really commenced in 1967 when he was appointed a lecturer at the University, then located at Tighes Hill.

He attributes his knowledge of building and science to the responsibilities that he was given in the University to teach and to publish papers.

The acoustics arm of the Harkness group of companies, Edward Harkness Pty Ltd, has completed a number of projects including the acoustics design for the Newcastle Family Law Courts and the Dubbo Law Courts.

In 1973 he enthusiastically went overseas on study leave so he could pursue his research in Europe. He visited a total of 38 concert halls and asked himself questions about the acoustics of the halls and the building materials.

After meeting some leading acoustics specialists he received a great deal of support and encouragement to publish papers.

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Some years ago Ted Harkness' interest in acoustics as they affect musicians led him designing some "boxes" which scatter the sound behind musicians while they are performing. The inventions helped the musicians in two important respects — they could hear themselves and they could hear the ensembles. The ABC and the Sydney Opera House are among the organisations which have availed themselves of Dr Harkness' boxes.

He was consulted by the Sydney Opera House Trust about an acoustics problem faced by the musicians in the orchestra pit of the Opera Theatre. His use of absorbers, baffles and flaps was a big success in returning to the full range of frequencies of the instruments to the musicians.

I also sectioned off the woodwinds from the brass, French horns and timpani and hung pieces of carpet to screen the string instruments. This greatly improved the sound of the overall ensemble.

Members of the company have joined forces on several noise assessment studies for local industries and hotels.

In 1986 a partnership was formed between the Harkness group and Architect Lan Yap Pty. Ltd, for the purpose of preparing a package proposal for the design, construction and operation of the Black Marlin Marina at Nelson Bay. The design was successful and some tenders and accepted by the State Government.

The work on the marina is nearing completion, with more than half of the 210 yacht berths now being used. A workshop and chandlery are taking shape and work will commence soon on the construction of a restaurant and shops.

Dr Harkness is Chairman of Directors of Black Marlin Marina Limited the developers and his group of companies holds 35 per cent equity in the project. He and his colleagues have also been commissioned to act as Architects for the re-development of the Sea Breeze Hotel which overlooks the new marina.

Asked if he thought the fishing village of Nelson Bay was being over-developed, he said Nelson Bay was under-developed and that was the tragedy. The peak of development would not be reached for some years.

His company is endeavouring to balance the nuances of commercial town planning and tourism in a town plan which the company is producing for the Nelson Bay Commercial and Tourism Corporation.

Furthermore, Dr Harkness and the three UN graduates who work with him delight in designing solar houses. He explains that in a period of 12 months it is possible to move from concept and models right through to Council approvals, tenders and construction and it was a particular pleasure to see a client's eyes light up at the sight of new concepts for residential design.

From the wide range of activities carried out by the companies which he heads, as well as his publications and overseas trips, Ted Harkness' career is certainly a Newcastle success story. It has been a success story for the University of Newcastle too.

CONVOCATION NEWS

At a 'graduation' in Singapore in July the University presented testimonials to former students resident in Singapore and Malaysia who qualified to graduate at the end of last year.

Forty-four graduates received their degrees at the ceremony — the first to be held by the University outside Australia — and an estimated 300 people were present.

The Past Warden of Convocation, The Rev. James Bromley, proposed that the University mount a graduation in Singapore when he spoke at a farewell dinner organised by the Singapore Students' Association in 1985.

A delegation from the University, headed by the Chancellor, Dr Elizabeth Elliott, conducted the graduation in almost the same manner as the traditional ceremony.

The former students who received their testamurs in Singapore, with the delegation from the University.

The ceremony was held in the Raffles Convention Centre. It was followed by a reception and that in turn was followed by a graduates' dinner.

The Occasional Address at the ceremony was given by the Australian High Commissioner to Singapore, Mr M.D. McGovern. The guest speaker at the dinner, Mr Chew Heng Ong, a graduate of this University, is a member of the Singapore Parliament.

A group of graduates headed by Mr Peter Tay, Director of Planning for the Singapore Technology Corporation, assisted in the planning of the function.

Other members of the committee are: Mr Tao Yechu, Mr Chow Kok Kee, Mr Ong Thiam Huat, Mr Anthony Chia, Mr Lim Chong Hin, Mr Leeosing Weng, Mr James Yng, Mr Alvin Lee, Mr Ng Peng Hong, Ms Jeanne Koh and Mr Barry Sim M.H.

To the pleasant surprise of the Newcastle visitors, the Singaporean and Malaysian graduates' 'new graduates' made a donation of $850 to the University to establish a prize for the overseas student who has the best academic record in a third year undergraduate course.

The former students who received their testamurs in Singapore, with the delegation from the University.
**CONVOCATION NEWS**

**NEW WARDEN ELECTED**

A senior journalist and a former President of University Cricketers Club has been elected Warden of Convocation.

A BA from the University, with majors in English and History, in 1973, Mr Vic Levi succeeds the retiring Warden, The Rev. James Bromley.

Mr Levi was educated at Fort Street High School and The University. He was journalist with the former afternoon newspaper, the Newcastle Sun, for 25 years, becoming Assistant Editor.

For six years he was Advertising Manager for the Newcastle Herald and District. Mr Levi is now Manager of the Post.

He was President of Warners Bay Rotary Club in 1986 and is currently Chairman of Rotary District 967's Public Relations Committee.

He served two terms on the Standing Committee of Convocation and was a delegate to the Australian University Graduate Conference.

He remarked that the would continue to work to bring the two worlds of 'town and gown' closer together in Newcastle. As a Rotarian he helped organise the University's highly successful first Summer Science School for high school students last year. Mr Levi took up the Warden's position after the annual general meeting on July 26.

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**NOMINATIONS FOR THE 1988 NEWTON-JOHN AWARD**

The Standing Committee of Convocation invites nominations for the 1988 Newton-John Award.

The Award recognises graduates of the University who have made a substantial contribution, by way of innovation or creativity in any field, towards enhancing the quality of life in the community.

The Award was instituted in 1974 with selection being based on the following criteria.

- Graduates of the University of Newcastle or graduates of the University of New South Wales or the University of New England who spent at least three years as students of the Newcastle University College are eligible to be nominated for the Award. The Award is given for innovation or creativity in any field with the emphasis on: (a) originality, (b) lasting value or aesthetic value or benefit to the community.

The Award was received by the following graduates:


From 1981 to 1983 he was a research associate in the Department of Chemistry and Mathematical Engineering at the State University of New York, Stony Brook, New York.

Since September 1983, Professor Cummings has worked in the faculty of Chemical Engineering Department at the University of Virginia in Charlottesville, Virginia where he received a Camille and Henry Dreyfus Foundation Award for Newly Appointed Faculty in the Chemical Sciences, one of 13 such awards given annually in the USA to outstanding new professors in biochemistry, chemistry and chemical engineering departments.

His current research interests include:

- perturbation theory and computer simulation; applications of statistical mechanics to fluidphase chemical equilibrium problems; computer-aided process design and optimization and applications of expert systems in chemical process engineering.

Professor Peter Cummings is recognised as a major contributor to the development of a solid conceptual foundation for the behaviour of dense fluids and for the application of these concepts to practical problems.

While he is noted for his independent creativity and is well launched on a truly promising research career, his constant concern and real interest in the personal and professional development of his students shows him to be a true 'teacher-scholar'. He is also a resourceful person on whom his colleagues may call for consultations on many scientific matters.

These are the qualities which prove his professional excellence in the areas of teaching and research in the field of Chemical Engineering.

The Standing Committee of Convocation is delighted to award the Inaugural Convocation Medal for Professional Excellence to Professor Peter Cummings.

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**BICENTENNIAL WARDEN'S COLUMN**

Whether as graduates (who have earned one) or as faculty members (whose professional business includes introducing students to the disciplines of research in order to acquire one), the graduates of the Galle have all urgent concerns for the worth in the open world of Newcastle degrees.

No such concern is immediately apparent in Federal Minister Dawkins' recent Green Paper on Higher Education. This document supports the idea that all institutions should develop an interest in the priority for future funding for research and more for teaching should be given to those institutions with an enrolment of at least 8,000 EFTSUs. The message to smaller institutions is blunt: to consider the options of affiliation, 'networking' or outright amalgamation with other bodies, and to take action before the 1989-91 Triennium if their research and teaching programmes (some of which have taken years to develop) are to remain intact.

The Green Paper speaks much of cost-effectiveness; however apart from a passing reference to 'instruction' (a term more appropriate to driving schools than to universities), nowhere in its 89 pages is there any consideration of the worth in the open world of Newcastle degrees.

In Newcastle the worry would have lived till now if she had saved her breath.

If she had saved her breath; she wouldn't have lived till now. But she feared her help wouldn't last all day and she mooed herself to death.

The greatest anxiety to some of us is the apparent failure of Mr Dawkins and his advisors to appreciate that today much of the most valuable activity in universities is interdisciplinary in nature — involving mutual support between the humanities and sciences, indeed all the faculties. Such cross-fertilisation is optimised in small universities; it is often crushed in larger ones, for it relies significantly on the kind of natural contact which large institutions inhibit.

New trends in the marketplace support the need for such cross-fertilisation. To cite one example: over the past 18 months there has been a striking increase in the demand from computer companies for graduates with majors in Philosophy, especially with a hefty strand of formal logic. And as our beloved Godfrey quite rightly never learned sailing, you can't have a good Philosophy Department without a good Classics Department to keep its foundations solid.

To the computer companies, and thus to the whole earthly work of engineering, science and business as well as the traditional professions, the humanities can more than ever have a pragmatic cash value. Those responsible for determining funding for higher education (including Dawkins at all) must be cognisant of this reality if a morally significant realisation of resources is to be avoided.

For another of office, at the end of July hand over the Warden's mantle to Vic Levi. As the graduates' chief watchdog he will find the immediate future offering many challenges and opportunities. He has broad shoulders and clear eyesight — with your active support, Convocation under his leadership will continue to develop into a world-wide body of scholars constantly enriched by a stout heart beating strongly in Shortland.

Felix qui potuit rerum cognoscere causas.

Fr. James Bromley.

PAST WARDEN OF CONVOCATION.

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**CONVOCATION NEWS**

**WARDEN'S COLUMN**

**What price a Newcastle degree?**

The thirteenth recipient of the Newton-John Award, Anne von Bertouch, and the Vice-Chancellor, Professor Keith Morgan, defend the Julie Santos gold medal presented by the Warden of Convocation, Father James Bromley. (The pale pink bowl was encrusted by a blue wave, a reminder of Anne's recent voyage with the First Fleet.)

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For further information contact the Convocation Officer at (049) 68 5370.
CONVOCATION NEWS

1988 NEWCASTLE LECTURE

Professor Donald Watts, President and Vice-Chancellor of Bond University, Australia's only private university, gave the annual Newcastle Lecture at the University on September 13.

He spoke on the topic 'Universities -- New Demands for Different Times'. He drew attention to the concerns in the United Kingdom and New Zealand which, as in Australia, stemmed from moves to question the values of, and the value provided by, the regulated public monopoly systems.

'It is interesting that left-wing governments in New Zealand and Australia are pursuing policy changes similar to those of the Thatcher Conservative Government in the United Kingdom,' he said.

GIVE AWAY MEMORIALS

The last three Newcastle Lectures have been published by Convocation and a limited number of each is available free as a community service.

The Lectures are:

- Technology and Our Changing Perceptions of Life by the Minister for Science and Technology, Mr Barry Jones.
- The Coca-Colonisation of Australia by Mr Phillip Adams.
- Peace by Miss Freda Whitlam, Moderator of the Uniting Church, New South Wales.

Why Feminists Have to Try Harder, a comprehensive commentary on the Cook Islands and his partner, Ngaire.

Dr Douglas went to Newcastle University in the mid-60s as a mature age Arts student and remained that way.

There are certainly more visitors and more accommodations than there used to be, but most of them are limited in size and likely to remain that way.

There are more restaurants, but they are frequented by locals also.

There are more shops, but there is no pressure on the visitor to buy, such as occurs in an increasing number of tourist destinations.

In any event, this upsurge in visitors over the past 10 years or so still accounts for only about 28,000 annually, hardly a deluge.

And even though the majority of them visit only Rarotonga, the main island, itself with a possible to spend one’s holiday and be completely oblivious of the presence of other tourists.

In any event, this upsurge in visitors over the past 10 years or so still accounts for only about 28,000 annually, hardly a deluge.

Unlimited numbers are present, and there is never any sense of over-crowding.

The Douglases’ visit to the Cook Islands has enabled them to provide interesting insights into the effects of large-scale tourism.

A guide written by a graduate of Newcastle University provides an interesting and comprehensive commentary on the Cook Islands -- one of the most delightful groups of islands anywhere on earth.

Cook Islands — A Guide has appeared as the latest in the Series of Studies of the South Seas by Dr Norman Douglas, of Alstonville, and his partner, Ngaire.

Dr Douglas went to Newcastle University in the mid-60s as a mature age Arts student and remained that way.

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And even though the majority of them visit only Rarotonga, the main island, itself with a possible to spend one’s holiday and be completely oblivious of the presence of other tourists.

"People charming and sophisticated yet with a completely un hurried life-style, a landscape that seems to combine all the features which give the Pacific Islands their special quality; an ease of communication that makes every activity a pleasure -- all these greet visitors to these beautiful islands."

Before writing Cook Islands — a Guide, Norman Douglas produced Vanuatu — a Guide and with Ngaire, Fiji Handbook — Business and Travel Guide. Their comprehensive guides describe the countries themselves, the people, past events, systems of government and (happily) accommodations, restaurants and communications to help travellers.

The publishers of the recent guides are Creative Associates, of Sydney.

The Douglases are also editors of The Pacific Islands Yearbook, published by Angus and Robertson. They recently completed work on the Sixteenth edition.

A person by the name of Newcastle-Upon-Tyne, England, is very keen to maintain links with Newcastle, New South Wales, according to Professor Frank Bates, Professor of Law, at the University of Newcastle.

Professor Bates travelled overseas to attend a conference in London and visit Newcastle-Upon-Tyne to investigate a proposed academic twinning-city relationship.

Although I have spent considerable periods of time overseas, I have never experienced such a warm and friendly reception and generous hospitality as I received on my visit to Newcastle-Upon-Tyne," he said.

Professor Bates visited the Faculty of Law at the University of Newcastle-Upon-Tyne, where he was concerned with a family law and social policy project.

Professor Bates also investigated the direct implications of the twinning-city relationship between Newcastle and Newcastle-Upon-Tyne.

He delivered a lecture at the Newcastle-Upon-Tyne Polytechnic Law School on the topic of the recently published report of the Australian Law Reform Commission on matrimonial property.

On the issue of the twinning-city relationship, Professor J.B. Clarke, of the University of Newcastle-Upon-Tyne, and Professor P.H. Kenny, of Newcastle-Upon-Tyne Polytechnic, said they were keen to continue to develop links with the Department of Law.

"These will begin by an exchange of research projects presently being conducted in law in the various operations involved," Professor Bates said.

In particular, developments in Australia which might not generally be available to English academics will be especially appreciated.

Both institutions in Newcastle-Upon-Tyne were appreciative of the idea of staff exchanges and saw no necessary administrative obstacles to them.

Professor Bates said he was received with considerable enthusiasm by the Corporation of the City and County of Newcastle-Upon-Tyne. He had considerable discussions with the Director of Social Services in the City, Mr Brian Roycroft, who had visited Newcastle whilst in Australia last year.

Mr Roycroft is very keen that all levels be maintained and would, for instance, seek sponsorship for airfares of any academics participating in exchange programmes. Such avenues should.

Professor Bates added, also be explored in Newcastle.

Professor Bates is pictured with a framed photograph of the bridge in Newcastle-Upon-Tyne on which the Sydney Harbour Bridge was patterned. The photograph is a momento presented to him by Mr Roycroft (The photograph was taken by a handicapped photographer and framed by a handicapped person).

3

NEWSFRONT

Administration Changes

Mr Lance Hennessy, previously Chief Executive Officer at the Commonwealth Tertiary Education Commission, took up the post of Deputy Vice-Chancellor (Administration).

Mr Hennessy’s appointment was part of a restructuring of University leadership.

Professor Donald Watts, President and Vice-Chancellor, said: "The University has undertaken the task of restructuring the senior administration of the University and has appointed a number of new positions to support the University's strategic planning and to present a more comprehensive administrative structure."

Professor Michael Carter, Professor of Sociology since 1976 and Deputy Chairman of Senate since 1979, took up his appointment as Deputy Vice-Chancellor (Academic).

Professor Ken Dutton, previously Vice-Principal, moved to the new position of Pro-Vice-Chancellor and Dean of Students.

Professor Geoffrey Kellerman, Professor of Medical Biochemistry since 1976, took up the appointment of Dean of Research.

Professor Ron MacDonald, Professor of Physics, was elected Deputy Chairman of the Senate. He will hold office for three years.

Dr Monica Hayes and Mr John Broughton are new members of the Council elected by Convocation.

They were successful in an election for which there were 13 candidates.

Five sitting members of the Council elected by Convocation were re-elected: Mr Trevor Waddell, Mr Geoffrey Kellerman, Mr Brian Roycroft, Dr Peter Hendy and Dr Tom Osborne.

Dr Hayes is the former ECO Co-ordinator for the University and the HHE and Mr Broughton is Manager of the University at the University.

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Some fascinating insights into the University's past were included in a collection of pictorial memorabilia exhibited during Open Days (September 3 and 4).

**ORIGINS**

They show an attractive bushland area surrounded by Steel Works Golf Course, the northern railway line, a rough road where Rankin Drive now is and homes in Glebe Farm Gardens. The present campus was the site for picnics and games of two-up. A private railway was used by coal trains, picking up at mines in Wallsend and, on their way to Newcastle, roaring as they crawled through the cutting near the site of the present University entrance.

**THEN...**

Looking up to Great Hall site.

The same view today.

The same view today.

Looking at Jesmond School from the Great Hall site.

Coal company's railway.

**NOW...**

WHERE ARE THEY NOW?

Greg Powell, BA 1988, is author and photographer of the book, Ben Hall Country, a record of the sites and events of bushranging history in Central West New South Wales. Fifteen years in the making, this book is to be the first of a series of books concerned with regions associated with Australia's greatest bushrangers.

Sandra Cornish, BEd 1988, recently resigned from a graduate trainee position with the National Australia Bank to become Assistant to the Chief Executive Officer of the Australian Catholic Social Justice Council.

John Goth, BCom 1982, is now Director of Transpacific Industries Pty. Ltd., and he runs the Penshurst Valley Medical Centre specialising in ski injuries.

Karen McCaffrey, BE (Chemical) 1988, is now employed as a Chemical Engineer with the mineral processing group CPM Advanced Technical Development.

Louise Feneon, BMed 1983, presently works as a partner in a three-man practice in Jindabyne. Over the winter season, however, he runs the Penshurst Valley Medical Centre specialising in ski injuries.

Carol Luty (née Fairbairn), BMath 1985, and her husband, Ian Luty, BE (Computer) Honours 1986, are both Computer Programmer Analysts with BHP in Newcastle.

Tracey Bristow, BA Honours 1986, is Professional Officer in Admissions for the Faculty of Medicine at this University.

Christopher Dibley, BMath 1974, left his position as Tutor at this University to start a computer business with his brother that has now expanded from a two-man shop to becoming a business earning $10 million per year.

Ronald Blackwell, BE Honours 1977, has worked in Alice Springs and the United Kingdom but returned to this University to teach part-time (1983-84) while pursuing a BA. He is currently a Senior Structural Engineer with Rankine and Hill Pty. Ltd.

Ronald Woolley, BSc, DipEd 1968, was science teacher at Gloucester High School for 16 years before training at Christian Outreach Centre Ministry School. He is now Headmaster at Christian Outreach College in Brisbane.

Susan Barter, BCom 1986, became an Associate member of the Australian Society of Accountants who took him to his present position as Company Accountant with Cadc's Mac Ltd.

Roma Kane, BA 1982, is a course co-ordinator for WEA and assists in the development of adult education activities in the Lower Hunter. Due to public response the planned growth has exceeded all expectations and she hopes to remain with WEA to see more exciting changes in adult learning habits.

Bill Menary, BA 1971, featured in our last Gazette as a Lecturer at South Australia College of Education, since 1987 he has spent five months lecturing in China at Shaam's Teachers University. An Australian representative in a group of international esperantists he advised the Shandong Government on a series of television programmes for teaching Esperanto in China.

Susan Dobson, BA 1988, majored in French for her degree which has enabled her to gain employment as a Community Relations Officer with Tomato Aluminium Co.

Elizabeth Baynham (nee Miles), BA Honours 1983, DipEd 1981, is currently working on a PhD on the Classics Department at this University while tutoring part-time. Previously she was teaching at Wellington University.

Mark Sutton, BCom 1988, became an Associate member of the Australian Society of Accountants who took him to his present position as Company Accountant with Cadc's Mac Ltd.

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John Goth, BCom 1982, is now Director of Transpacific Industries Pty. Ltd., and he runs the Penshurst Valley Medical Centre specialising in ski injuries.

Karen McCaffrey, BE (Chemical) 1988, is now employed as a Chemical Engineer with the mineral processing group CPM Advanced Technical Development.

Louise Feneon, BMed 1983, presently works as a partner in a three-man practice in Jindabyne. Over the winter season, however, he runs the Penshurst Valley Medical Centre specialising in ski injuries.

Carol Luty (née Fairbairn), BMath 1985, and her husband, Ian Luty, BE (Computer) Honours 1986, are both Computer Programmer Analysts with BHP in Newcastle.

Tracey Bristow, BA Honours 1986, is Professional Officer in Admissions for the Faculty of Medicine at this University.

Christopher Dibley, BMath 1974, left his position as Tutor at this University to start a computer business with his brother that has now expanded from a two-man shop to becoming a business earning $10 million per year.

Ronald Blackwell, BE Honours 1977, has worked in Alice Springs and the United Kingdom but returned to this University to teach part-time (1983-84) while pursuing a BA. He is currently a Senior Structural Engineer with Rankine and Hill Pty. Ltd.

Ronald Woolley, BSc, DipEd 1968, was science teacher at Gloucester High School for 16 years before training at Christian Outreach Centre Ministry School. He is now Headmaster at Christian Outreach College in Brisbane.

Susan Barter, BCom 1986, became an Associate member of the Australian Society of Accountants who took him to his present position as Company Accountant with Cadc's Mac Ltd.

Roma Kane, BA 1982, is a course co-ordinator for WEA and assists in the development of adult education activities in the Lower Hunter. Due to public response the planned growth has exceeded all expectations and she hopes to remain with WEA to see more exciting changes in adult learning habits.

Bill Menary, BA 1971, featured in our last Gazette as a Lecturer at South Australia College of Education, since 1987 he has spent five months lecturing in China at Shaam's Teachers University. An Australian representative in a group of international esperantists he advised the Shandong Government on a series of television programmes for teaching Esperanto in China.

Susan Dobson, BA 1988, majored in French for her degree which has enabled her to gain employment as a Community Relations Officer with Tomato Aluminium Co.

Elizabeth Baynham (nee Miles), BA Honours 1983, DipEd 1981, is currently working on a PhD on the Classics Department at this University while tutoring part-time. Previously she was teaching at Wellington University.

Mark Sutton, BCom 1988, became an Associate member of the Australian Society of Accountants who took him to his present position as Company Accountant with Cadc's Mac Ltd.
SPORTING ROUND-UP

Men's Hockey

University Men's Hockey Club is one of the major sporting clubs on the Shortland campus, currently fielding seven teams in the district competition.

The First Grade team won the 1986 and 1987 Newcastle premiership and Fifth Grade side won the 1986 grand final. University fielded two teams in Fifth Grade in 1987, taking out all the honours. One team won the minor premiership and the other the major premiership.

First Grade player, Peter Sweeney, won the 1987 Newcastle Hockey Association's 'Player of the Year' award.

When 'The Gazette' went to press it appeared certain that First Grade would again be a semi-final contender. It seemed that five of the remaining six teams were also set to contest the semi-finals.

For the first time since the formation of the University Netball Club many years ago, the club's team has won the Newcastle District B Grade Minor Premiership. A well-disciplined approach to training throughout the year was further rewarded when the team won the major premiership.

This year University is fielding a team in the Newcastle District Competition in A4 Grade. The team is set to take out the minor premiership. A second team has been entered in the Howzat Indoor Netball Competition.

Netball

The new Greater Newcastle Teaching Hospital at Rankin Park, which will be the base for several specialties in the University's Medical School.
Convocation Mementoes

Standing Committee of Convocation has produced a range of fine quality mementoes of the University which feature the University’s Coat of Arms. By purchasing these items (see below) you will be helping to support Convocation and also the University. The items can be sent as gifts to members of families and friends if the necessary details are supplied. No charge is made for postage.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost</th>
<th>Number Required</th>
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</thead>
<tbody>
<tr>
<td>Glass Commemorative Plate</td>
<td>$25</td>
<td></td>
</tr>
<tr>
<td>Made of glass, designed and manufactured by Newcastle Glass Works. (For an extra $5 the plate will be numbered and engraved with the name of the graduate.)</td>
<td></td>
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<tr>
<td>Glass Paperweight</td>
<td>$10</td>
<td></td>
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<tr>
<td>The glass paperweight features the Arms of the University and is 8 cms in diameter.</td>
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<tr>
<td>Album &amp; Greeting Cards</td>
<td>$3.50</td>
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<tr>
<td>Sketches &amp; descriptions of the University by the artist Allan Gamble. (Illustrations by Allan Gamble).</td>
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<tr>
<td>Wall Plaques</td>
<td>$30</td>
<td></td>
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<tr>
<td>Made of teak and embossed metal, suitable for mounting in offices, living rooms and studies.</td>
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<tr>
<td>University Book</td>
<td>$5</td>
<td></td>
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<tr>
<td>This new 16 page publication is an overview of the University, its system of government, research strengths, courses and student services, etc., with beautiful colour illustrations.</td>
<td></td>
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<tr>
<td>Academic Dress</td>
<td>$3</td>
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<td>This well-illustrated publication is a brief guide to the origins and history of the various items of apparel seen on graduation days at Australian universities, written by K.R. Dutton.</td>
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</tbody>
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Please tick the momento/mementoes you wish to purchase. Complete the form below and either send it together with your remittance or debit the cost to your Mastercard or Bankcard. Cheques should be made payable to Convocation, c/o The University of Newcastle, New South Wales, 2308.

Name and full delivery details (postal address, not P.O. Box).

NAME: ........................................ ADDRESS: ........................................

POST CODE: ........................................ EXPIRY DATE: ........................................

MASTERCARD/BANKCARD No. ........................................ SIGNED: ........................................