First grants for research excellence

The University has released details of the allocation of $588,000 in Grants for Areas of Research Excellence to researchers from the University.

The grants are for seven research projects and have been made from a special vote of $1 million for the support of areas of research excellence.

The Vice-Chancellor, Professor Keith Morgan, said the purpose of the Area of Research Excellence Scheme was to lift the research profile of the University, with a view to obtaining additional, large, external research grants.

The Research Management Committee of Academic Senate, which is responsible for the allocation of the grants, reported to the Interim Council on June 8 that after inviting expressions of interest the Committee had selected a number of proposals which it felt should be developed into full research grant applications.

The Committee said it gave lengthy and careful consideration to the full grant proposals. It interviewed applicants, called for referee’s reports and, in some cases, sought additional reports.

The Committee said it was satisfied that the successful applicants met the criteria set out for this important research support.

The Chair of the Research Management Committee, Professor Michael Carter, reported to Academic Senate that unsuccessful applications did not mean that the research projects were not outstanding.

"However, we are looking for something different - the ability to breakthrough in the future and attract substantial grants from outside the University.

"The Committee intends seeking further expressions of interest at the end of year, with a view to releasing funds in 1991."

Professor Morgan said the intention of stimulating research in ways which would lead to major research programmes being carried out in the University had, in part, been fulfilled.

"I would have been happier if there had been a plethora of applications. I believe we should begin to think about developing major research programmes and ‘plug into’ major sources of funds in addition to the ARC and other research schemes."

The Vice-Chancellor suggested that researchers begin to think about projects now, so that the applications would not be late.

Successful applicants for Area of Research Excellence grants are:

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical Mechanical Description of Protein Folding</td>
<td>$60,787</td>
</tr>
<tr>
<td>The Scanning Tunnelling Microscope</td>
<td>$129,200</td>
</tr>
<tr>
<td>Computer Simulation of Materials</td>
<td>$49,450</td>
</tr>
<tr>
<td>Optimizing Plant Productivity Using Physiological and Molecular Approaches</td>
<td>$104,633</td>
</tr>
<tr>
<td>Placental Endocrinology</td>
<td>$100,000</td>
</tr>
<tr>
<td>Properties of Neuronal and Vascular Cells</td>
<td>$63,695</td>
</tr>
<tr>
<td>Visualised by Confocal Microscopy</td>
<td></td>
</tr>
<tr>
<td>Transference of a Molecular Beam (MB)/Ultra</td>
<td>$80,000</td>
</tr>
<tr>
<td>Violet Photoelectron Spectrometer (UPS) from the University of Sydney</td>
<td></td>
</tr>
</tbody>
</table>

University Supports Art Gallery Proposal

The University of Newcastle has given its support to a proposed Central Coast Regional Art Gallery being located on its campus at Ourimbah.

Vice-Chancellor of the University, Professor Keith Morgan, said he strongly supported the move and believed the proposal was an excellent development for the campus.

He said the project, which was still well into the future, was discussed at last week’s meeting of the University Council which gave full support for the
people exerted a heavy demand on the University’s computing network.

Professor Croxton said installing supercomputing facilities, like those available at the A.N.U. in Canberra, or buying computing time off-campus would prove to be too expensive for the University.

"I believe the way to go is to establish a network of computer work stations, with the facilities conveniently located for researchers to be able to use them," he said.

Professor Croxton said he had difficulties finding postgraduate research students because his specialisation was highly interdisciplinary, embodying elements of chemistry, physics, mathematics and biology, and there was no straightforward route to study in the area.

He suggested that the University introduce a scheme for 'targeted' postgraduate research scholarships and that the research projects and the desired skills be clearly designated in the advertisements for the scholarships.

He believed that scholarships of this kind would be a successful means of attracting top quality postgraduate students from outside the University. They should be advertised in the UK and Europe to increase the competitiveness. It would be good if there were an influx of quality students, as they would raise the University's research profile.

"I consider theoreticians like me are research resources which should be exploited to generate more research workers and higher degree students," Professor Croxton said.

Two New Professors Appointed

The Vice-Chancellor, Professor Keith Morgan, has announced appointments to two senior positions at the University.

Mr Denny McGeorge has been appointed to the new Chair of Building.
Dr Iain Raeburn has been appointed to the Chair of Mathematics.

Professor McGeorge is Head of the Department of Building and Quantity Surveying at Curtin University of Technology.

The new Chair of Building has been established within the Faculty of Architecture and has received substantial financial support from the New South Wales Government. The New South Wales Building Services Corporation made a grant of $658,000 in 1988 to assist the University to establish the new Bachelor of Building degree course. In addition, the New South Wales Education and Training Foundation have provided support of $170,000 to allow the degree course to be extended into an external studies degree. The course will be introduced next year with an expected initial intake of 25 students.

Professor McGeorge graduated with the degree of Master of Science from Heriot-Watt University in 1970. He is a Fellow of the Royal Institute of Chartered Surveyors, an Associate of the Australian Institute of Quantity Surveyors and a Member of the Australian Institute of Building. He served as an indentured apprentice chartered surveyor from 1958 to 64. After periods as a loss adjuster in London, a chartered surveyor in Edinburgh, a Lecturer in Glasgow College of Building and senior Research Assistant to the Scottish Local Authorities, he was appointed as Research Fellow and Lecturer at Heriot-Watt University (1968 to 72). He then held appointments as Lecturer at the University of Salford and Strathclyde University before moving to Curtin University of Technology as Senior Lecturer and Head of the Department of Building and Quantity Surveying in 1982. His appointment to Curtin University (the W.A.I.T.) was to develop the new degree courses in Quantity Surveying and in Building.

Professor Morgan said Professor McGeorge’s success in creating courses at both undergraduate and postgraduate levels was indicated by the high demand for places on their courses and the esteem which now attached to the department.

As a teacher, both in establishing new courses, in providing an innovative approach to professional needs and in his own work with students, he had established an outstanding reputation. His research had concentrated on building cost modelling, energy efficiency of buildings and the use of systems analysis in appraising building performance. His publications included contributions to three books, some 20 papers and a number of research reports.

Professor McGeorge will take up duty in mid-July.

Professor Raeburn is an Associate Professor at the University of New South Wales. He was awarded the degree of B.Sc. with First Class Honours in the University of Edinburgh (1971), completed Part III of the Mathematical Tripos, University of Cambridge (1972) and received the degree of PhD from the University of Utah (1976). After having completed his PhD degree, he served as a
postdoctoral Fellow, at Dalhousie University, before joining the University of New South Wales as successively Lecturer (1977), Senior Lecturer (1982) and Associate Professor (1988).

Professor Morgan said Professor Raeburn had established an international reputation for his work in functional analysis and its applications. His work was based chiefly on operator algebras and drew substantially on the techniques of algebraic topology, operator theory and group theory. His referees described his work in this field as characterised by deep and interesting results embracing methods which are beautiful and innovative, Professor Morgan said. His research had led to some 30 papers and had been supported - in collaboration with his colleagues - to the extent of $250,000 by the ARGC and ARC since 1983.

Professor Morgan said Professor Raeburn was a committed and effective teacher with experience at all levels from undergraduate service courses to postgraduate supervisions. He had taken a keen interest in designing and developing undergraduate programmes and might be expected to continue this interest in Newcastle. As a colleague and administrator he brought high achievements and credentials. This was shown, Professor Morgan said, by the success of his research collaborations which had been sustained over extended periods of time and by his reputation as a responsible and sound administrator, with a full appreciation of leadership and the capacity to exercise it to the satisfaction of his colleagues.

Professor Raeburn expects to take his Chair in January, 1991.

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**Loose Leaf Map**

A map of the Shortland campus showing the locations and names of buildings is included in this edition of The Bulletin.

When discussing the locations of individuals or groups, please refer to the building in which those persons or groups are located.

It would assist if internal mail is addressed in the following format: 1. Name 2. School, Department or Section 3. Building.

A guide will be printed in the near future which will contain the campus layout on one side of the sheet and the University/As location in relation to Newcastle on the other side. The guide, which is aimed at assisting visitors of the University, will be available from the Information and Public Relations Unit in the Hunter Building.

D.R. Huxley, Deputy Vice-Chancellor (Planning)

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Ms Liesl Tesch, a Science IV student, leaves on June 25 to play for Australia in the world women's wheelchair basketball championships in France. After finals on July 14, she will stay with friends in Switzerland.

In November, 1988, Ms Tesch shattered a vertebrae in her lower back in a bicycle accident at Coal Point.

She has no memory of the incident, which left her paralysed from the waist down for a fort-night and in a Sydney hospital for three months.

After months and months of daily physiotherapy and hydrotherapy, she has regained some movement in her legs and begun walking without the aid of sticks. She subsequently forced her way into the national squad for the world women's wheelchair championships.

She and two others in the team have trained three times a week with the men's wheelchair team and spent a period at the Australian Institute of Sport to improve their mobility on their wheelchairs.

Ms Tesch, who was a pupil of Toronto High School before beginning at University, received a total of $3500 in support from organisations and individuals in the Toronto area.

PHOTOS: Ms Liesl Tesch trains with members of the men's team and receives a cheque for $835 towards her expenses from the President of the University's Sports Union, Dr Bernie Curran.
New Telephone System almost Imminent

The University's new PABX telephone system is expected to be installed by the end of September.

The Manager, Buildings and Grounds, Mr Maurie Edmunds, said the replacement of the present two different switchboards by just one switchboard would be a long-awaited blessing.

He said Housley Communications Consultants Pty Ltd, of Sydney, had investigated the amalgamated University's switchboard requirements, prepared specifications, examined the tenders and made a recommendation in respect of a company to supply and commission the new PABX equipment.

A project committee, comprising Mr Edmonds and Mr John O'Donohue, of the Buildings and Grounds Division, Mr Peter Myors, of the Bursar's Division, Mr Ron Goodhew, of the Faculty of Engineering, and Mr David Morrison, of the Computing Centre, was working on planning the installation.

Mr Edmonds said the old University's and the former Hunter Institute of Higher Education's switchboard systems would be replaced by one PABX, a modern, right up-to-date system incorporating several technological developments.

The budget for the provision of the new telephone system was $700,000 and the tender recommended by Housley Communications was within this vote.

Although a portion of the system would be housed in the Hunter Building, the new PABX would allow the University to have one switchboard and integrated incompletely telephone services. Mr Edmonds said to call the University, people would dial one number. The present shortage of "in" dial lines would be alleviated by the provision of a more than adequate network of extensions. All parallel extensions would disappear and be replaced by separate extensions, as requested by Departments, he said.

One-Day Workshop

Are you experiencing a time of reviewing the successes and failures of the past and planning for the future? Is there some restlessness and upheaval within you because of this question? Maybe you are in a period of transition? A workshop to explore and better understand this change in your life will be held on Saturday July 28 OR Sunday July 29 at 67A Dickson Street, Lambton. Mrs Elizabeth Cain, whose spiritual direction base in workshops, retreats and therapy sessions is Jungian, will conduct the one-day workshop.

For further enquiries and application forms contact: Mary Godsworthy or Faith Jones at the Chaplain's Office 68 5202 (West Side), 68 7516 (East Side), or telephone at home on 69 4434 (Faith) or 57 1387 (Mary).
**LETTER TO THE EDITOR**

Dear Sir,

While it is undoubtedly good financial news that the University's 1990 Budget balances (give or take a few hundred thousand dollars), there is one aspect of Mr Hennessy's report in Bulletin No 8 (May 14-18) which is not good news.

That is the fact that all these important financial decisions were made by an all-male Finance Committee. Only at the Interim Council meeting which endorsed the 1990 Budget did Council act to appoint a woman - Dr Eileen Doyle - to the Finance Committee. It's a bit like bolting the stable door after the horse has headed off to the lush green pastures for the day.

The University is to be commended for committing itself to the principle of single-sex committees, as it did at Interim Council last year. But it's discouraging to see how long it often takes to get the principle put into action. Can't we do better than the minimum, and do it sooner?

Susan M Jones  
EEO Co-ordinator

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**MEETING TO DISCUSS POLICE TERTIARY COURSES**

New directions in higher education courses for NSW police officers will be on the agenda when the Police/Higher Education Standing Committee meets on the University campus this week.

The Committee, which comprises representatives of organisations providing higher education courses for police officers including the NSW Police Academy, will convene in the Hunter Building on Thursday and Friday (June 21 and 22).

A member of the committee and Lecturer in the University's Associate Diploma of Police Studies, Mr Neil Wright, said the group met at least once a year to consider issues relevant to post-Academy courses.

"The role of the committee is to monitor the provision of higher education courses for police officers and to assess their viability," said Mr Wright.

"The meeting will be looking at new directions for these courses, such as forensic science and disaster management, as well as discussing its relationship with the Police Education Advisory Council and reciprocal secondment of tertiary staff to the Police Academy in Goulburn for staff development and teaching."

"Other items on the agenda include plans for encouraging police officers into tertiary education, research into policing and police education and an update on police education developments."

Guest speakers during the two-day meeting will be Detective Sergeant Warren Day from the Physical Evidence Unit, Inspector Nick Stoves from Police Headquarters and Mr Tim Robl, who is the Dean and Director of the Australian Police Staff College in Manly.

Mr Wright said the University was proposing to introduce next year a Bachelor of Justice Studies which was being specifically designed to integrate with the Police Recruit Education Program (PREP) at Goulburn. The degree course would supersede the current Associate Diploma course.

Two other universities in NSW provide tertiary courses for police officers. The University of Western Sydney offers an Associate Diploma of Criminal Justice and a Bachelor of Arts (Applied Social Science) while Charles Sturt University offers a Bachelor of Social Science (Policing Studies) at its Wagga Wagga campus and Criminal Justice Studies at the Mitchell campus.
Stimulating Time To Be Here, Says Novocastrian

Mr John Miner, first Director of the Information and Public Relations Unit

A former member of the Media Units of two State Premiers has taken up his appointment as Director of the University's Information and Public Relations Unit.

A Bachelor of Arts from the University of New South Wales, Mr John Miner has spent the last two years on the Premier of Victoria's, Mr John Cain's, staff with the Government Media Unit. The Ministries he was associated with included Treasury, Planning and Environment, Consumer Affairs, Aboriginal Affairs and Sport and Recreation.

He was called upon to help the new Tasmanian Government to establish a media unit and assist the Victorian Branch of the ALP to conduct its Federal election campaign.

He was prior to working in Victoria attached to the former Premier of New South Wales', Mr Barrie Unsworth's, staff as Officer-in-Charge of the Ministerial Media Unit. He had formerly been Press Secretary to the Minister for Sport and Recreation and Minister for Tourism, Mr Michael Cleary, MLA.

Mr Miner, who was born at the Mater at Waratah, was educated at St Joseph's School, Cardiff, St Joseph's College, Hunter's Hill, and the University of Sydney, where he majored in English and Legal Studies.

In 1977 he joined The Sydney Morning Herald as a Cadet Journalist and in the next seven years the range of his positions with the newspaper was extensive. He was a correspondent in New-
castle and Queensland, a NSW Parliamentary Reporter, Chief of the Melbourne Bureau and Editor of The Guide. He was also NSW Political Correspondent for The Australian for two years.

Asked what he remembered as highlights of his career, Mr Miner replied: "Working on election campaigns, both as a reporter and as a participant. They're nail-biting, all-absorbing experiences and they engender a great camaraderie. Of course, they're much better if your win."

He included the Sydney campaign featuring Elle McPherson as a highlight. "Ms McPherson was the total professional, but I don't know how she keeps her head. She was so big, the ad agency we hired had to hire a public relations agency just to answer the phones. It was a very busy time but a very successful campaign."

The new Director of the Information and Public Relations Unit considers it to be a period of great change for the University, "...which makes it a stimulating and challenging time to be here. Keeping people informed about the new University, both inside and outside the institution itself, will be a vital function and I'm looking forward very much to playing a part in that."

Mr Miner, 34, commenced duties in the Hunter Building on June 12.

University's 1991 Academic Year

The University's academic year for 1991, which was approved by the Interim Council on June 8, consists of two semesters each of 14 weeks.

The main dates of the two semesters are as follows:

- Semester 1 commences - February 25, 1991
- Semester 1 recess - March 29 to April 5, 1991
- Semester 1 concludes - June 7, 1991
- Mid Year Examinations - June 10 to 28, 1991
- Semester 2 commences - July 15, 1991
- Semester 2 recess - September 30 to October 11, 1991
- Semester 2 concludes - November 1, 1991
- End of Year Examinations - November 4 to 22, 1991

The Faculty of Medicine and the School of Health do not observe the dates for these academic year.

Council was told that the academic year complied with guidelines issued by the Department of Employment, Education and Training on the length of semesters. It was understood that other universities also complied with the guidelines.

Science Students in Universities and Colleges

The Number of higher education students studying science in Australia's universities and colleges has risen steadily over the past ten years, contrary to claims by some individuals and organisations that numbers have fallen.

Mr Peter Baldwin, the Minister for Higher Education and Employment Services, said the steady rise in the number of higher education science students was featured in a report Science Students: a decade," prepared by the Department of Employment, Education and Training.

"The report shows that the number of science students in higher education rose from about 42,000 in 1980 to almost 61,000 last year," said Mr Baldwin.

"Over the same period," the Minister said, "science's share of total enrolments also rose. Science students last year accounted for almost one-seventh of the total higher education student population."

The report, the fourth in DEBT's higher education series, notes that both Bachelor and higher degree student numbers rose over the decade, with Bachelor numbers rising by 50 per cent.

"What is especially encouraging in the report is the increase in the participation of women in science during the 1980s. Women now account for just under 40 per cent of science students, compared with only a third at the beginning of the decade."
Uni to Host National Sport in Schools Congress

A congress which will look at the issue of Sport in Schools will be held at the University early next month.

The congress, organised by the Hunter Academy of Sport in association with the New South Wales Department of Sport, Recreation and Racing and the New South Wales Department of Education, is drawing participants from all Australian states and will be held in Lecture Theatre B15 of the Hunter Building between July 3 and 5.

A member of the Steering Committee, Physical Education lecturer, Mr Kerry Thompson, says there is much uncertainty surrounding sport in schools and there have been questions raised as to whether sport in its present form should continue to be an integral part of the school curriculum. "The Congress will address the relevant issues, existing in all Australian state education systems, which have been related to the reported diminution of school sport as a significant and effective program within school curriculums," said Kerry.

Amongst the prominent speakers who will be addressing the congress are the Director-General of the New South Wales Department of School Education, Dr Fenton Sharpe; the Australian Institute of Sport’s representative, Dr Richard Telford; former and Olympian for South Wales, and the Institute of Coal Research at the University of Newcastle will provide facilities and lecturers: other lecturers will come from industry and consulting firms.

The course was organised by the Joint Coal Board and commenced on June 4.

Our picture shows senior engineers and administrators from nine countries with (front row) Dr J. Sligar, Manager of Scientific Services for the Electricity Commission, Mr E. B. Dillon, Director of International Trade for the Joint coal Board, and Dr K. H. R. Moelle, director of the Institute of Coal Research.

Report On College's Link With Uni

A report on discussions between representatives of the University and Avondale College, Cooranbong, in relation to the College’s wish to have a formal association with the University was given to the Interim Council on June 8.

Council was told by a working group appointed the meet with the college that Avondale College currently had about 750 students, of whom 700 are enrolled in accredited courses: the Bachelor of Business; Bachelor of Education; Bachelor of Arts (Theology); and Diploma in Nursing courses. It was anticipated that an upgrading course to Bachelor of Nursing would soon be approved. The other courses offered were at certificate level.

The working group reported that although Avondale was not part of the unified national system, the continued accreditation of its courses was not in jeopardy. There was some concern, however, that the abandonment of the binary system could be seen to devalue the standing of the institution.

'The University derives the legislative base for the awarding of degrees from the University of Newcastle Act, whereas, Avondale derived this authority from the NSW Higher Education Act of 1988,' the working group said.

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As the granting of University of Newcastle awards to Avondale students would involve a closer link between the two institutions than had been envisaged, an arrangement whereby the University of Newcastle certifies the quality of Avondale’s own awards is seen to be a better alternative.

'It was thought that the University’s involvement may take the form of providing assessment panels, possibly every five years, to examine all aspects of the College’s courses when they are due for reaccreditation. Avondale also has external assessors from a number of Universities who consider the College’s course submissions and exam scripts on an annual basis. It is anticipated that this will continue regardless of the accreditation process.

'The working Groups is not aware of any models for the proposed accrediting arrangements, but does not foresee any strong objections to a workable proposal from either the Commonwealth or the State authorities,' the report said.
Apartheids impact on health in Southern Africa

Professor Ricardo Barradas, Dean of the Medical School in Maputo in Mozambique shows members of the Faculty the University of Newcastle plaque presented to him by Professor John Hamilton (right, back).

Professor Hamilton worked at St. Francis Mission Hospital in Katete in Zambia for two years in the sixties. He and Dr James Calms, Medical Superintendent of the hospital, are pictured while visiting a local village. The hospital is run by churches and accepts medical students who want to undertake electives, including students from the Newcastle Medical School.

Professor John Hamilton, Dean of the Faculty of Medicine, recently spent two weeks in Southern Africa attending a conference in Mozambique and a workshop in Natal. He also made brief visits to Malawi and Zambia.

The Fourth International Conference on Health and Apartheid, held in the capital of Mozambique, Maputo was supported by organisations from South Africa, the United Kingdom, the United States and Holland opposed to apartheid. The gathering included a contingent from the African National Congress (ANC) and representatives of the surrounding Frontline States of Southern Africa.

Professor Hamilton says:

"Given the political developments in South Africa, with the release of Nelson Mandela and the unbanning of the ANC, the political discussion both within and without the meeting was at a high pitch."

Dr Alison Hamilton attended a session devoted to AIDS. AIDS is a major problem in Africa, Dr Hamilton says, with an entirely different epidemiology from Australia and some differences with clinical presentation. "The main lines of spread are by heterosexual contact. Public health measures are accepted with great reluctance by most people", she says. A major part of the conference was concerned with future directions for the training of doctors, nurses and other health professionals.

The conference also reviewed the current situation with respect to health in South Africa and the impact of apartheid. It examined the challenges faced by the ANC, in particular in establishing a political presence and developing plans for future developments in health services, health personnel training and primary health care, which are currently largely constrained by apartheid.

"A particular challenge", John Hamilton says, "is the rehabilitation of 20,000 returning refugees and political exiles from the Frontline States. Experience of Namibia (recently independent) and Mozambique, coping with the continuing insurgency war, and the escalating violence in Natal and urgency to the discussions".

The history of Mozambique is an extremely sad one, Portuguese occupation for four centuries was extremely oppressive and cruel and there was a total lack of development of health services or education.

"During the War of Independence, Frelimo (the Front for the Liberation of Mozambique) established health services and schools within their own safe areas. These provided the experience for the further development of primary health care networks after Independence in 1975," he says.

"At Independence, 90 per cent of the Portuguese expatriate population returned to Portugal. Of 500 doctors, only 70 remained and the economy and the health service had a very difficult time. "Things were made much worse by the policy developed by South Africa to destabilise the surrounding Frontline States, using the guerrilla army originally recruited by the Smith regime in Rhodesia, RENAMO.

"Mozambique agreed in 1984 to close down ANC refugee camps". South Africa promised to no longer support the RENAMO bandits and to open up trade. However, it did not honour the promise. It has continued military supplies to RENAMO and maintained its economic squeeze on Mozambique.

"RENAMO has no political agenda of its own. Murderous attacks on villages have driven 1.2 million people off their land, or over the borders, leaving their dead and carrying their maimed and injured.

"Many arrive in the mission hospital at which I used to work in Zambia, with limbs and genitals mutilated and with children pierced by bayonets."

"The second target is social infrastructure", Professor Hamilton says. "The Government built 400 new primary health care centres, set up obstetric centres, trained village midwives and built up a strong and dedicated staff of health workers."
Letter to the Editor

Dear Sir

The letter to the Editor (J. Foster, Bulletin, June 4) shows a lack of understanding of the democratic processes of unionism. The picture painted of strike-bent delegates and coerced, reluctant members is ludicrous for many reasons including the following:

As one of the delegates who attended the Sydney PSA meetings which voted for a one day stoppage, I can assure members that numerous ideas for industrial action were vigorously debated. Other suggestions put the burden of industrial action on particular groups of staff (e.g. clerical) or seemed likely to inconvenience students over a longer period. In the end a stoppage seemed the only way to share industrial action equally, as well as containing the effects on students to one day.

Pickets not only prick the conscience of staff who refuse to stand with their fellow workers, but provide information on the issue at stake to the University community as well as the wider community.

Mr Foster also apparently advocates a rather curious economic plan for abusid's. He seems to suggest that people would pay fares according to their means or number of children. (Conjures up some interesting images of ticket purchasing procedures doesn't it?). Interestingly the 'battlers' are often the Union's strongest supporters perhaps they put a special value on mutual support. As for members who can afford to lose a day's pay in these days of big mortgages and high costs - I have yet to meet one.

Finally, don't let delegates be passing acquaintances - attend meetings and get to know them. Better still, work with them giving a hand with day to day matters such as typing and information distribution. You may even find they are good 'drivers', attuned to the needs of their passengers and following their directions.

Carol Sjostedt
Chairperson, PSA.

1990 Scholarship Winners

Assoc. Professor John Fryer congratulates the 1990 scholarship winners (from left): Andrew Daley, Matthew Pike, Mark Masia, Brenton Neuschulz and John Tonkin.

The Department of Civil Engineering and Surveying has announced the winners of five scholarships, one of which has been awarded for the first time.

Discussion between the Department and the Institution of Surveyors, New South Wales, has resulted in the established by the Institution of a $2000 scholarship which will be made available to the recipient at $500 each year for the four year surveying course. Head of the Department, Assoc. Professor John Fryer, said that the Institution was keenly interested in the progress of students in the Newcastle course and he expected the competition for the scholarship to be very keen in future years.

Professor Fryer said the inaugural winner was Andrew Daly, of Cardiff.

The other four awards, all Frank Henderson Scholarships, have gone to Mark Masia of Edwards Hall, Matthew Pike of Nords Wharf, Brenton Neuschulz of Wallsend and John Tonkin of Adamstown Heights.

The $500 scholarships are named after the former Professor of Civil Engineering who worked at the University for about 15 years. The scholarships are made available each year in either civil engineering or surveying from a fund which Professor Henderson established with proceeds from his applied research work.

Professor Fryer said the scholarships this year were awarded to first year students studying civil engineering on a full-time basis. Selection was based on the results of the 1989 Higher School Certificate examination in which the successful applicants scored more than 400 marks.

Book Review

Media buffs have a new book on the shelves which will bring them up to date with developments in Australia's defence forces.

Australians At War - Modern Military Towards 2000 has been written by four men, including Mr Bede Jordan, of the University's Central Audio Visual Services Unit.

He wrote the chapter on a mobile army, co-wrote the first chapter dealing with Australia's current defence capability and also acted as a consultant for the remainder of the book.

Mr Jordan was joined by Mr Peter Badman, a senior executive with a computer company, who has had a strong interest in Australia's Army and its history, Mr Alan Evans who spent 32 years in the Navy and has written A Navy for Australia, and Mr Doug Hurst, an RAAF officer in Canberra who has written articles for various defence journals and magazines.

Australians At War is published by Time-Life Books and although only just released has been partially funded by the Australian Bicentennial Authority. It's five chapters discuss Australia's defence, the building of a modern navy, the history of the RAAF from the Mustang to the Hornet, a mobile army and what the future will bring.

The book, although relevant to those interested in the military, will also find its place among general readers. The research on each of the chapters has been thorough and the photographs (black and white and colour) are both dramatic and give a good visual picture of Australia's military components.

Some of the material in the book gives you an insight into our defence capabilities - such as the Jindalee Over-The-Horizon Radar, computerisation and its effect on defence mechanisms, the submarine-launched Harpoon missile, the fibreglass minehunters built in Newcastle and special operations - and it is this material which provides a lot of special interest.

The 168-page hardcover book is a publication which is easy to read and the chapter, Into The Future, is an eye-opener.

Australians At War - Modern Military Towards 2000, sells for $29.95.
Satellite - based Education - the way of the future?

Mr Alistair Inglis, whose interest in Satellite-based education goes back to the early 1980s.

A visiting expert on satellite-based education believes Australian academics have "a long way to go" before fully understanding the advantages that can be gained from the use of space-age teaching facilities.

Mr Alistair Inglis, a Senior Lecturer in Instructional Design and Distance Education at the Royal Melbourne Institute of Technology, says that while Australia's AUSSAT system is under-utilised educational institutions are not making use of the facility.

He believes AUSSAT needs large scale commitment from industry as well as the educational institutions and firms wanting specialised teaching. As a result, industry is having difficulty meeting its training needs and AUSSAT cannot attract institutions to use the facilities which could be used for delivery.

Mr Inglis recently visited the University to deliver a seminar on satellite-based education to staff and to lecture to final-year Industrial Arts students. His visit was arranged by the School of Education and the Department of Industrial Technology at the invitation of the head of the Department, Dr Roger Coldwell.

Misunderstandings out of which questions arise include:

Satellite technology is always more costly than terrestrial technology (the reality is that terrestrial technology is more costly in point-to-multipoint applications for high band width applications for high-usage/long distance applications).

The use of terrestrial communications avoids high capital costs (the reality is that the establishment of private terrestrial networks involves extensive switching hardware).

Mr Inglis became involved in satellite-based education in the early 1980s. He worked on a feasibility study and design exercise for RMIT which (along with the separate University of Queensland project) became a precursor to AARNET, the Australian Academic and Research Network, which is about to link university computer systems.

He said Australia's three satellites were being used to only about 80 per cent of their capacity because educational applications for AUSSAT had not materialised. In America, where the industry is deregularised, industry and education were making great use of satellite-based education.

"In Australia, we have the perception that this type of technology is too expensive," Mr Inglis said. "The public therefore sees AUSSAT as a technological white elephant.

"The irony of the situation is that there is a lot of potential but we need people who have the perspective of the user, as well as the provider, to design the services which can capture the potential. To take advantage of what is available we need to get all the perspectives synthesised and we need large scale commitment," commented Alistair.

During his seminar, Mr Inglis said a satellite solution for networking tertiary institutions could have been justified because:

Tertiary educational institutions have significant potential demand for high band width services such as videoconferencing have a demonstrated need for point-to-multipoint services such as audio and video conferencing are widely spread across Australia, including remote locations such as Karatha, Batchelor and Longreach.

Australian Fulbright Association

The Australian Fulbright Association came into existence in January, 1990, just in time to mark the fortieth anniversary of the introduction of Fulbright awards in Australia.

Membership is open to all who have participated in Fulbright and other United States Government-sponsored education and cultural exchange programs. The objectives of the Association are to support and promote such programs and to encourage continuing relationships among those who have benefited from them.

There are chapters in each state and the range of activities undertaken vary according to the interests of members. Lists of members and descriptions of activities are published regularly in the Fulbrighter.

The Patron is Sir Zelman Cowen, the Association being governed by a Board of Directors representing the chapters. Foundation officers are: Emeritus Professor Bill Walker (Mt. Eliza and Monash) President; Emeritus Professor Don Nicholas (Waite) Vice-President; Professor John Sharpham (Ballarat) Secretary and Treasurer.

A one day conference, including a number of distinguished U.S. academics, is planned for later in the year. Anyone interested in further information about the Association is invited to write Professor John Sharpham, Director, Ballarat University College, P.O. Box 663, Ballarat, Victoria 3353.

Appeal Donation for Radiotherapy

The Hunter Valley Cancer Appeal has strongly supported the development of the University's new radiotherapy course with a cheque for $51,000.

The donation, presented by officers of the Hunter Valley Cancer Appeal Committee on June 8, has enabled the University to install a modern radiotherapy planning software and hardware package in the Department of Applied Sciences,
where it will be used to educate therapy radiographers.

In order to made the donation, the Hunter Valley Cancer Appeal carried out an extensive fund-raising campaign, which included social functions and individual donations.

Dr Stephen Beveridge, Head of the Department of Applied Science, said the University had introduced the therapy radiography strand in the Diploma of Applied Science (Medical Radiation Technology) course this year with an enrolment of 15 students. Considerable support had been given by organisations and people in the Hunter including the Director of the Radiation Oncology Unit at the Mater Hospital, Dr Jim Denham, and the Chief Therapy Radiographer, Ms Margaret Bulmer.

"The Mater has had significant problems with staffing its two linear accelerators in the Oncology Unit," he said.

"Working with the Mater we saw the need to provide educational opportunities to students, while concurrently providing an essential public health service in the Hunter."

The radiotherapy students would move into specializations next year and in 1992, Dr Beveridge said. There would be a second intake of first-year radiotherapist students in 1992. Next year the University would enrol its first students in the Nuclear Medicine strand.

Dr Beveridge said the Multidata Radiotherapy Planning package had been supplied by Radiation Services Australia and incorporated new technology for Australia. It was being installed by an American expert.

"We anticipate that the equipment will generate a great deal of interest among radiotherapists in Australia, as it represents a significant breakthrough in terms of cost and features, including brachytherapy and options such as CT interface."

Two academic staff members will present papers at the upcoming 22nd International Congress of Applied Psychology in Kyoto, Japan, in July. The papers will form part of a symposium on Spatial Cognition in Education. Other presenters are from Tasmania, Canada, the United States and Japan.

Dr Phil Moore, of the Department of Education, will be reporting the findings from a Senate Research Committee funded project involving himself, Dr Lorna Chan and Mr Wing Au, also of the Department of Education.

The paper High School Students' Use of Diagrams During Reading examines the ways in which high school students use diagrams and summaries reading and the effects of such usage on learning from typical high school texts. Using computer presentations of texts and diagrams, the academics found that the more time a student spent examining a diagram, the more likely their learning would be enhanced. This was particularly the case for higher verbal ability students. Overall, though, the findings provided little evidence of strategic use of diagrams during reading.

The second presentation, by Dr Neville Schofield of the Department of Educational Studies, focuses upon the ways in which people solve problems in reading maps and locating themselves in their environment.

His paper, Strategy Training for Map Use: Effects of Abilities and Preferences, examined the interaction of particular spatial abilities and learning styles with various types of training for effective map use. One form of training was found to produce up to a 50% percent reduction in the amount of time taken for an individual to locate themselves on a two dimensional map when given a position on a three dimensional model.

Both papers draw out the implications of the findings for instruction and training. It is expected that the papers presented at the symposium will form the basis for a book on spatial cognition.
Attention General Staff Women

The EEO Unit invites you to an information-sharing meeting on Wednesday, July 4 from noon to 1pm, or 1 to 2pm, in the Engineering Sciences Building, Room ES 305. Topics for discussion include:

- Update on EEO Unit activities
- Concerns regarding amalgamation e.g. relocation etc
- Maternity leave/child care issues

All General Staff Women are encouraged to attend one of the sessions, and to raise any EEO/AA issues they wish.

Come along - the meeting will be informal - bring your lunch!
Orange juice, tea and coffee will be provided.

Susan Jones
EEO Co-ordinator
Telephone 685317

A Healthy Lifestyle Baking Workshop

The workshop will be held at Jesmond neighbourhood Centre on July 7, from 10am to 3pm. Participants will learn how to bake breads without added fats, salt or refined sugars. There will be lots of discussion, helpful advice and as much as you can eat for lunch. Cost $20, includes food and recipe sheets. For bookings telephone 46 7582 after 6pm on

Position Vacant -
Deputy Warden of Evatt House

Applicants should be proceeding toward a higher degree and have previously held a position of responsibility in an educational environment, involving some pastoral care.

The appointee will be expected to live in Evatt House and appropriate accommodation is provided.

A remuneration package of $5,000 plus reduced residential fees is payable.

Applications should be directed to The Warden, Evatt House, University of Newcastle and close on Friday, June 22.

Further information may be obtained from Evatt House or on 60 2071.

Word Processing for Students for Essay and Assignment Writing

July 2 to 5, 2 to 4.30pm, Monday to Thursday
An introduction to computer keyboard and Wordperfect 5.1. The accent in this course will be on word-processing for students of Humanities subjects. Micro-computers, programmes, discs and printers are available in the Auchmuty Library for students to use. After demonstrations and hands-on experience you will be able to present your essays and research papers in readable and attractive form, and to save your study material in your own files. Venue: AG24 (Computing Centre). Cost: $40 per student. Enquiries, telephone 68 5000 or 68 5522.

CHAOS
JULY 6, 7.30pm
The Australian Institute for Nuclear Science and Engineering, the Department of Physics and the Physics Society will hold a public lecture on CHAOS.

The Lecturer is
Professor G. Brown
Venue: Lecture Theatre E01.
Enquiries: 685 388

The BULLETIN’S slogan for June
“If you think autonomy is a luxury, try bureaucracy”