



ENTERPRISE AWARD FOR SUSSEX ENGINEERS

Two Sussex engineers have won the £25,000 first prize in this year's Academic Enterprise Competition, organised by the British Technology Group (BTG).

Professor Fred Bayley and Dr. Mike Owen, of the School of Engineering and Applied Sciences, received their prize - for gas turbine cooling technology intended to improve the fuel efficiency of jet engines, such as Rolls-Royce's RB211 - at a special award ceremony and lunch held last Tuesday at the Techmart Exhibition in Birmingham's National Exhibition Centre.

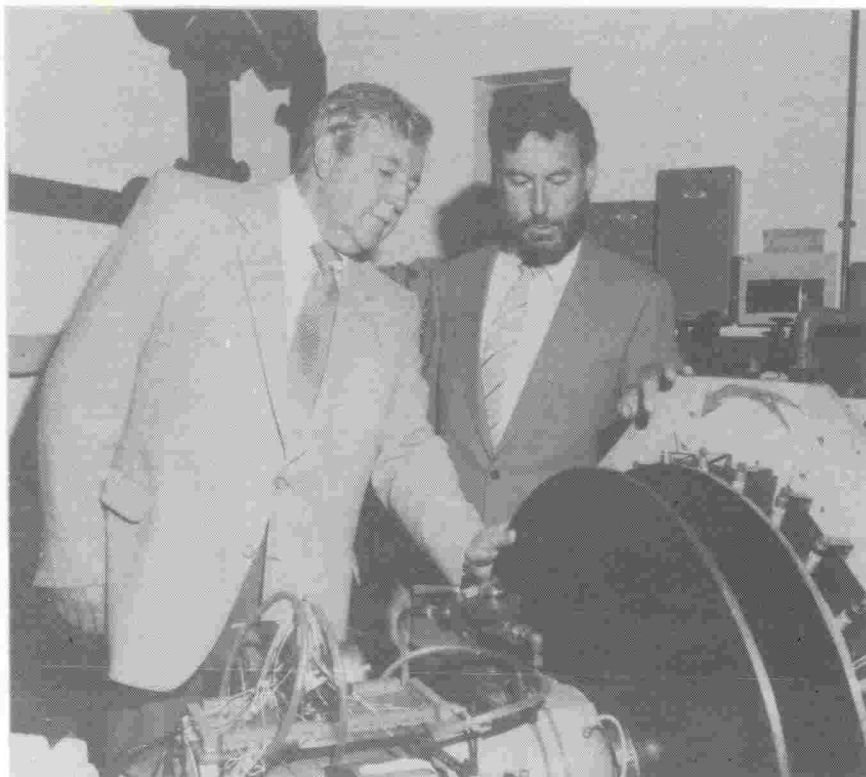
Winning the Academic Enterprise Competition, which is intended to promote the transfer of technology from UK academic institutions to British industry, is the second major boost for Fred Bayley and Mike Owen. They have just received a new research grant of more than £½ million to support the work of their research team in the University's Thermo-Fluid Mechanics Research Centre. This latest grant brings the Centre's total research earnings over the last eight years to almost £2½ million.

The work on which their winning entry in the Academic Enterprise Competition is based is concerned with the fluid dynamic and heat transfer performance of air-cooled rotating components in the gas turbine, especially turbine and compressor discs. These components have become increasingly critical in determining the reliability and operating life of aircraft and industrial engines as turbine operating conditions have advanced.

Roll-Royce Limited and GEC Ruston Gas Turbines Limited are the two British companies who have benefitted from the research which comprised the winning competition entry, although other British and overseas firms (including Sulzer of Switzerland and MTU of West Germany) have provided funding for the Thermo-Fluid Mechanics Research Centre and received research assistance.

Competition for the Academic Enterprise award was stiff, with 80 entries from universities, polytechnics and research centres throughout the country. Second prizes were won by research units at Birmingham and Leicester Universities and at the Cranfield Business Development Centre, with the third prize going to Cambridge University.

Dr. Owen and the research team are understandably pleased with the award. "For a long time the work of the research centre has been valued by individual British and European companies," he commented, "but it's good to see that



Professor Bayley (left) and Dr. Mike Owen beside one of their test rigs.

the work is now being recognised on a national basis for its contribution to the transfer of technology to British industry."

The new award of £547,767 to Professor Bayley and Dr. Owen is a three-year co-operative award funded by the Science and Engineering Research Council (SERC), Rolls-Royce Limited and GEC Ruston Gas Turbines Limited.

CAMPUS NETS £9 MILLION

A massive £9 million was received in research grants and contracts by the University and other campus-based institutions in 1984-85.

Figures just released show that the University's research income rose by 7.4 per cent to £5.17 million (compared with £4.8 million last year) and that a further £4 million was received by University-based research centres - the Institute of Development Studies (IDS), the Institute of Manpower Studies (IMS), the two Agricultural and Food

Research Council (AFRC) Units and the two Medical Research Council (MRC) Units.

The most notable increase was in Education where the research income rose from £65,000 to £186,000 (a rise of 284 per cent). Arts income also showed a significant gain of £243,000 (up 37 per cent), mainly in grants from the Alvey Programme and the Science and Engineering Research Council (SERC) to support artificial intelligence and information technology work. On the science side Biochemistry had the biggest proportional increase, up £58,000 (19 per cent), and the Science Policy Research Unit was up by £78,000 (8.1 per cent).

Income from research grants and contracts

	1984/85
	£
Science	3,407,242
Education	185,760
Library	12,312
SPRU	1,039,000
Arts & Social Studies	529,769
	<hr/>
	5,174,083

News

KEEPING AN OPEN MIND

The Committee for People with Disabilities recently discussed the question of the employment of disabled people by the University and there seemed a number of issues worth setting in front of the University community.

The University has a duty under the Disabled Persons (Employment) Acts to employ a quota of registered disabled people, three per cent of the workforce. In common with most employers, the University is below quota presently; it is not an offence to be below quota but we then have a duty to engage suitable registered disabled people where vacancies arise. In this situation, the employer must obtain a permit from the local Job-centre before engaging anyone but a disabled person. This permit has always been forthcoming. Nevertheless our obligation to disabled people remains and we must ensure that our practices are good.

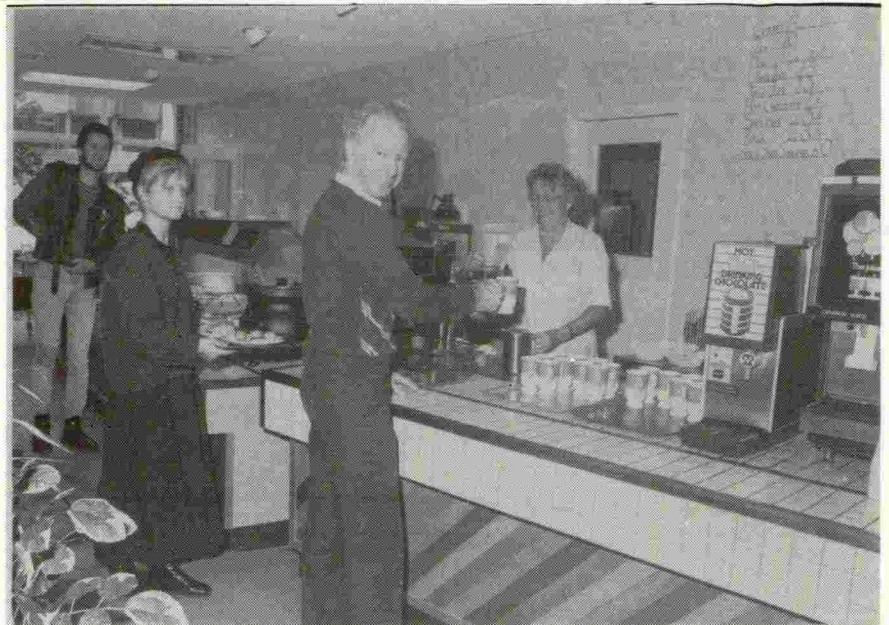
So why put this in the Bulletin? If you think about it, part of the selection process prior to formal appointment is **devoled** from the Personnel Office to a myriad of other groups. You may find yourself interviewing or on an appointment committee. Please give the following some thought. Registered disabled are those whose disability substantially handicaps them in obtaining or keeping a job, which, apart from their disability, would normally fit their expertise and qualification. We should keep an open mind on jobs that a disabled person can hold, assess job requirements in an unrestricted way, look at what they can do rather than at their disability, and be flexible.

As I have discovered in myself, it is easy to harbour unsupported views which might easily become prejudices. Disability is not the same as ill-health. Data available suggest that service length may be **greater** and time lost through absence may be **less** amongst disabled people, reflecting their increased conscientiousness.

The Du Pont company and the British Epilepsy Society both have evidence showing that the safety record of disabled employees is better than average, although we must not neglect precautions specific to individual needs. There is enormous scope in advice and financial support (for adaptation of buildings, purchase of equipment, training, etc.) from statutory bodies and from voluntary bodies that could make a particular job a reality rather than a dream for a disabled applicant.

A word on discrimination. In this area not all discrimination is unreasonable (no car hire to blind people) but we must watch for **indirect** unjustified discrimination, differential treatment not arising directly from the disability but from an indirect consequence (for instance no lift, or no space for the guide dog). Finally I must explain that I proffer these comments as a consciousness-raising act and not as any indictment of our good practices. If Bulletin readers have any questions arising from the issues raised in this article, I can be contacted in the School of Biological Sciences.

Robert Whittle
Chairman of the Committee for
People with Disabilities



A new restaurant and take-away service has opened in the Refectory building. The new facility is in the space previously occupied by the Coffee Shop. Chairman of Catering and Services Committee, Dr. James Hirschfeld, is pictured above about to sample a cuppa in the restaurant's bright new surroundings. A broad range of snacks are available, including hamburgers, fish and chips, pies and pasties. The service will be open lunchtimes from 12 noon to 2 p.m. and during the evenings from 8 to 11 p.m., but these times may be changed subject to consumer demand and reaction. Catering Manager Tom Stevens would welcome comments on the new service from users.

The great plug-in

Bells will be ringing all over campus next Monday morning, (November 4) when the internal lines of the University's new telephone system become operational. Members of the University will then have the opportunity to try out - in the privacy of their own rooms - the special facilities which they have learned about in their training sessions.

It's been a mammoth task to install the system, but work is going to schedule and all of the new telephone handsets on the campus will have been fitted and tested by the end of this week, ready for the great plug-in.

The system will not be fully operational until Monday, November 18, when the external lines will be linked up, giving access to the outside world at the press of the number '9' button for those whose telephones have trunk access. In the meantime the new internal system will be running in parallel with the old internal system and people will have the choice of using the old telephones and extension numbers or the new ones until November 18, when the new system goes solo.

New telephone directories, designed to fit into the training manual folder, have been distributed throughout the campus and every handset will be supplied with an Extension Facility Card which should be placed in the pocket at the rear of the folder. This card gives details of the services, such as camp-on, follow-me, do not disturb, etc., which are available on the particular extension. It also gives the Trunk Access Class of Service - when the telephone can be used for external local and for STD calls - and details of the communications, pick-up and hunt/distribution groups which the extension is part of.

The new telephone system - the biggest

alternations project ever undertaken within the University - has taken nine months to install at a total cost of £960,000. Plessey Communications Systems Ltd. have provided the system, although Gratte Brothers were subcontracted to Plessey to handle the site and building wiring.

"I am very pleased that the installation has been achieved without a single formal complaint", commented Deputy Estates Manager, Roger Bailey, Supervising Engineer for the whole project. "This reflects not only on the competence of the contractors but also on the understanding and co-operation of members of the University, without which the task would have been much more difficult".

Roger is clearly pleased that the end is in sight. "I'm looking forward to the successful completion of this project after years of involvement and planning", he said.

MARTLET



UNIVERSITY - POLYTECHNIC COLLABORATION IN EDUCATION

The University and Brighton Polytechnic are collaborating in a new joint venture across the binary line - believed to be the first of its kind in the country - to approve teacher training courses in Sussex.

The new Joint Professional Committee, which is being established by the two institutions in line with the requirements of the Department of Education & Science (DES), maintains the long-standing tradition of collaboration between the Sussex higher education institutions in teacher training. The University was for many years the Area Training Organisation for Sussex and until 1984 it validated teacher education courses at the Polytechnic and the West Sussex Institute of Higher Education.

The DES in its circular entitled "Initial Teacher Training: Approval of Courses" requires each training institution to have a local committee which will approve initial teacher training courses and discuss their planning, operation and review. Without approval from a local committee, courses cannot be considered for approval by the national Council for the Accreditation of Teacher Education (CATE). The Joint Professional Committee obviates the need for the University and the Polytechnic to have their own separate committees.

The Committee will be chaired by Sir Norman Lindop, former Director of Hatfield Polytechnic, and chairman of the Lindop Committee on public sector validation which reported earlier this year.

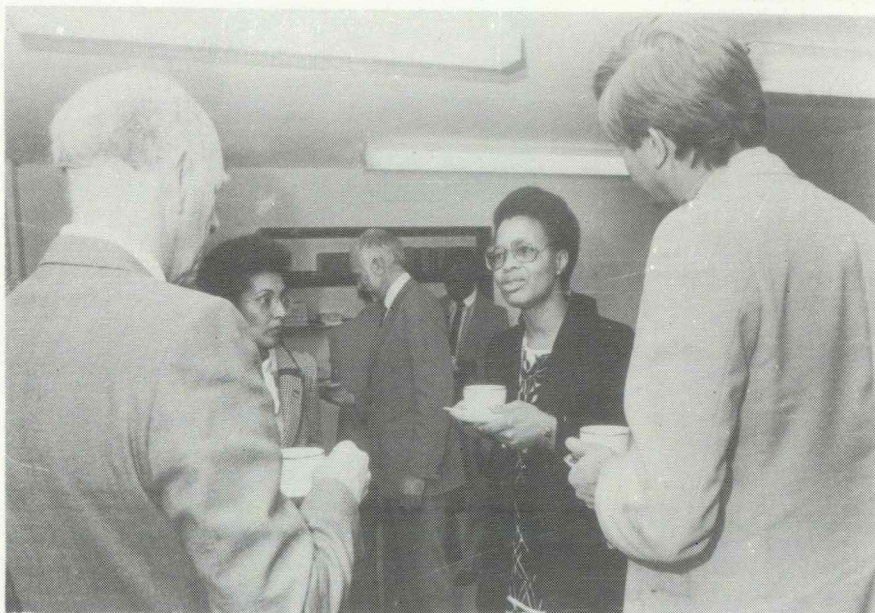
The purposes of the Committee include liaising with CATE (of which Chairman of Education, Professor Tony Becher, is a member), promoting links between the two institutions, local schools and other areas of the community with an interest in initial teacher training, providing a forum for consultation, considering and approving formal course proposals and giving advice on resource matters.

The Committee, which will hold its first meeting early in 1986, will comprise: the chairman, 3 members of the University and 5 members of Brighton Polytechnic; 8 practising teachers; two representatives each from East and West Sussex Education Authorities, and three members from local industry, commerce and the professions.

Commented Professor Becher: "I and my colleagues welcome the new arrangements as a way of reinforcing our links with the Polytechnic, with the schools in East and West Sussex, and with the wider community in the region."

HONOUR FOR VICE-CHANCELLOR

The Institute of Physics is to award the Vice-Chancellor its senior award, the Guthrie Medal, next year. Sir Denys has already received two of the Institute's awards - the Holweck in 1957 and the Rutherford in 1962. This latest award will make him only the second person in the Institute's history to receive three awards. The presentation will be made on May 7.



Senhora Machel (centre) with the Vice-Chancellor (left) and Dr. Chris Colclough.

SENHORA MACHEL VISITS IDS

The Institute of Development Studies (IDS) played host earlier this month to Senhora Graça Machel, the First Lady, and Minister of Education & Culture, of Mozambique.

Her Excellency Senhora Machel visited IDS on October 4 as part of a seven-day tour of Britain at the invitation of the Foreign and Commonwealth Office. The tour, which was organised by the Central Office of Information, was designed to promote English Language training and teacher training in Mozambique and to increase educational contacts between the two countries.

Senhora Machel, wife of the President of Mozambique, was met at the Institute by its Deputy Director, Dr. Chris Colclough and the University's Vice-Chancellor, Sir Denys Wilkinson. During her visit she met members of IDS and Education faculty to discuss educational

research and over lunch had discussions with the IDS group on "Women in Development" and the Education group on "Women in Education".

As Minister of Education and Culture, Senhora Machel is responsible for the direction of all educational matters in Mozambique. The combination of a higher school intake since independence and the country's lack of funds for basic educational needs in the underdeveloped rural areas, poses an enormous challenge to the government, which is currently making major policy decisions on its approach to education.

Senhora Machel was accompanied on her tour by Her Excellency Senhora Frances Rodrigues, Ambassador of Mozambique to Belgium and the European Community, three officials from the Mozambique Ministry of Education and two personal assistants.



Brighton & Hove Albion striker, Justin Fashanu, pictured recently during a workout on the University campus. The Albion manage to keep their Goldstone pitch in good condition by using the University's playing fields for many of their weekly training sessions, and expressed their gratitude to the University in the programme for their recent Milk Cup match against Bradford City. (Photo courtesy of the Evening Argus.)

SALARY NEGOTIATIONS

At the time of publication, University representatives on the Universities' Committee for Non-Teaching Staffs had made two offers for salary increases, which were under consideration by the relevant unions.

For technical staff the offer is 5.25 per cent on each salary point, backdated to April 1, 1985.

For clerical and related staff the offer is for flat-rate increases to each grade, backdated to July 1, 1985. The flat-rate increases are: £234 p.a. on grade 1; £286 p.a. on grade 2; £312 p.a. on grade 3; £364 p.a. on grade 4; £415 p.a. on grade 5.

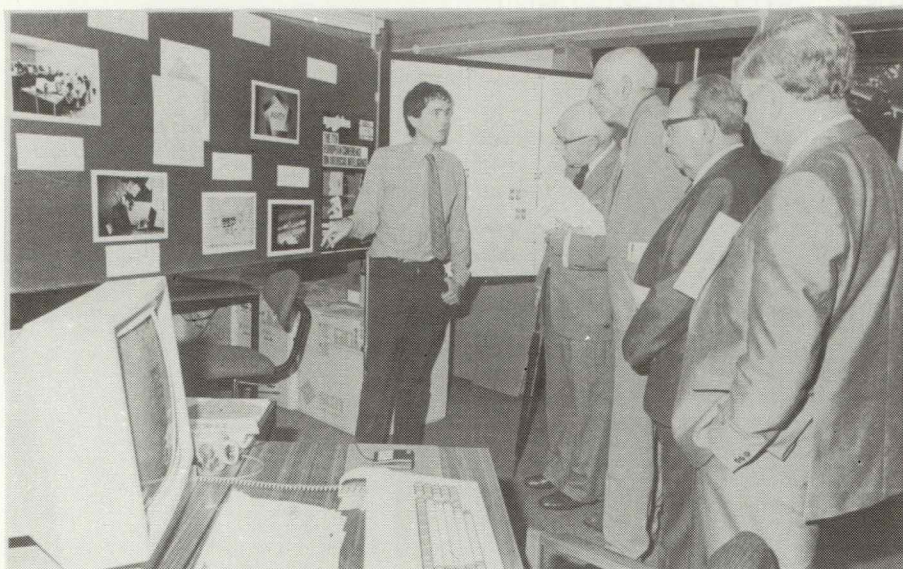
UNIVERSITY INSURANCE POLICY

PERSONAL EFFECTS OF STAFF

The University has extended its insurance policy in a way that will benefit staff. Under the policy accidental damage to, or theft of, personal effects of staff on campus (excluding cash and jewellery) is reimbursed up to £2,000 per person, no single item being reimbursed over £200, or £500 in the case of scientific equipment.

1985 careers convention

The annual Careers Convention will be held in Mandela Hall, Falmer House



An informal open day to show members of the Court something of the teaching and research work of the University was held on October 17. It took the form of six very successful tours of different parts of the University. Our photograph shows some of those who attended looking at a display of the work of the Cognitive Studies programme.

on Wednesday, November 20, from 1 p.m. to 4.30 p.m.

Representatives drawn from a wide range of occupations will be available to give informal advice and information on matters concerned with career choices. Whereas it will be of particular benefit to finalists who will soon be faced with

the need for decisions the Occupational Advisory Service emphasises its value to all students.

The Convention provides a unique opportunity to talk to people with first-hand practical knowledge of what working in their fields actually means.

Vernon Wycherley, O.A.S.

Deaths

BARONESS SHARP

We regret to report the death of Baroness Sharp, GBE, an honorary graduate of the University of Sussex.

Baroness Sharp, who died on September 1 at the age of 82, was Permanent Secretary of the Ministry of Housing and Local Government from 1955 to 1966 - the first woman to attain the highest executive position in a great department.

She was awarded an honorary degree of Doctor of Laws by Sussex in 1969.

DR. FREDERICK TINDALE SHADFORTH

Dr. F.T. Shadforth, who died after a short illness on August 15, was Consultant Psychiatrist to the University Health Service from the inception of the Service in 1962 until his retirement in 1973. His profound and sympathetic understanding of the psychology of late adolescence enabled a great many students to survive and succeed academically who would otherwise have foundered and, equally importantly, his contribution to the psychological training of successive student health doctors, psychotherapists and nurses formed the basis of a well-rounded unit, with proper regard for both the physical and psychological well-being of the student community.

His wide cultural interests (he took an Arts Degree in the Open University after his retirement) and his sincerity

of purpose and warmth of personality made him a delightful colleague who will be remembered with deep affection.

KG

PROFESSOR A.M. UTTLEY

As reported in the last issue of Bulletin, Emeritus Professor A. M. Uttley died on September 13. A colleague writes:

Professor Uttley came to Sussex in 1966 at the age of 60 as a Research Professor in Experimental Psychology. He was the first cognitive psychologist at Sussex and his presence here was largely responsible for the subsequent development of that field, for which he was unusually well qualified since he took his first degree in mathematics and a doctorate in psychology.

During the war and for some years after, he worked at the Radar Research Establishment where he developed an interest in computers. In 1956 he became Superintendent of the Autonomics Division of the National Physical Laboratory, a post which allowed him to pursue the idea of the brain as an intelligent automaton. Under his leadership, his Division became the first centre in Britain to carry out research on the computational modelling of mental processes.

He was largely responsible for organising a symposium at the NPL in 1958 on the "Mechanisation of Thought Processes", which brought together psychologists, mathematicians, control engineers, and workers in artificial intelligence. It was the first international meeting of what was later to be called cognitive science, and many of the participants

subsequently became the leaders of that discipline.

Professor Uttley is best known for his mathematical models of brain functioning and learning: he overcame difficulties in previous less tightly formulated theories by postulating the growth of synaptic inhibition as part of the mechanism underlying learning. His work on brain modelling was highly technical and although the basic ideas have had a considerable impact, some of the details have yet to be digested by the scientific community.

Pete Uttley had all the old-fashioned virtues. He was a gentleman and a Christian; he was kind to everyone with whom he came in contact; he was never vague and never woolly; he thought everything through with scrupulous care and he was a man of complete integrity.

Until recently he still came into the University once or twice a week. His death is a great loss to the University, to his many friends and to his wife and two daughters who survive him.

NSS

MICHELLE KETTERINGHAM - MEMORIAL SERVICE

A memorial service for Michelle Ketteringham will be held on Friday, November 8 at 1 p.m. in The Meeting House Chapel. Michelle, a student in the School of European Studies majoring in German, died in a motorcycle crash during the summer vacation. The tragedy occurred in Patros where Michelle was on holiday.

LEAPS AND BOUNDS

The Gardner Centre's autumn programme progresses in leaps and bounds with dance providing some of the main highlights in the next few weeks. The Centre acts as one of Britain's best venues for touring middle-scale dance companies and two of the top groups in this category are presenting major new works here.

Second Stride has rapidly developed a reputation as the most innovative of contemporary dance companies since its formation in 1982. The company was designed largely as a vehicle for three of Britain's most talented and individual choreographers, Siobhan Davies, Ian Spink and Richard Alston. It has received international acclaim for pushing back the boundaries of modern dance while remaining entirely accessible and entertaining. The programme at the Gardner (October 30 - November 2) is a double bill of works by Siobhan Davies, and includes "Silent Partners", which was the subject of an hour-long TV film for the South Bank Show screened last March. There will also be a brand new work premiered this autumn.

New work is also a feature of Extemporary Dance Theatre's visit (November 12-16), and the programme is again a double bill. "On the Breadline" is a very physical and theatrical dance piece made by one of the rising stars of British choreograph, Katie Duck. Described by Extemporary as "an exciting and radical work", it features plenty of humour, and live music composed by Tristan Honsinger which ranges from classical to jazz in its influences. The programme is completed by "Cutter", a new work from Richard Alston, resident choreographer with Ballet Rambert.

The season of dance coincides with the national "Dance Umbrella" festival,



and continues with Afro-Caribbean dance and drumming group Ekome (November 21, 23) and the Academy of Indian Dance (November 26, 27).

The Gardner Centre is celebrating the tercentenary of Bach, Handel and Scarlatti this autumn with a range of events. The first is a concert by the Guildhall String Ensemble (October 29), with a programme including Bach's Brandenburg Concerto No. 3, and works by Handel, Vivaldi, Respighi and Heberle. One of the best string ensembles to emerge in recent years is joined by the extraordinary recorder player Michala Petri, who made her professional debut at the age of eight.

The Albion Wind Quintet give a special Sunday afternoon concert on November 3, especially suitable for children aged

between 6 and 12. They play a wide variety of music and involve the children as much as possible.

The Chilingirian String Quartet continue their residency at the Gardner with a major concert on November 20, an open rehearsal on November 11 and a lecture recital on November 12.

The ever-popular Moving Picture Mime Show are back on November 5-9 with "The Compleat Burke", a new show directed by Ken Campbell.

New exhibitions of photography and painting open on November 13.

Small ads

USED POSTAGE STAMPS WANTED for the Leprosy Mission. Please send your stamps to: Mrs. M. Watson, 20 Jephson Close, Eastbourne, E.Sussex.

CHRISTMAS SKIING: a trip is being organised to Sol y Nieve (Southern Spain) for Sussex staff, students and friends. £260 fully inc. (flight, skis, lessons, lifts, etc). Contact Diane Edwards, E.P. p/h or int. tel. 07-262 (or 8060).

ACCOMMODATION WANTED urgently. s/c flat/flatlet or consider sharing house, preferably in Lewes area. Contact Maggie int. tel. IDS 02-203 (or 4071) or Lewes 475653.

FOR SALE: detached 4-bedroom house in Kingston village, sun lounge, dble. garage, patio with ample parking for boat or caravan, large well-kept garden. £77,500. Tel. Lewes 472968.

ACCOMMODATION WANTED: New Zealand sabbatical couple seek furnished house or flat, May-August 1986 inclusive. Contact Peter B. Smith, int. tel. 03-426 (or 2338).

WANTED - cheap reliable motorcycle 100cc or less. Contact Barney Dresman, EAPS u/g ph or Brighton 695286.

GUITAR FOR SALE: Suzuki Acoustic Guitar, with case. Excellent condition, only £150. Contact Clive Baldock, MAPS undergraduate pigeonholes, or Tel: Brighton 23584.

NATIONAL THEATRE TRIP "DUCHESS OF MALFI"

A trip to the National Theatre to the matinee performance of *The Duchess of Malfi* by John Webster, starring Eleanor Bron, has been arranged at a very much reduced price for Saturday, November 23. The ticket for the performance, including return coach trip, costs £5.85. The coach will leave Brighton at 10 a.m., arriving London 12 noon, giving two free hours before the 2.15 p.m. performance. Afterwards there will be a further two free hours before leaving at 7.30 p.m. for the return journey. The coach will also pick up/drop off passengers at the University.

Tickets/reservations from Jane Bamford, Arts B245, int.tel. 04-734 (or 2154).

LOOKING INTO PAINTINGS

October 14 saw the publication of a book (by Faber & Faber) and a supplementary study pack (by the Open University), and November 13 will see the first of a series of six television programmes on Channel 4, all entitled LOOKING INTO PAINTINGS.

It all started in May 1982. Elizabeth Deighton, staff tutor for the Open University, came down from London to consult the new Dean of European Studies, Professor Norbert Lynton, about a possible 'short course' on art for the OU's Continuing Education programme. Professor Lynton proposed something he had been considering for a while and for which there had been no outlet so far: to publish something about art that was not about great artists, nor about periods or movements, nor about the 'shock of the new', but about art as communication and thus about the forms of art and how they are used, re-used and adapted for different purposes. The 'genres', in short - discussed often enough among specialists but kept from the wider public, thought to need newsier art talk.

A group was formed. Alistair Smith of the National Gallery and Robert Cumming of Christie's Fine Arts Course joined Professor Lynton as authors of three texts, on narrative painting, portrait painting and landscape and still life painting. Diané Collinson, staff tutor

in philosophy at the OU, provided a discussion of some of the basic questions that art tends to raise. Ms. Deighton edited and introduced and got a glossary organised. All of them worked on the study pack, including six tape programmes accompanied by illustrations and a listing of the country's main galleries and museums. The texts and talks invite participation and are intended to arm people with methods of looking at, and looking into, paintings wherever they find them.

Channel 4 will broadcast six weekly half-hour programmes on similar themes, extending the content of book plus pack. The first goes out on November 13. One of them is on abstract painting; the last, broadcast shortly before Christmas, uses images of the Nativity to comment on narrative painting. All the programmes involve living artists and their work as well as Old and Modern Masters. The series will be repeated in 1986.

Finally, the Arts Council will present and tour three exhibitions on the same themes as the book, in 1986-87, bringing together paintings of several centuries to illuminate each other as well as to please and interest by themselves. "The overriding aim of the whole venture" says Professor Lynton, "is to stop people walking past paintings quite so quickly."

Noticeboard

VACANCIES Faculty & Non-Faculty

The Personnel Office has issued the following summary of posts to be filled. Advertisements for these vacancies have been placed in the local and, where appropriate, national press as well as being circulated to relevant Section Heads and union representatives for circulation to staff and noticeboards. Copies of these advertisements and further particulars, if available, as well as application forms, are obtainable from the Personnel Office, Room 227, Sussex House. This list was compiled on October 22 and is subject to revision.

All posts are full-time, full-year and for male or female applicants unless otherwise stated.

Clerical and Related

Purchasing Assistant, Grade 2, Estates and Maintenance Department.
Secretary, Grade 3, Catering Department, Refectory.
Secretary, 1/2, Occupational Advisory Service, Falmer House.
Senior Recruitment Clerk, 3, Personnel Office, Sussex House.
Salaries Clerk, 1/2, Sussex House.
Clerk, 1, temporary till 31.9.86, Admissions Office, Sussex House.

Manual and Ancillary

Chef, Refectory
General Catering Assistant, part-time, part-year, Refectory.
General Domestic Assistant, Isle of Thorns, Chelwood Gate, Haywards Heath.
Foreman Carpenter, Estates & Maintenance Department.
General Catering Assistant, part-time, Sports Pavilion.
Cleaner, part-time, Sportcentre.
Cleaners, UCNS Grade A, part-time, Student Accommodation.
Porter, UCNS Grade D, Norwich House.
Chargehand Cleaners, UCNS C, Accommodation Area, York House & Essex House.
Porter, UCNS D, Student Residences and Refectory.
Maintenance Man/Woman, Assistant Fitter Grade, Estates & Maintenance.
Cleaner/Teamaker, part-time, UCNS Grade B, MAPS.
General Catering Assistant, part-time, UCNS B, Refectory.

Research and Analogous

Project Coordinator, Range IB, Information Technology in Liberal Adult Education, Centre for Continuing Education.
Project Coordinator, Range IB, Video & Television in Adult Education, Centre for Continuing Education.
Research Assistant, Thermo Fluid Mechanics Research Centre, EAPS
Research Fellow, Artificial Intelligence, Cognitive Studies Programme, temporary for 1 year.
Post Doctoral Research Fellow, temporary for 8 months, MOLS.

Technical

Electronics Technician, 6, Experimental Psychology, BIOLS.
Electronics Technician, 4/5, MOLS
Technician, 5, MAPS.

ASTHMA STUDY

If you suffer from asthma and would be willing to take part in a paid non-invasive (no needles!) study into asthma, Mike Mussell in the Centre for Medical Research, Biomedical Engineering, EAPS Stage 3 (int.tel. 07-317 or 2862) would be pleased to hear from you.

RECENT BOOKS

Recent publications by Sussex authors include:

HOUSING, STATES AND LOCALITIES by Peter Dickens, Simon Duncan, Mark Goodwin and Fred Gray. Methuen. £27.50.

LOW DIMENSIONAL TOPOLOGY. Edited by Roger Fenn. London Mathematical Society Lecture Notes Series, No. 95. Cambridge U.P. Paper £13.95.

UNIVERSITIES: THE MANAGEMENT CHALLENGE by Geoffrey Lockwood and John L. Davies. SRHE and NFER-Nelson. Paper, £14.95.

THE HORSE BUSES OF BRIGHTON AND HOVE by Adrian Peasgood. CCE, £2.95.

LOOKING INTO PAINTINGS by Norbert Lynton, Alistair Smith, Robert Cumming and Diane Collinson. A Channel Four book. The Open University in association with Faber & Faber. Paper, £9.95.

SPEAK FOR YOURSELF. A Mass-Observation Anthology, 1937-1949. Edited by Angus Calder and Dorothy Sheridan. Oxford U.P. Now available in paperback. £4.95.

PLANNING FOR MICROELECTRONICS IN THE WORK PLACE. Edited by Peter J. Senker. Gower. Paper, £19.50.

STACKING THE CHIPS. Information Technology and the Distribution of Income by John Bessant and Sam Cole. Frances Pinter. £17.50.

DATA COMMUNICATIONS AND COMPUTER NETWORKS by Fred Halsall. Addison-Wesley. Paper, £12.95.

All available from
SUSSEX UNIVERSITY BOOKSHOP

LUNCHTIME RECITALS

Chilingirian String Quartet: Monday, November 11, 1 - 2 p.m. Open Rehearsal. Tuesday, November 12, 1 - 2 p.m. Lecture recital on Kurtag Quartet no.1. Group Music Practice Room, Gardner Centre.

Tuesday recitals in the Meeting House Chapel: 1.15 p.m. today (Oct. 29) John Birch (organ); November 5 - Darren Jacob (flute); November 12 - John Birch (organ); November 19 - Bryan Almond (organ).

Sussex Trugs play mainstream/traditional jazz in the Playing Fields Pavilion from 1 to 2 p.m. on Fridays.

Admission to the above events is free.

V-C'S MEETING WITH FACULTY

The Vice-Chancellor's termly meeting with faculty will take place on Thursday, November 28, from 1.30 to 2.15 p.m. in the Senior Common Room.

ASSOCIATION OF UNIVERSITY TEACHERS

At a GENERAL MEETING of the Sussex Local Association to be held in Lecture Theatre A2, Arts A Building, on Tuesday, November 5, from 1-2 p.m., Dr. Alan Taylor-Russell, the National President of AUT will introduce discussion of the National Executive recommendation of a Strike Ballot over salaries. All members are urged to attend to form local policy and to inform the National President of local opinion.

A.A.H. Inglis,
Secretary

CENTRE FOR CONTINUING EDUCATION

Lectures

Thursday, November 7, 6.30 p.m. in MOLS Lecture Theatre: "Louis Pasteur and the fight against infectious disease" by Dr. John Kay.

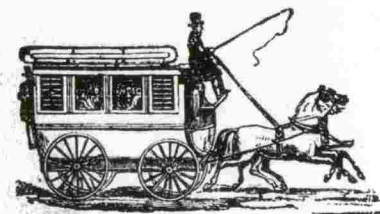
Thursday, November 14, 6.30 p.m. in MOLS Lecture Theatre: "The Sociology of electrons - the physics of metals" by Professor Michael Springford.

Admission to the above lectures is free and no tickets are required.

The Pelham Lecture (in association with the Regency Society of Brighton & Hove) will be held on Tuesday, December 3, at 8.15 p.m. at the University. Sir Roy Strong, Director of the Victoria & Albert Museum, will speak on "Henry, Prince of Wales, and England's lost Renaissance". Admission by ticket only, available from CCE, s.a.e. please.

Saturday School

December 7 at the University: "Ageing and the Human Spirit (I)". Convenor: Dr. Dorothy Jerrome. This is the first of a series of events focussing on spirituality in later life. A second seminar will be held in March 1986.



The Horse Buses of Brighton & Hove

The extensive horse bus operation of Brighton and Hove from 1840 to 1916 is described in this 54-page, well-illustrated publication, by Adrian Peasgood. CCE Occasional Paper No. 25, price £2.95 (inc. p & p).

For further information about the Centre's events and publications, contact CCE in the Education Development Building.

1986 GRADUATION CEREMONIES

The Winter Graduation Ceremony will take place on the morning of Wednesday, January 29 at the Gardner Centre.

The Summer Graduation Ceremony will take place on Tuesday, July 15, at the Brighton Centre.

BULLETIN

The Bulletin is published every three weeks during term-time. The next edition will appear on Tuesday, November 19. Copy must be received in the Information Office, level 2 Sussex House (int. tel. 05-155 or 8208) by no later than 5 p.m. on Monday, November 11.

We can only inform you if you inform us - so please remember to let us know about news events.

The Bulletin is for the information of staff and students of the University of Sussex. Published by the Information Office and printed by the University of Sussex Printing Unit.

BULLETIN**EXTRA****October 29, 1985****COUNCIL PAPER
ON JARRATT****INTRODUCTION**

This Bulletin Extra contains the text of a paper on the implementation at Sussex of the Jarratt Committee's recommendations. The paper was considered at the 110th meeting of Council on October 4, 1985, where it was agreed that opportunity should be given for a wider discussion of the paper in the academic areas and elsewhere throughout the University.

Council has established a number of working groups which will consider the issues and make proposals. These proposals will go through the full committee discussion cycle in 1986. In the meantime the paper is published here to enable a wider discussion throughout the University to take place.

THE UNIVERSITY OF SUSSEXTHE COUNCILSteering Committee for Efficiency Studies in Universities
(the Jarratt Committee)

1

Introduction

The Council at its meeting on 28 June received a paper (C/109/3) on the report of the above Committee. After discussion, Council agreed that the Vice-Chancellor should propose to the October meeting how the recommendations in the Jarratt Report should be progressed within the University.

The Jarratt Report consisted of a General Report and Special Reports on four topics. In regard to the latter four, one does not yet have direct relevance to the University (ie the National Data Study). One other was dealt with in June when paper C/109/3 reported:-

'Purchasing: University officers have been studying this topic over the past year and made proposals to the Vice-Chancellor and the Chairman of Council prior to the availability of the Jarratt Report. Those proposals have subsequently been checked against the Jarratt Report, considered by the officers concerned with purchasing in the main units and approved by the Chairman's Committee of Council. No further action appears to be necessary.'

Appendices are attached containing proposals on how to progress the other two special topics:-

Appendix 2: Financial Management

Appendix 3: Building Maintenance and the Use of Space.

The remainder of this paper deals with the recommendations in the General Report of the Jarratt Committee, which have been divided into categories.

2

Recommendations which current Sussex practice already meets

- 2.1 'Council to assert itself'. Council has done that over the past several years generally with regard to structures (eg Charter and Statutes review, Community Services Area re-organisation, review of the Planning Committee) forward planning (eg GRIPE, the University Plan) and external relations.
- 2.2 'Senate to co-ordinate academic work and formulate academic views to assist Council'.
- 2.3 'Vice-Chancellor to be academic leader and chief executive'. More or less stated in the Charter but made more explicit in the June 1985 Council paper on the Vice-Chancellorship. However, it is suggested that terms of appointment of the next Vice-Chancellor should contain a clear statement of the authority from Council for the Vice-Chancellor to make executive decisions as the chief executive or general manager of the University.
- 2.4 'Organisational structure to be reviewed regularly, norm of a termly cycle of meetings, delegation of budgets, delegation powers to Chairmen of committees and officers, tenure of heads of units to be 3-5 years, duties of officers to be specified' etc. All met by the contents of the Organisation of the University document and its annual review.

- C/110/2 2.5 'Heads of Departments to be responsible for allocating duties to academic staff'. Built into the role of the Deans, in consultation with Subject Chairmen.
- 2.6 'Administration to be one unit and co-ordinated by its senior officers' 'need for admin training and transferability of staff' 'need for an annual review of admin staff and their performance'.
- 2.7 'Central University control over staff appointments'.

3

Recommendations which will be met if proposals currently under consideration are approved

- 3.1 'Creation of a small planning committee responsible for integrated planning, resource allocation etc'. Already met almost fully but the current proposals to reduce the size of the committee and amend marginally the terms of reference would meet it fully.
- 3.2 'Fewer committees and more managers in non-academic areas'. Would be met largely if the proposals on 'Community Services, Businesses and Welfare' are approved.

4

Recommendations which can be met without much policy difficulty

- 4.1 'Creation of a formal corporate planning process' which accepts conditions of uncertainty, which is on a rolling basis, integrates all activity, contains a strategic dimension, considers options, is selective, based on units of sufficient size, serviced by the Administration (possibly with a Planning Officer) and which is supported by proper management information (University performance assessment, unit profiles, performance indicators, control statements for units which include forward commitments and the full costs of each unit etc). Sussex had a formal Planning Process until the mid-1970's which met the essentials of this range of recommendations.

Action The Administration to draft such a formal corporate Planning Process for detailed consideration by the Vice-Chancellor and senior officers prior to its submission direct to Council and Senate.

- 4.2 'Council business to be more clearly separated into policy and routine'. Sussex has attempted to do this since the late 1970's but the practice has not been very successful. It appears to be an opportunity to re-assess how Council functions, and the internal and external perceptions of it.
- Action The Chairman of Council, the Vice-Chancellor, the Treasurer, the Registrar & Secretary and the Deputy Secretary to review the structure of Council agendas and papers, including inviting members of the Council to submit ideas and comments.
- 4.3 'Holding budget centres responsible for what they have achieved'. At present Sussex has a thorough system for reporting on University and unit accounts to Planning Committee, Senate and Council but the reports are on financial performance and not on activity performance.
- Action Include the aspect in the action under 4.1 above.
- 4.4 'Fewer committees, with fewer members and more delegation to officers'. Para 3.2 above covers much of this but there are other parts of the

committee structure to be looked at.

Action The Administration to put proposals to the Vice-Chancellor and senior officers prior to a submission to Council and, where appropriate, Senate, Areas and Schools.

5

Recommendations which present Sussex with constitutional or policy difficulties

- 5.1 'Staff Development, appraisal and accountability' including an annual review of performance. In regard to academic staff Sussex has procedures for the annual review of probationers, staff at the top of the lecturerscale re promotions and it has certain record forms but it does not have a formal annual appraisal procedure. Much of those procedures has been negotiated with the AUT and significant proposals for change would require re-negotiations.

Action Senior Pro-Vice-Chancellor, Pro-Vice-Chancellor (Arts) and Pro-Vice-Chancellor (Science) to make proposals to the Vice-Chancellor and the Chairman of Council for submission to committees as appropriate. The action to be deferred until early 1986 in order to know the outcome of national discussions.

- 5.2 'Development and usage of Performance Indicators'. There are several national and international projects working on the development of Performance Indicators. It would be a waste of effort for Sussex to attempt to develop its own indicators.

Action The Administration to monitor external developments and to make proposals to the Vice-Chancellor and senior officers later in the 1985-86 session.

- 5.3 'The need for management training for senior academic officers'. As with 5.2 above there is time to await national reactions to the recommendation.

Action The Vice-Chancellor to make proposals in following discussions in the Committee of Vice-Chancellors and Principals. If the national discussions do not produce results by 1986, the Vice-Chancellor and the Senior Pro-Vice-Chancellor to make proposals for action by Sussex.

- 5.4 'Council to search for more younger executives from industry and commerce as members possibly at the expense of local authority representation'. The categories of membership of Council are laid down in the Charter so moves in that direction would require Charter amendment unless the local authorities are prepared to use some of their places to appoint non-representatives. The opportunity should be taken to review the process by which members of Council are appointed, and the expectations Council has of its members.

Action Council to discuss, with the Chairman of Council, the Vice-Chancellor and the Registrar and Secretary to follow-up the discussion.

- 5.5 'Units should as far as possible be charged the full costs of the services provided to them including overheads'. Sussex already meets some of the examples used to illustrate this issue (eg telephones) and others will be covered in the report on Maintenance and Space, but there remain other aspects to consider.

Action The Administration to draft proposals for consideration by the Vice-Chancellor and senior officers prior to the submission to Planning Committee, Senate and Council.

- 5.6 Resource allocation to the Administration. The Report adds considerably to administrative tasks to be undertaken both by academic officers and the Administration. In regard to the Administration, for example, it requires more effort on planning (including the possibility of the appointment of a Planning Officer), or management information (which would mean more expenditure on staff and computing facilities), on financial management (eg fuller accounts, more detailed control statements, new value for money studies) on space management, on assistance to academic office-holders etc.

Action The Vice-Chancellor and the Chairman of Council to convene a group consisting of the Pro-Vice-Chancellors and two or three lay members to discuss the topic and make recommendations to the Council.

- 5.7 Designation of Cost Centres and specification of their relationship to the Council. In the academic area Sussex has neither the traditional University - 5 to 8 Faculties - 40 to 60 Department structure nor that of the University - 8 to 10 Schools of Studies of some newer universities; in both these cases it is easy to designate cost centres. At Sussex the Academic Areas are the main budgeting units but they are far too large (except Education) for designation as Jarratt cost centres; even if they remain as organisational and planning bodies the University would need to identify and designate budget and cost centres below the Area level. This range of issues was considered by the Planning Review Body in 1973 and an extract from its report is attached (Appendix 1); the Review Body's report was not decisive on this topic and led to no changes in the Area/Schools structure. The situation is also complicated by the differences between the Arts/Social Studies and the Science Area; it would be easy to designate cost centres in Science without much, if any, change (ie the Schools of Studies operate virtually as cost centres) so the difficulty lies almost entirely within Arts and Social Studies.

Action Senior Pro-Vice-Chancellor and Finance Officer

to produce a paper for consideration by a working party consisting of Vice-Chancellor, Senior PVC, PVC (Arts), PVC (Science) and three lay members of Council with the Registrar and Secretary and the Finance Officer. The paper to be submitted to Subjects, Schools and Area Committees, as well as Planning Committee and Senate, for discussion.

- 5.8 'Council to appoint Heads of Departments on the nomination of the Vice-Chancellor after consultation'. The first difficulty is in relating the term 'Head of Department' to the Sussex structure ie does it refer to the Dean of a School or a Subject Chairman? The second difficulty is that traditional practice at Sussex has been for these appointments to be made by the Senate; indeed that is laid down in the Charter as far as Deans are concerned. The third difficulty is that almost all such appointments are now made through elections. However, it is important to bear in mind that the Jarratt concern is that there should be a Council appointed officer in each budget centre who would be responsible to the Council for the management of resources; if necessary that office could be separate from the academic leadership of the unit.

Action This recommendation cannot be considered properly until Council has resolved the designation of budget/cost centres. Leave it on the table until the Spring Term 1986.

6

Conclusion

There will be further national consideration of the Jarratt Report before 4 October on which an oral report will be made, though the main national debate will be at a Universities Conference on 31 October 1985.

8th October 1985

Vice-Chancellor

Appendix 1

Extract on Schools of Studies from the Report of the Planning Review Body (January 1973)

Schools of Studies

The Review Body began by investigating whether Schools could be made the main academic planning areas. Reasons for such a change would include:-

- (a) Schools are the primary academic units of the University and may not reach their full potential as a form of organisation under the umbrella of a co-ordinating area;
- (b) it would carry devolution further as the University continues to increase in size. The Arts and Science Areas will soon be as large as the University was in 1967 when devolution to the Areas was agreed upon. The Schools will be large units requiring a greater devolution of responsibility to them;
- (c) it would reduce the number of levels in the organisational and planning systems;
- (d) some pressures exist for direct University involvement in certain functions currently devolved to the Areas (e.g. unionisation, teaching across the Area boundaries) i.e. there is pressure on the Area level both from below and above.

The Review Body looked at the possibility of devolving to Schools the responsibility for the organisation and planning of student affairs, teaching and curricula, research, academic faculty, other staff, other resources etc.

However, the Review Body felt, although it might be possible to devise procedures and mechanisms to implement the proposal to make Schools the main planning units within an Area framework, nevertheless it would be undesirable to attempt a complete devolution of functions from the Area committees to individual Schools at this time. The detailed reasons are as follows:-

- (i) if the Area level support was removed, some Schools might become dominated by subject interests which could eventually lead to the complete erosion of the School concept;
- (ii) the existing planning process involves the Area committees formulating overall plans which are by no means merely the sum of the individual plans of the Schools. This aspect of academic planning, and particularly the exploration and fostering of new developments within the Area or the ensuring of inter-Subject or inter-School integration, cannot easily be carried out by the individual Schools;
- (iii) the abolition of the Area level would lead to the re-centralisation of parts of the planning function which can be more effectively conducted in the Areas; for example, at the moment it is the responsibility of the Area committees to apportion the total number of Area faculty posts between different Subjects and Schools taking into account the specific needs of particular groups, the question of academic development, and of the overall balance of academic interests. In the absence of an Area level, it is probable that a University committee would have to undertake that function, or posts would have to be allocated to Schools on the basis of a formula (e.g. student numbers) which would necessarily be rigid and have a conservative tendency: new areas of activity and small Subject Groups might be neglected;

- (iv) if decision-taking or planning functions were to be delegated to the Schools, one of the effects would be a greater diversity of practice within the University in all fields of activity (e.g. assessment procedures, teaching methods, research organisation, planning techniques). Diversity would have to be within principles and guidelines set by or for the University (agreements with the UGC, CAG, Unions etc.) and there would have to be perpetual discussion of the flexible limits of diversity in the Senate. Some divergencies might lead to problems for faculty and students (e.g. those concerning detailed selection procedures, teaching methods, course content and assessment practices (and standards);
- (v) the academic inter-connections and overlaps amongst Schools, particularly in Arts and Social Studies, might be weakened in that it would be in the general and financial interests of Subject Groups to be strongly identified with an individual School (i.e. the source of funds and posts);
- (vi) further, the abolition of the Area committees would require much clearer boundaries between Schools. Schools in Arts might thus become more like Science Schools in that inter-disciplinary work might be strong in the subject areas contained within the boundaries of the School but less common across School boundaries, contextually might become unique to the School, each major would feature in fewer Schools etc. Also greater differences may emerge in the syllabus of the same Subject in different Schools.;
- (vii) where a subject functions at present mainly within one School the proposals might have little effect, but where a subject at present functions in a range of Schools the above proposals would tend either to fragment the subject or gradually to concentrate it in one School;
- (viii) the individual Schools would not be the most efficient units on which to base the allocation of some resources. Thus Schools do not have a constant and equal interest in certain expenditures (technicians, postage, travel, research assistance, equipment, etc.). As a result, some of these might be neglected in some Schools, or prove excessively costly (in terms of alternatives foregone) in others. At the moment an overall view can be taken because the Area is reasonably large and its committee is responsible for all activities. This would be much more difficult, particularly in Arts and Social Studies, if each School, with a relatively small budget, was responsible for a wide range of activities.

While the Review Body's discussions do not point to any immediate and far-reaching change in the pattern of Areas and Schools, it recognises that some changes are or may be desirable. The work of the Academic Policy Group will have significant effects in that respect. Moreover, as the University grows larger over the next two quinquennia, the existing academic Areas may individually become too large to achieve their original purposes and it may therefore be necessary to allocate important responsibilities to somewhat smaller units. If the number of Schools were to grow significantly then this might be done by creating further academic Areas each embracing a number of distinct Schools. Alternately it may be that the number of Schools will remain roughly constant but that each of them, as it grows to a fairly substantial size, will assume some or all of the functions of existing Areas.

The Review Body also wishes to stress that since Schools are the primary academic units of the University, the achievement of their full potential needs to be further encouraged. It recommends, therefore, that:-

- (1) the existing trend of placing the management of the resources allocated more firmly upon a School basis should be encouraged. Faculty posts, supporting staff posts, School Funds, Laboratory funds, etc. could be allocated by the Area to Schools and the Schools would then be responsible for the management of those resources (e.g. for the allotment of duties to faculty members);
- (2) the Areas should explore methods of devolving greater freedom of decision-taking to Schools in academic affairs (e.g. in teaching methods); it was noted that this proposal should be seen in concert with other proposals (evaluations, visitations etc.) which would provide the University and Area levels with better information on School practices and performance;
- (3) the Schools should collect information necessary for planning and when appropriate set up planning groups to define particular areas of concern and make proposals for their development.

Appendix 2

Jarratt Report: Financial Management

- 1. The recommendations in the Report on Financial Management are based largely on the Special Studies undertaken with the help of management consultants at the University of Edinburgh (Coopers & Lybrand Associates) and University College London (Deloitte, Haskins and Sells), though the main committee's recommendations reject some and extend others of the proposals in the special study reports. Although there is no such thing as a typical university institution in this as in other respects the choice seems to have been particularly unfortunate if, given the size of the sample, representative conclusions on the quality of financial management in universities were to be drawn.
- 2. Edinburgh happened to be one of a larger sample of universities studied in the early seventies for a DES financed project on Planning and Management in Universities undertaken jointly by senior administrative staff at this University and another firm of management consultants (Peat, Marwick, Mitchell & Co). A brief but nearly accurate description of its system of financial management then would have been "non-

existent". It does not appear from the latest report that much has changed since. For instance, the existing central accounting system only provides analysis required for the published accounts and the U.G.C. returns. "The coding system does not provide sufficient analysis to satisfy the needs of those responsible for budgets within the University". Departments, therefore, have to duplicate the accounting work by keeping their own records. The new Director of Finance has made recommendations for changes which he is trying to implement with what appear to be inadequate resources and the rather thin special study seems to be largely based on these recommendations which it endorses.

- 3. The report on University College is a much more impressive document. It shows that in a number of ways the College is in the forefront of institutions in its financial management systems - for instance it is one of the few places where research performance has for some time been a specific factor in the determination of departmental allocations. Insofar as shortcomings in the financial management system and performance of the College are detailed, these are largely attributed to the federal nature of the University and in particular to the fact that the College is dependent for the production of its accounts upon an out of date and inflexible University wide computer system. The cost of the system is a charge on the grant before its allocation to the Colleges so a College which duplicates or supplements the system, as University College has to some extent already done, has to pay twice over for its accounting system.
- 4. Given the special circumstances of the institutions covered by the Special Studies it would not be surprising to find that most universities which operate rather more up to date systems were to claim that their procedures satisfied or went a long way to satisfying many of the Jarratt recommendations and Sussex would not be unusual in being able to do this. On the other hand, there is no room for complacency and always scope for further improvements. The rate at which these can be brought about depends very largely on the resources made available particularly for staff in the management accounts section of the Finance Division and the Administrative Data Processing Unit and for computer hardware and development software. If the present levels of resources are maintained continued progress will be possible but it will be slow. Rapid improvements or radical changes would require additional resources.
- 5. The remainder of this report details the Jarrett recommendations in turn, briefly describes the Sussex situation and, in appropriate cases, recommends appropriate action:-

- (a) "A domestic manual of Financial Procedures and Regulations, approved by the Council, should establish a uniform reporting framework and enable comparisons to be made between budget centres."

A survey of University practice in this matter carried out by the Internal Audit office at Sussex in 1983/4 showed that only about one-third of U.K. universities had codified and detailed documents of this sort and many of these were not kept up to date. Sussex is rather unusual in having a quite comprehensive description of its budgetary system describing how budgets are determined and rules for their control. This document was last updated in November 1984 (P/194/2). It is likely that changes in the system will be required as a result of the review of the planning process recommended in 4.1 of the main paper and it is hoped that a revised document can be submitted to Council for approval during the next twelve months.

Regulations on other matters exist, if at all, only in fragmented form. A start was made during 1983/4 in bringing these together, updating them and trying to fill the gaps (using knowledge of actual practice, copies of regulations in use elsewhere and the standard professional literature). Staff reductions in the audit section prevented progress on this work in 1984/5 but a recent strengthening of the staff (see (1) below) will make it possible to resume work and it is hoped that a set of Financial Regulations will be submitted for approval by Council within the next twelve months and copies will then be circulated to spending officers and others. A more detailed set of Financial Procedures will also be drawn up for more limited circulation. This will be descriptive of approved procedures and will be used primarily for instruction and training of accounts staff although appropriate sections could be made available to other interested persons. It will also be used by internal audit in checking that proper procedures are followed. In the related, and to some extent overlapping, field of establishment work the Personnel Office has for some years issued and periodically updates an Index of Establishment and Personnel Procedures. A further update is in course of preparation.

- (b) "Each budget centre should prepare an annual plan including a budget covering all the expenditures for which it is responsible. When this has been approved or amended by the planning resources committee and Council, the centre should be monitored and held fully accountable for the plan's fulfilment."
- This is done so far as it relates to accounting control but activity performance is not, generally speaking, monitored. (See paras 4.1 and 4.3 of the main paper).
- (c) "Each budget centre should be given as much delegated authority for administering its plan as is consistent with the procedures and regulations laid down in (a) above, and within the requirements of internal audit (see below)."
- This is done.
- (d) "Where there are intermediate authorities within the budgetary line they should hold the primary budget centres responsible for performance and themselves account to the planning and resources committee."
- This is done.

- (e) "Effective financial management requires that cash resources are used to maximum productive purposes. This is achieved by purchasing goods and services of required quality at least cost; maintaining minimum stock investment commensurate with operational needs; and maintaining maximum positive cash flow and optimum investment income from it."

Discussions will be held with the Purchasing Officer about the best way to use the accounting system to help him and the internal audit section to monitor University purchases (a separate report on Purchasing has already been approved and implemented).

Sussex is unusual in keeping detailed records of and bringing into the balance sheet stock values for the main Science Area stores as well as the Central Stores, Estates and Catering.

Cash flow and investment income are dealt with in (f) below.

- (f) "Cash flow forecasting and control, with monitoring of creditors and debtors, is a vital aspect of income management and should be designed to identify promptly surplus funds available for short and medium-term investment. Professional investment advisors should be employed and an investment appraisal service used to assess investment management performance."

The only substantial funds available for long term investment are held by Trustees for the benefit of the members of the non-academic staff pension fund (academic pensions are dealt with nationally). Two insurance companies are employed as fund managers and the investment management performance is monitored by an investment appraisal service (The total invested is about £7 million.)

Most University general funds (variable seasonally but averaging about £8 million in 1984/5) are invested in short and medium term securities (e.g. local authority, bank, finance house and building society deposits, bonds etc.). Investment is under continuous review by a Deputy Finance Officer who is in touch with five or six brokers. General policy on investment is regularly reviewed by this officer with the Finance Officer and discussions have been held periodically with the Chairman of Council or the Treasurer. The uncertainty of the financial outlook for the University makes it unwise to contemplate longer term investment of balances.

The Deputy Finance Officer maintains a close daily review of cleared cash balances and continually updates forecasts of cash flow to maximise income. The computerised creditor system ensures that payments are made at the optimum time to maximise investment income while obtaining discounts where they are worth taking and complying with creditors trading terms (for control of debtors see (h) below).

- (g) "Research contract overheads should be identified and levied at full cost unless a conscious decision is made to accept a lower rate on clearly stated considerations. Universities should engage outside advisers where the volume of contract work is substantial."

All research contract applications are channelled through a single Research Grants Office to try to ensure that maximum overheads are earned.

- (h) "Tuition fees are a substantial element in university income and their collection should be accelerated by early issue of invoices, particularly in respect of returning students."

The comments in the report seem to be prompted by the relatively poor performance of University College in the annual statistics of tuition fee collection produced by the Southern Universities Finance Officers Group. This is attributed to the weaknesses of the London University Registry computer system which "does not allow the Finance Division to exercise financial control over fees"! Sussex has performed consistently well in these statistics. In 1983/4 it was placed 3rd out of 18 institutions (U.C.L. was 17th) and in 1984/5, when our term started one week later, Sussex was 6th (and U.C.L. was 16th).

- (i) "Internal audit should extend beyond probability and systems audit to a value for money audit. The internal auditor should be responsible for his professional performance to the Treasurer or Chairman of Finance Committee and major audit reports should be available to Council."

An annual survey produced for the Finance Officers Conference shows that approximately half the institutions represented had internal audit sections. Most were of modest size and many, like Sussex, had been run down in recent years. By 1984/5 our section had been reduced to one temporary junior audit clerk and a part-time clerk supervised on a very part-time basis by a Deputy Finance Officer. A reappraisal of priorities, taking account of the Jarratt Report, has led to a strengthening of the section in the current year (largely at the expense of other sections though the Institute of Development Studies has agreed to make a contribution to acknowledge the extension of the service to its accounts). It now consists of a full time Assistant Finance Officer (for the first time since 1980), a full time senior clerk and a part-time clerk and a Deputy Finance Officer who as well as supervising the section will be able to devote a significant part of his time particularly to value for money audits. In addition it has been agreed that members of administrative faculty (including some from outside the Finance Division) will be attached for particular value for money projects for which a group of senior administrative officers, including the Registrar and Secretary and the Finance Officer, will act as a steering committee.

The proposed revised terms of reference of the Planning Committee in paper P/194/5 which was approved in principle by Council at its June 1985 meeting and will be considered again later in the term

when the comments of Senate are available contains the follows:-

"It is also the body, on behalf of the Council and the Senate, which is responsible for monitoring and evaluating activities in the University which includes the undertaking of reviews of the financial and academic performance and standing of any unit, and the assessment of the activities of any part of the University."

If these revised terms of reference are approved it might be considered desirable for Planning Committee, or perhaps a small sub-committee under the chairmanship of the Treasurer or another lay member, to commission and consider value for money reports.

The practicability of the recommendation in the Jarratt report that the internal auditor should be responsible for his performance to the Treasurer depends a good deal on the seniority of the internal auditor as well as on the willingness of the Treasurer to be involved on a continuing basis in this way. Hitherto the post has been filled at a relatively junior level, sometimes as a training post and it has been felt more appropriate to provide the necessary professional guidance by establishing a reporting relationship through a Deputy Finance Officer to the Finance Officer. Similar arrangements are in operation at most other universities. Although this has not led to any difficulties it is suggested that the arrangement in operation at certain universities whereby the Internal Auditor (and/or the Deputy Finance Officer in respect of his audit duties) be given a formal and explicit right of access to a senior University officer e.g. the Treasurer if he considers it necessary to report directly to him on specific matters should be adopted here.

- (j) "Presently most management accounting systems are inadequate. They are also frequently held both centrally and locally and are incapable of integration. The above proposals require an integrated system to provide, inter alia:

(i) for cost centre/operating units:

- payments and commitments to date by operating units and projects.
- payments to date by type of expenditure and supplier and discounts obtained.
- uncommitted resources to date.
- other returns to users' requirements.

(ii) for intermediate levels of responsibility:

- summary reports of unit financial operation related to budgets.
- aggregated financial report for the area of responsibility.

(iii) for Council:

- annual first and revised estimates in total and by appropriate sectors of responsibility.
- summary financial reports related to budget in total and by sectors of responsibility.
- cash flow report and forecast.
- performance analyses of relevant indicators such as discounts received, frequency and volume of purchases by type, etc."

The acquisition of a new administrative computer in 1981 made possible significant improvements in the management accounting system at Sussex. The full implementation of the improvements has been delayed by shortages of staff and funds for additional hardware and software. Continuing improvements are planned but can only be implemented quickly if additional resources are made available. A case for funds for administrative computing will be put to the Computing and Equipment Committees this year.

The system is capable of producing up to date information in a format which is flexible to user requirements. Unlike the systems described at Edinburgh and University College analyses designed to meet both financial accounts (including U.G.C.) and management accounts requirements can be produced.

The up-to-datedness of this information is achieved by the input of invoices on receipt (not delayed until payment) and a facility (only widely used in the Science area at present) to include commitments based on outstanding orders. Although print outs are normally produced monthly they can be produced at short notice on demand and direct interrogation from about 20 terminals in accounts offices in various parts of the University is possible. The most obvious improvement in the service to users would be the provision of terminals for direct interrogation of the system by spending officers. A start is being made by extending the system to the Library (which has a large volume of non-pay transactions) but further extension is inhibited by lack of funds for hardware, wiring etc. This will form part of the case to Computing and Equipment Committees referred to above.

A good deal of work in improving the content and presentation of data has been done in the last twelve months for early implementation in the Science Area. It is capable of extension to other areas though to obtain the full benefit e.g. by inputting outstanding orders to produce a full commitment accounting system would require additional clerical staff resources. Such resources would also be required to cope with the accounting implications of implementing the recommendations of the special studies on Maintenance of Space (see separate appendix)

The usefulness of the information produced by management accounts depends a good deal on the coding analysis in use. Minor changes are easily made on a piecemeal basis but radical changes require careful planning and can only be implemented at the start of a financial year. It is important therefore for users (committees as

well as individuals) to stipulate clearly their requirements as early as possible. It is likely that significant changes will in any case need to be made e.g. arising from changes in cost centres (ref para 5.7 of the main paper) and any move towards separate accounts for teaching and research costs (only partially provided for in our current coding analysis).

Management accountants will discuss cost centre and intermediate level ((i) and (ii) above) records with spending officers. So far as information to Council is concerned original and revised estimates and financial reports ((iii)(a) and (b) above) are already produced. It is suggested that the report on the Planning Process and on monitoring of performance against budgets referred to in para 4.1 and 4.3 of the main paper should include recommendations for any changes in content and timing of such reports. Steps would then be taken to ensure that reports to area and unit committees were prepared on a consistent basis e.g. to ensure that detailed forecasts of income and expenditure submitted to the committees could be aggregated to build up the reports Planning Committee and Council. It is suggested however that reports on cash flow and purchasing, though necessary for operational purposes, are not appropriate for consideration by Council.

24th September, 1985
Document : JARRAT.COM

Appendix 3

Building and Plant Maintenance and Works and the Allocation of Space

A

Summary of the Jarratt Recommendations

The main points of recommendation from the special studies conducted at the Universities of Loughborough and Nottingham are summarised below with the relevant recommendations from the main report in brackets where appropriate. In general the recommendations are concerned with two main aims. Firstly, the need to improve the management, technical and financial, of the Estates function. Secondly, to make the University, and in particular its operational academic units, more aware of the costs of the buildings and space they are occupying.

1. Rolling Programme of Maintenance

The importance of preparing a forecast over at least three years for major maintenance to identify the best time to carry out such work is emphasised. (Recommendation 11(a) Appendix D.)

Action: This is done at Sussex and considered by Buildings Committee. A major dilapidation survey is nearing completion which will significantly revise the forecast this year.

2. Annual Review of Buildings and Services and the maintenance programme

The level of serviceability which should be regarded as acceptable should be considered, and the analysis of cost benefits of 'patch' versus 'long term' repairs should be annually reviewed.

Dilapidation surveys with limited detail could be used to check the effects of different levels of maintenance input. (Recommendation 11(b), (c) and (d), Appendix D.)

Action: This has also been the practice of Sussex since the Estates Section professional staff was strengthened in 1983-4.

3. The advantages and disadvantages of the use of internal labour versus external contractors should be examined. Routine maintenance on a regular basis might be more appropriately and cheaply let to a contractor rather than ad hoc "off loading" of excess work which leads to delay and higher costs. Such contractors would also become familiar with University practice, and hence not require double manning through the attendance of University personnel. (Recommendation 11(e) Appendix D.)

Action: Contract labour is used regularly but the Site Team intends to experiment in the way suggested by Jarratt; for example, contract labour only might be used on the off-campus properties to check the assumptions in Jarratt about costing and the ability of contractors to build up sufficient knowledge and expertise not to require 'double' supervision.

4. Performance indicators are possible if jobs are fully estimated and outcomes compared with estimates. A schedule of rates for certain jobs would form the basis for contracting out of some work and provide guidance for monitoring of direct labour and external contractors and comparison of their relative costs, if the use of all available paid hours of direct labour and supervisory costs were recorded. The point was also made that internal labour did not however incur VAT charges and that a paging system could reduce the number of returns to base necessary and thereby increase the productive hours in a day. (Recommendation 11(f) Appendix D.)

Action: The Site Team will review the rates for jobs and will propose a range of performance indicators to the Buildings Committee.

5. More responsibility for contractors should be given to trades foremen to improve supervision, and reduce the load on officers. Also, a weekly meeting of officers and foremen to monitor work and outstanding maintenance requests and predict future workload would remove the ad-hoc nature of contracting out work. It should also then be possible to assign priorities to demands for maintenance and also consider the rela-

tive benefits of temporary versus major repair (mentioned in paragraph 2) and the use of direct labour or contractors.

Action: A weekly meeting will be instituted from which proposals concerning supervision of jobs and projects can be expected through the Site Team.

6. It was suggested that temporary supervisory staff could be employed for peak periods.

Action: This will be done.

7. Design and development costs should also be taken into account in analysing the cost of projects. More detailed and accurate cost estimates prior to decision on funding would entail more work for the department and hence for projects but it was felt important to tie expenditure down more closely and carefully to specific projects rather than seeing the building minor works budget as a homogeneous unit within which it is possible to virement between projects. (Recommendation 11(i) Appendix D.)

Action: See Section B below.

8. Financial control. Data should be on line commitment accounting and distinguish between different elements. There should be no virement between controllable and non-controllable items, but virement between pay and non-pay items should be allowed. This would mean that the Estates Section would not be penalised for increases in costs beyond their control but that where savings were made in these, they could not be used to offset overspending in the controllable items. The pay/non-pay virement would mean that the most cost effective solution to a particular job can be adopted be it direct labour or contract work according to fluctuations in workload etc.

Action: See Section B below.

9. The full cost of repairs and maintenance should be transferred to the departmental cost-centre budget. This extends the system commonly applied to Halls of Residence to all cost centres. Clients who have budgetary accountability for the cost of maintenance are more likely to demand high standards. (Recommendation 11(h) Appendix D.) It needs to be noted that there is a conflict between this recommendation to devolve maintenance budgets to cost centres and the ability to maximise cost effective solutions to maintenance by the flexible use of the budget described in paragraph 8 above, or if a rolling programme of maintenance to optimise the timing of the work is to be devised by the Estates Section.

Action: See Section B below.

10. Space should be recognised as no less a resource than labour, materials and services. This recognition is unlikely to be effective unless space is costed at least in terms of basic running costs including maintenance. We are not persuaded by the arguments against departmental accountability for space through charging. Charges would encourage close consideration of space implications of equipment and research projects and levying of full standing costs on research contracts. (Recommendation 11(j) Appendix D.) Identified surplus space should be one aspect of an annual review of space. Specialised accommodation such as lecture rooms are generally pooled and centrally timetabled for shared use by departments. The practice should be universal. The abridged planning norms sent to universities by the UGC make clear that the use expected of teaching accommodation and inter-institutional comparisons should now be possible. (Recommendation 11(l) Appendix D.)

Action: See Section B below.

11. Certain key points recur in these recommendations:

- Analysis of alternatives, which leads to better
- Forward planning, which together with
- Tighter monitoring of costs and performance leads to better management information for the analysis of alternatives, and therefore to improved value for money
- Enhancement of cost centre awareness of the capital, recurrent and opportunity costs.

B

Implications for the University of Sussex

Analysis of alternatives

- The analysis of alternatives is an essential part of effective forward planning: major versus patch repair; ideal versus acceptable standards; direct labour versus external contractors; project A versus project B.
- The alternative of letting routine maintenance work to a contractor has been considered but it is felt that flexibility and a speedier response is possible with a minimum core of direct labour handling maintenance requests. It will, however, be possible to test the relative merits of contract versus direct labour work by studying two comparable projects using each different types of workforce.
- It should be possible to institute schedules of rates for certain regular jobs or elements within jobs to provide a check on efficiency. In effect this would formalise estimates for jobs but it would also provide a reference for future similar requests.
- The appointing of temporary supervisory staff during peak periods will be experimented with, whilst noting that local knowledge of site and University policy is especially important in a supervisory role. Certain work could more easily be supervised by temporary staff, eg work in plant rooms.

16. There are problems in devolving maintenance budgets to cost centres. Firstly, it must await the University's designation of cost centres and then the assessment of their fit into buildings. Secondly, it could be argued that such devolution does not fit well with the flexibility and responsiveness to changing circumstances. For example it would be difficult for the Estates Section to plan the optimum timing of some project if the spending power for that was located elsewhere. Far from encouraging a higher standard of maintenance, especially since it has taken a long time for the University to accept that maintenance spending is necessary in the face of other cuts in expenditure, the temptation for academic areas would be to use the funds for alternative more directly academic purposes thereby storing up problems for the future. It does need to be noted that devolution is an overall policy aim and it already applies more widely than in most universities (eg telephones, electricity) so it is not a matter of policy objection but simply that the Site Team will need to consider the situation carefully once the cost centres have been designated.

17. However, whether or not actual maintenance budgets are devolved, what is very clear is that the Administration must ensure the proper keeping of records of expenditure on maintenance etc for the cost centres so that the cost centre, Estates Section and central planning bodies can be aware of the demands placed upon the budget and the implications for maintenance of academic planning decisions. Maintenance of the fabric and services are as essential to the operation of an academic unit as expenditure on academic salaries, technical support etc and, therefore, the costs of that maintenance need to be known by the cost centre and taken into account by it in its planning.

18. The basic element in any building is usable space by room. It would therefore be logical to use this element to build up records of expenditure. The maintenance of these records would effectively fit with the space register which records the space and usage of rooms in the University. Fields could be included for the cost of maintenance, minor works etc which could then be readily aggregated by unit, area of building. Summary figures could be kept for comparison with subsequent years and a separate field could be used to record commitments which could also then be used in analyses of expenditure by various formats.

19. The recurrent cost of areas of space would thus be recorded but it is also important to be aware of the capital cost of replacement of the buildings. Summary figures for these should also be kept updated as a reference point with details of the gross floor area of buildings and their initial cost. Straight replacement of existing stock would not in any case be appropriate as the academic uses of space have changed since most of the buildings were completed. Economics in space utilisation are a major area for consideration by the Site Team and the Buildings Committee. On the assumption that space released can be rented to external bodies there is considerable scope for reducing the University occupancy of already built space; in essence the University ought not to need to erect new buildings for a 'Science Park' since the space is available in existing buildings. Whereas further consideration needs to be given to the devolution of maintenance budgets, there is a strong case for the introduction of an internal space renting system since the general experience is that only by charging cost centres for space will they give serious consideration to reducing the amounts they are occupying.

20. Projects of minor works, above a financial minimum, should be standardly submitted for Investment Appraisal unless there are strong reasons for not doing so, in order that alternative solutions can be considered including the possibility of no action being taken. Major structural repairs should also be submitted as described in paragraph 2.

Forward Planning

21. The Building Contract Surveyor was appointed to help with the planning and implementation of major repairs which are becoming necessary as the buildings reach an age where minor 'patch' repairs will not suffice. His surveys pinpoint areas requiring attention and estimate how long before action must be taken.

Alongside the major repair work, maintenance, minor works and alterations occur and impinge on the resources of the programme. The programme will be reviewed annually and go out to tender. Routine maintenance tasks form a fairly steady baseline of work load for direct labour, though as mentioned above contract labour will be experimented with. The demand for minor works however is subject to peak periods following Buildings' Committee's dispensation of funds from the Buildings Alterations Fund. Both this and major repairs work tend to group in vacation periods to reduce the disruption in buildings, and thereby impose a heavy burden of supervision during these periods.

22. To respond to these fluctuations in demand for maintenance and minor works, the direct labour force employed should not be sufficient and therefore work will be let out to outside contractors. Rather than either waiting until there is a backlog of work or automatically contracting out minor works, regular meetings with trades foremen should review workload and progress with requests for work to be done and thus base decisions about work to be let to contract. This sort of arrangement is what happens now but implicitly rather than explicitly. Trades foremen might also be given more responsibility for monitoring contract work so that they have responsibility for both direct and contract labour.

23. In order to make decisions about future commitments, it must be clear what is already committed in budgets and what the free balance is. While it may be possible to balance the books overall, decisions are being made on false evidence if a minor work is considered on the basis of x cost and then in practice ends up costing x+y. The Buildings Committee may well have wished to spend y savings on another project in an alternative way to making up a deficit on project x. Certain increases in cost cannot be avoided and it is suggested that there should be a distinction drawn and no virement allowed between controllable and non-controllable items. This would make it more crucial to accurately estimate works and thereby impose an additional burden on the Estates staff.

Tighter monitoring of costs and performance

24. Forward planning based on the analysis of alternatives sets the basis

for monitoring costs and performance, but to be effective information also needs to be gathered on outcome from different methods and solutions. Monitoring of expenditure and commitments is important so that proper decisions can be taken on future projects in the light of past experience. Equally estimates must be accurate to make commitment accounting worthwhile. Accurate financial information needs to be available at least for the three meetings of Buildings Committee, but also for the interim consideration by the Site Team of whether it is worthwhile pursuing certain options. A preliminary step which would save Estates Section some time is that all requests for estimates should be channelled through the head of a cost centre so that they can ensure that the particular project achieves a high priority in that area.

25. Performance should be checked and the devolution of more responsibility to trades foremen would aid this. A second check would be the regular meetings between officers and trades foremen, which would indicate up-take time and the standard of work. A third check would be the comparison of direct labour and contract costs for similar jobs. The schedule of rates and good financial information should provide a basis for this.

C Summary of Recommendations for University of Sussex

26. Much of the recommended practice in the general and special study reports has already been adopted at Sussex, and current procedures are set out in the 'Organisation of Building Works' document. Certain activities however need more explicit and regular acknowledgement.

27. The Site Team should be more active and recognised as the executive of the Buildings Committee with responsibility, for example, for the forecasting of needs, the balancing of 'long term v patching' maintenance, the analysis of alternatives, the assessment of dilapidation surveys, routine decisions on space allocation, the assessment of capital replacement costs etc. It should also assess bids for minor works, alterations etc prior to their consideration by Buildings Committee with

- (i) The heads of the cost centres. Works should not be estimated unless a strong case has been made for them.
- (ii) Investment appraisals prepared by the Estates Section with accurate estimates.

28. The meetings of Estates staff and trades foremen should be formally held fortnightly to:

- (i) review requests received;
- (ii) review outstanding workload;
- (iii) decide on methods and timing of works.

29. The cost and efficiency of direct versus contract labour should be examined by the Site Team in test cases and regularly compared to evaluate the adoption of one or other method.

30. Records should be kept both of estimates and final cost to compare as the main type of performance indicator. Other possible PI's include records of number of requests received and jobs undertaken, both weekly and cumulatively, but the Site Team should propose a full set of Performance Indicators to the Buildings Committee.

31. Trades foremen should be given more responsibility for supervision both of contracts and direct labour, and they in turn should report to officers at their regular meeting. They should also be given more financial responsibility for expenditure on consumable items. An adequate paging system as part of the new telephone system should be a priority as this will save substantial time and effort.

32. The question of the devolution of maintenance budgets should be considered by the Site Team for report to the Buildings Committee when the University has designated the cost centres. In the meantime the Site Team should propose a system for the internal charging of space.

D Conclusion

33. The University of Sussex is already doing much of what Jarratt has recommended. The above proposals, if implemented, should complete the fulfilment of those recommendations but

- (a) the implementation cannot take place without an increase in the resources allocated to the Administration. The Estates Section needs strengthening but most particularly with regard to financial costing, monitoring and reporting. Even under present procedures there are many justified complaints not about the standard of technical work but about the accuracy of estimates, the control over jobs and the reporting of costs. Under the procedures above a significant increase in the financial and generalist staff in Estates would be required, especially if the University is to revise its budgetary structure in this field (away from UGC accountancy heads and towards object of expenditure and the new cost centres). In the second half of the 1970's the University reduced severely its expenditure on staff in the Estates field (at one time it had three architects on the staff, several Clerks of Works etc) but it is now well below the staffing levels of other universities of comparable size or of other bodies responsible for the capital scale of the University

- (b) the implementation of the proposals will have major effects upon the operational units, especially with regard to their occupancy of space. On UGC norms, and any other reasonable criteria, those units are occupying too much space (eg some individuals have separate individual offices on campus, many offices have very low year-round occupancy levels) but whilst space is regarded as a free good the demands for more space multiply.