



FELIX

Founded 1949

The Newspaper of Imperial College Union

Mooney— Gross error

Southside refectory staff admitted on Wednesday that a dish described as Sauté of lamb in fact contained beef.

FELIX was alerted when a Hindu student allergic to beef phoned the office anonymously.

FELIX reporters then went to Southside and ordered a portion of 'Sauté of Lamb'. The dish was served, and the waitress replied that it was lamb when asked repeatedly.

The meal, costing 72 pence, was brought back to the FELIX Office where it was examined and found to contain large cubes of stewing steak in a thick beef sauce.

Southside Refectory Manager David Smith investigated the matter after enquires from the FELIX Office.

'A member of the kitchen staff was responsible', he said.

'He removed the wrong dish from the freezer, and thought that it didn't matter'.

College Refectory Manager Victor Mooney said how sorry he was and hoped that similar mistakes would not be made again.

'I've given instructions for the chef to mark the dishes more clearly before they are frozen', he went on.

This incident follows a FELIX editorial in August this year which said:

'...Mr Mooney's staff are wrongly describing beef as lamb...and so Hindus eating in Southside are likely to have committed what they would regard as a grave sin'.

'It is intolerable that refectory staff should make such crass errors'.

Mr Mooney, who has been in charge of the Refectories since the early 1950s, is to leave the College soon. His job was advertised in The Times on Tuesday.



Mr Mooney

New Prof

Dennis L Buchanan has been appointed to the Mineral Industry Chair of Mining Geology at Imperial College, University of London, with effect from 1 October 1984. This chair has been funded through BP Minerals International Ltd, Consolidated Gold Fields PLC and Rio Tinto-Zinc Corporation with support from Charter Consolidated and Anglo-American Corporation.

Professor Buchanan graduated from Rhodes University in 1969, then worked for Union Corporation before he gained his PhD at Imperial College on aspects of the Bushveld Complex. He has particular expertise in the economic geology of sulphide deposits associated with basic complexes and was Specialist Adviser to the House of Lords Select Committee study on Strategic Minerals.

Southside flooded

Southside residents may have to be evacuated after leaking pipes caused severe flooding yesterday morning.

Residents first noticed water coming into rooms on Staircases five and eight, level three, on Wednesday night at 6.00pm. On Thursday morning at 8.25am more severe flooding occurred mainly in four Falmouth/Keogh rooms, Selkirk gallery level, the Housekeeper's Office and Tizard kitchen.

Dirty water flowed into the rooms through pipes running along wardrobes. Residents reported ruined clothing and hi-fi equipment.

In one room water began to flow through the electric light fittings, fusing the system.

Electricians from Estates were called to the scene to turn off lighting current, and begin the job of drying out fuse-boxes and conduits.

Consultants DSSR, who designed the system, were quickly on the scene to assess damage and ascertain the cause of the flood.

The flooding occurred when Southside's newly installed central heating system was filled with water. The contractors, Mort Scott, had failed to cap off pipes to the old system.

Kate MacPherson housekeeper in Selkirk, whose own office was badly affected, said that the long term problem would be the stench from the flooded rooms when they dried out.

Damage to personal property, carpets and paintwork has been put at many thousands of pounds.

More false alarms

Fire precautions in College have once again been shown to be at fault. The problems with the new Southside fire alarm system have still not been resolved with three false alarms this week following the inconvenience and disruption caused last term when the alarm continually went off, often in the middle of the night.

Last year fire alarm system was installed in the Southside Halls of Residence. From the start it proved to be unreliable with the alarms going off regularly. As a result the alarm became useless since it was soon ignored by residents. FACE, the consulting company concerned with the installation, visited the College on several occasions during the summer. However, false alarms during the summer and on Tuesday this week showed that the problem had still not been solved completely. Falmouth-

Keogh Hall warden Paul Jowitz said that already new residents were getting into the dangerous habit of ignoring false alarms are the result of some fundamental flaws in the design of the system. Smoke detectors, for example, were installed in positions where they were likely to detect smoke from harmless sources such as cookers and cigarettes. These are now being replaced with heat sensors which will hopefully only be triggered in real emergencies.

continued on back page



Not so sorry state

Dear Sir,

Hugh Stiles (FELIX, Monday 1 October) is to be admired for his concern regarding certain aspects of the state of safety in his Department. His letter records his opinions and regardless of the accuracy and tone of his letter's contents we should welcome any open discourse on matters which affect the safety of our places of work. They are, however, *his* opinions and in fairness to those involved as well as for the general appraisal of safety in his Department and the college as a whole, more needs to be said.

First, and of most importance, it is in the Department's opinion that all of the appropriate 'staff in Sherfield' have always behaved in an entirely proper and professional manner. They have been far from indolent and indeed without their vigorous assistance and monitoring the standard of safety would be greatly reduced.

The second and final point of relevance in the appraisal of the letter from High Stiles concerns the nature of the two incidents described. In both cases the offending components were destroyed and the surrounding evidence available to identify the causes of failure is entirely circumstantial. We have to admit that in cases such as this an

accurate identification of the reasons for the accident may never be established. There is simply a physical limit to what can be done. On these occasions all the possibilities are explored and a considered appraisal of the new hazard is made followed by the general issue of new working procedures for staff and students who are involved with hazards of this type. This has been carried out for the first incident and the results are on record. A similar approach is currently being pursued for the most recent case.

Our safety is a matter of continuing and paramount concern and I wish to assure your readers of this. The support and direction provided by the Sherfield staff is a valuable and indispensable contribution which deserves to be more widely recognised.

Yours faithfully,
Brian J Briscoe

Departmental Safety Officer

Another hazard

Dear Sir,

Since February the main entrance to the old Chemistry building (RCS1) has been locked in the evenings and at weekends (although it is unlocked during College hours). There is a small notice pinned to the door (initialled by someone called CMW, whoever he is) stating that during the times that the door is locked it can still be used as a fire exit, despite the fact that it cannot be opened from the inside without a key. I wonder if the Departmental Superintendent would like to explain how we are supposed to get out through this door if the building happens to be on fire.

Yours sincerely,
Howard Rudd
Chem PG

SMALL ADS

ANNOUNCEMENTS

- **Wanted:** SCC Chairman and HJT. If interested in these posts, please sign up in the Union Building or go to the Union Office for more information.
- **Photosoc** preliminary round of staff-student photographic competition will be in Min Res Eng 303 on Wednesday 10 October at 6.00pm.
- **Help needed** for Lord Mayor's Show Float. Meeting 12.30 Today (Friday) outside C&G Office, or sign list on Office door.
- **Pooh**, Badge, ICNAC: where are you? See SCC c/o Union ASAP.
- **Dr David Owen**—Tuesday 9 October—Great Hall.

ACCOMMODATION

- **Female wanted** to share double room in a flat for six in 79/81 Lexham Gardens. Basic rent £24.50pw. Tel 373 1968 ask for flat twelve.
- **Wanted: Male or female** nonsmoker to share double room

in a flat for 5 in Lexham Gardens. Contact Kelly Mech Eng 3 or ring 373 1968 and ask for me in flat.

- **Student wanted** to share large flat in Willesden Green. Shared room, £112.50pm plus bills. Contact F Clark Aero two. Tel 459 6413 ground floor flat.
- **Looking for somewhere to live?** We have one vacancy in a spacious modern all male flat on old Brompton Road. (Rent £35pw). Tel 390 7882 for details.
- **Accommodation in Chiswick.** One/Two people needed to share room in family house. £40pw, includes all meals, etc. Contact Mrs M Davies, 994 2803.
- **Bedroom available** in four person flat in NW10 area. Kitchen, bathroom, living room, double and two single bedrooms. Price £20-25pw. Contact Sue Glover in Linstead Hall or on 589 9718.

WANTED

- **Bicycle—under £25.** Contact Kathy, Students Union Office ext: 3500.

● **Are there** any women cricketers out there? If you've played to any standard before, or are keen to organise a team, contact Kate Gilbert, Geology Dept asap.

FOR SALE

- **Belstaff Trophy Jacket** £25, trousers £20. Quilt lined, waterproof, as new. David Munden EE 3.
- **Beautiful Fiat 128**, 1100cc, 1977, 56000 miles, very well looked after, £700 ono. Ring George, internal 4032.
- **Two B R 'London Saver'** return halves to Manchester, £4.00 each. Contact S D Barker Elec Eng 3.

PERSONAL

- **Snug as two peas** in a pod, eh Sally?
- **Lead guitarist** seeks bass player, drummer, singer and synth player for quality rock/heavy metal band. Apply J Grey Bernard Sunley Sunley House, 40-44 Evelyn Gardens.

FELIX

Incompetence Unforgivable

To those of you who are Freshers, this institution must fill you with a certain sense of awe.

There are large, glass and concrete buildings towering above us, academics with famous names, rectors with peerages and so on.

But they all have one unity of purpose; they are in your service, and without you they would not be here.

Yet there are some parts of the great institution which manifestly fail in their duty. And the one that has failed most frequently, with most distress to students, and with most crushing incompetence, is the Refectory Service.

To confuse beef and lamb is, you may think, forgivable. The first time. But on the second, third, fourth, fifth time it becomes, by God, unforgivable.

And the story doesn't end there. This latest error is symptomatic of a general disregard, in the Refectories, for the proper service of the students.

The responsibility must be laid fairly and squarely at the feet of the Refectory Manager, Mr Victor Mooney.

Mr Mooney has lost all interest in catering. He divides his time between his extravagant yacht in Southampton, and petty in-fighting with members of the College Estates section.

When the College replaces Mr Mooney next year it must find someone of rare insight and skill to right the many wrongs that exist in the refectories. We wish them luck.

Acknowledgements: Many thanks to Rosemary, Tony, Dave Jones, J Martin, Hugh, Andrew Causebrook, Pete, Nigel, Tinker, Jon, Tony Atkins, Pete Coleman, Graham Stewart and, of course, all the collators.

Felix is published by the Editor for and on behalf of Imperial College Union Publications Board and is printed by the Union Print Unit, Imperial College, Prince Consort Road, London SW7.
Telephone 01-589 5111 Ext 3515
Editor: David Rowe, Business Manager: Martin Taylor, Advertising Manager: Paul Belford.
Copyright FELIX 1984, ISSN 10140-0711.

Rector slams pigs

The Rector, Lord Flowers, criticized male chauvinist pigs within the College, in his speech to Freshers on Monday.

'They may consider themselves fine fellows as they swagger to their trough', he said, 'but the rest of us merely pity them and are happy to note that their influence is on the wane'.

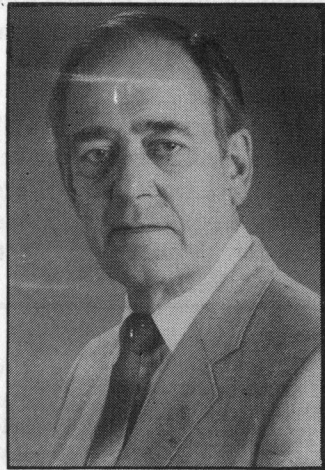
He urged any girl who feels subjected to unacceptable pressure to take her problem to the Senior Tutor for women students, Margaret Cunningham.

In this welcoming address, the Rector urged Freshers to work hard but at the same time to participate in Union activities.

'Few things can be less democratic', he said, 'than the apathy that leads you to leave your opinion unregistered, and allows others to exploit you'.

He went on to ask for consideration for those living near to the College, referring in particular to the level of noise.

In a departure from his prepared text, the Rector joked



The Rector

about the problems with the new telephone systems reported in Monday's FELIX.

The reception ended with an introduction to the Union by President Ian Bull and other Union Officers.

Officials pleased

Union officials are pleased with the performance of the new Union snack bar during its first week of operation. Despite some initial problems, the quality of the Food has been consistently high and the demand has been such that many of the items on sale have sold out.

The menu has been praised by many of the customers as being interesting and varied. The most popular item is the quarterpounder which sells for 60p. This consists of a quality burger in a bap with salad. Other items that have been

selling well include the microwave dishes, such as pizzas, tandoori cutlets and baked potatoes, and the salads.

On each day a queue built up during lunchtime. However, by Wednesday many of the serving problems had been solved and the students were being served rapidly.

Snack bar staff stated that they were delighted with the snack bar's performance. They only wished that people would make more use of the snack bar at off peak times in the morning and afternoon when it serves the full range of food.

EMERGENCY NOTICE

Hang-Gliding Club members who can train *thisweekend* (Sat and Sun) Please see Dave in 416 Biochem asap.

THE SPECTATOR

Young Writers

In association with Lloyds Bank The Spectator is launching a competition on October 27 to find the best young journalists and writers in schools and universities. Winning article published in The Spectator. £2000 worth of cash prizes. **Subscribe now** at less than Half-Price by filling in the coupon below.



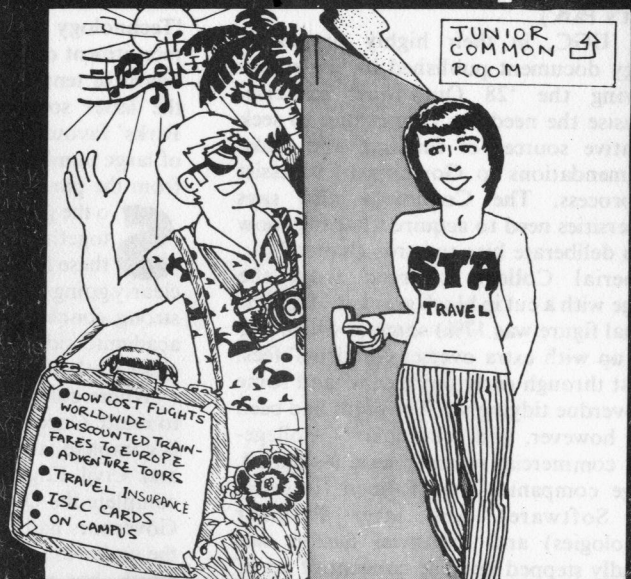
Spectator Student Offer

I would like to subscribe to The Spectator at less than half price for: 6 months £7.95 1 year £15.95 I enclose a cheque for:

Name _____
Address _____
Postcode _____

Send to: The Spectator Young Writers Offer, 56 Doughty St. FREEPOST, London WC1N 2BR (No. stamp required). BEA

ULU Travel is now on campus



IMPERIAL COLLEGE UNION
THE JUNIOR COMMON ROOM
SHERFIELD BUILDING
PRINCE CONSORT ROAD
SW7 2AZ Tel: 589 8882



Technology Transfer

It has become a cliché to say that the UK is good at inventing things but poor at marketing them. It is a fact nevertheless that the UK lags behind the USA and other countries when it comes to the successful marriage of a technological possibility with a market need.

The blame for this shortcoming has been laid squarely at the feet of the universities. In Britain they have historically developed as places of scholarship and education, although their research has ranged from the pure pursuit of knowledge for its own sake to applied research and

development. In an ideal world the fruit of this effort would flow through to industry and commerce via technology transfer or the formation of new business or 'spin-off' ventures.

In a series of feature articles, FELIX will examine the various mechanisms for Technology Transfer, and see how they affect Imperial College.

This week's article looks at the proposed Technology Transfer development at the College's field station at Silwood Park.

The Cuts of '81, Keith Joseph's summer vacation project that year, were rushed, discriminatory, arbitrary to a degree, and badly implemented. But for those universities not damaged beyond repair they have also proved salutary not least in engendering a unity of purpose in opposition. Academics and administrators, or some of them, have been shaken out of their lethargic superiority complex and brought nearer to the realities of economic recession. Universities have come to realise, under pressure from the University Grants Committee, that full use must be made of capital and real estate assets, or they should be disposed of — exploit or liquidate. The rules regarding the sale of land or buildings originally purchased with public money have even been changed, allowing institutions to keep at least some of the proceeds (witness the recent sale of the Bedford College site in Regent's Park).

The UGC, in their highly supportive strategy document published in September following the '28 Questions' exercise, emphasise the need for Universities to seek alternative sources of funding, and make recommendations to Government to assist this process. The Committee also says "Universities need to acquire what they now lack: a deliberate bias towards change."

Imperial College emerged from the carnage with a cut in block grant of 15% (the national figure was 17%) some of which was made up with extra overseas students' fees, the rest through early retirements and some long overdue tidying up. The point had been made, however, and a number of College-linked commercial schemes were instigated. College companies were formed (Imperial Bio-, Software-, and later Polymer Technologies) and industrial liaison was markedly stepped up. The concept of an IC Science Park was considered. Amongst a number of suggestions which got no further than an Admin file was its possible location in a disused chalk pit in darkest Surrey. There are now, we are led to believe, other plans for the site.

Meanwhile, down at Westminster, a new buzzword had hit the streets. 'Technology Transfer' — the commercial or industrial exploitation of technological innovation developed, usually, in universities and polys. Your average academic inventor, it was considered, is more interested in carrying out research than in earning money from it — a typically British failure to capitalise on home-grown ideas.

The Government pronounced itself in favour of technology transfer and pledged its support for schemes devoted to this end. Some university Science Parks were held up as shining examples of just this, but investigation reveals the older, larger ones, at least (Cambridge, Aston) to have no more connection with their respective universities than a company in which the institution happens to have a shareholding. They are little more than medium-sized industrial estates often sited miles from the university. 'Technology transfer' there is limited to the recruitment of Prof Smith or Dr Jones to the board of tenant companies in order to lend the latter some credibility. In the Science Parks' favour, though, is their employment of large numbers of graduates and post-docs from the parent university.

So the great minds at IC put themselves together. What could they do along these lines, only better? Well, big was clearly going to be no good. It had better have strong connections with the College on the academic side. It ought to be physically as close to the College as possible.

Where could it be built? Two sites sprung to mind. Once the new 'Chemistry 2' building is complete, another in the space between it and Civil Engineering would more or less complete the Queen's Lawn square. And the Governors had been muttering darkly about the under-use of Silwood Park ("Very pretty, Smith, but what actually happens there?"). 250 acres of land used by about 300 people at a net cost to the College of around £3/4m a year didn't sound like efficient use of resources. And those awful sheds on South Gravel could only be improved by demolition.

Who was going to pay for these developments? How about those chaps who helped set up Imperial Biotechnology — Investors in Industry — the ones with full page colour advertisements in The Times? What should we call them? Not Science Parks, for a start. What about Technology Transfer Centres?

purpose-built laboratory at Silwood, as a prototype. The architect is taking special care to integrate the design of the Centre with the existing architecture of Silwood House and with the rural nature of the site. As few trees as possible will be cut down, and many more will be planted.

There will be a one-storey building comprising a number of small 'seed-bed' units of variable size, where an academic can extend his or her research one step from the pure laboratory stage towards full commercialisation. He might initially want to employ a researcher, say, or a part-time secretary. The management company will provide advice on banking, accounting, law, etc, and maybe help with contacts in the real world. Central reception, conference and secretarial facilities will be available in the building.

There will also be six two-storey buildings, grouped in pairs, ranging in floor area from 4k to 12k sq ft. These will be leased by larger R&D companies — perhaps one of the academic's companies having grown after a few years, perhaps the research group of an established company. These units will provide a greater sense of identity for tenants, each being occupied by just one company.

Flexibility is the key to the development. If an individual in a seed-bed unit wants to

extent that he needs to employ more people, or to have given up altogether. Projects involving use of the Reactor and Computer Centres, or the wind tunnel when it is built, will be regarded particularly favourably.

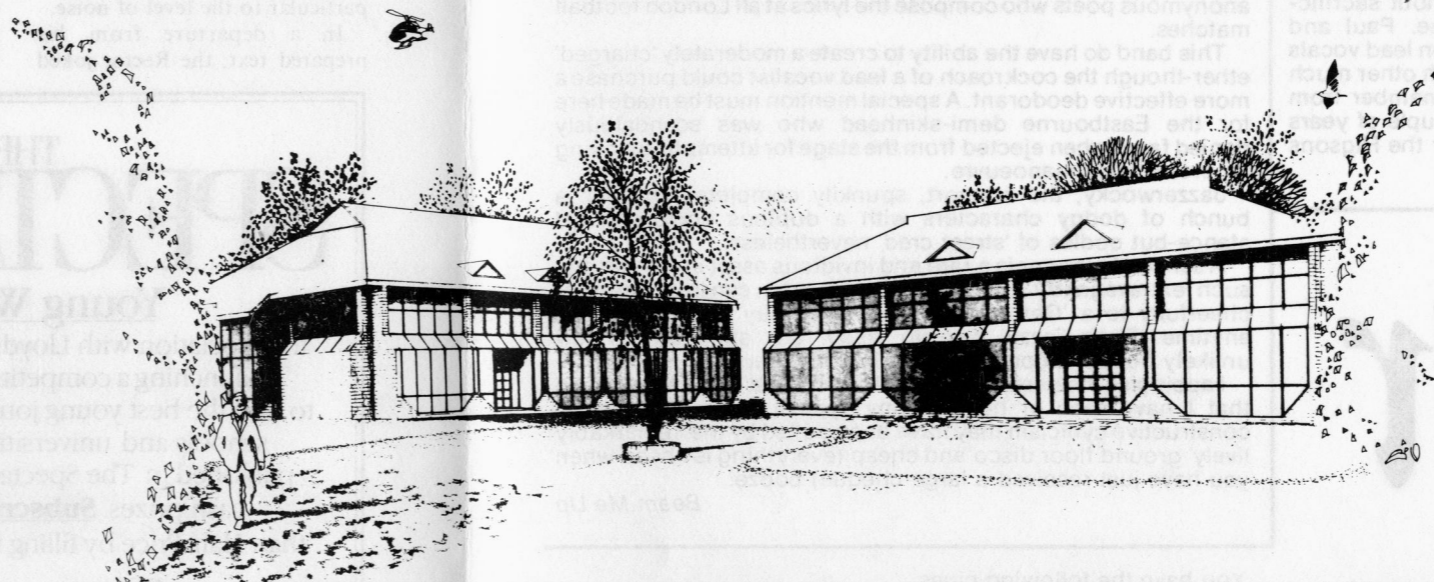
The type of tenant will be strictly controlled. All must have strong connections with the College, perhaps through their personnel or because they need facilities uniquely available at IC. Only low-bulk, clean research will be permitted — microelectronics, software development, biotechnology, etc. There will be no juggernauts thundering around the lanes of Berkshire. No more than prototype production for research purposes only will be allowed.

Apart from the usual problems of a new development, one barrier will prove particularly difficult to climb — Silwood Park is in the Green Belt, which forbids almost all new building. In order to show compatibility with Green Belt Policy and to show an overall improvement to the site coupled with some advantage to the locality, the master plan for Silwood Park as a whole will be revised and submitted along with the planning application. It will include provision for the resiting of the storage and other facilities at present on South Gravel, three new academic buildings behind

of this building, and that SRL will be involved in its financing. Sir Clive Sinclair already has links with IC as a Visiting Professor, and will be admitted to the Fellowship of the College at Commemoration this month. The same management company will operate this Centre and will provide similar facilities to those at Silwood.

The timescale of these projects is largely a matter of conjecture at the moment. A preliminary application for planning permission for the Silwood development will probably be made this autumn and if all goes well, building could start in the spring and the Centre be operational within a year. If all goes well. The South Ken Centre is a rather different matter, and is likely to take at least a year longer. The winds of change are in the air, you see, but they are sometimes a little gusty.

If you would like any more information about the TTCs please contact Don Ferguson, Sheffield 537, ext 3017.



An artist's impression of the proposed development at South Gravel, Silwood.

And so it came to pass that plans to prove the viability of two TTCs, organised under one umbrella company, got under way. 3i would provide the development, managerial and organisational skills, not to mention finding the money; Imperial would contribute the land and the all-important academic input — both people and services. 3i and IC would be equal partners in the management company, dividends from which would provide the College's income from the project.

Plans for the Silwood Park Centre are currently the more advanced, using M-Scan, a mass-spectrometry consultancy housed in a

expand his operation, he can move to a larger unit within that building or to one of the six individual ones. If a company in one of these buildings wants more space, it can move to the one next door or even have the two joined together — they are designed so that a link-way can easily be constructed. Any organisation requiring more space than, say, 20K sq ft is considered too large for the Centre and should really be looking for space in a different type of development.

Leases will be of the order of 3 years for the seed bed units, longer for the larger buildings. An academic with ideas is likely within 3 years either to have developed them to the

Silwood House, and possibly a new Southwood hostel, together with the demolition of some of the obsolete, wartime buildings. Nobody will lose out, rest assured.

The South Kensington TTC will be a prestige block visible from the main entrance in Exhibition Road. Its function will be similar to that at Silwood Park, though the details have yet to be decided. There will probably be some College-related retail outlets on the ground floor — a bank, the ICU bookshop perhaps, STA, the union travel agency — and an underground car park. There is a strong possibility that Sinclair Research Ltd will occupy up to half

SOUTHSIDE BAR

Friday 5th October:

DISCO—Jamie Bell

8.30pm till 12.00 midnight
(Bar closes at 11.00pm)

Sunday 7th October:

CARLSBERG Lager

ONLY 50p pint

Tuesday 9th October

Dustin Hoffman in

TOOTSIE

on video in Real Ale Bar

6.30pm and 9.00pm

Opening hours:

Mon-Fri	12.00-2.00	5.30-11.00
Sat	12.00-2.00	6.00-11.00
Sun	12.00-2.00	7.00-10.30

Guest Ale

Courage Best 60p per pint

REVIEWS

SINGLES

45 rpm

Spandau Ballet: *Highly Strung*

The latest From the Spandaus' hit album 'Parade' maintains the standard set by 'I'll Fly For You' and 'Only When You Leave'. Is this really the same band that Radio 1 was saying was passed it last year? This one's as good as 'Gold'. Possible no 1?

Mtume: *Prime Time*

The success of 'Juicy Fruit' came as such a shock to this long time Soul band, that it's taken nearly 6 months for a follow up. They obviously don't have much confidence in it, since they've flipped the new single with their previous hit. However, from the airplay 'Prime Time' has already received, I reckon the 'unknown duo' won't stay unknown for much longer.

Haywoode: *I Can't Let You Go*

After falling off a Hammer-smith stage last year, Haywoode had to give up recording until her leg had recovered (no, I don't understand why either!!). Now back on vinyl, and supported

by record company hype, 'I Can't Let You Go' is a club smash, but personally, I'll let it go.

Difford & Tilbrook

After being dubbed 'The 70's Lennon and McCartney' the success of their band Squeeze inevitably went downhill. After a year away (writing Stage musicals) Chris Difford and Glen Tilbrook return with an album, and a couple of excellent singles. Unfortunately the seventies feel is no longer 'hip', so this won't be a massive hit, but then again if crap like 'Agados' can make no 2, who knows?

The Questions: *A Month of Sundays*

Despite the fact that all Respond records sound like the style Council, the Questions maintain an individuality without sacrificing a good tune. Paul and Maureen Barry on lead vocals complement each other much better than I remember from their IC gig a couple of years ago. I still prefer the Higsons though!

NEW YEAR PARTY



The Higsons at New Year Party

Photo Nigel Atkinson

Stumbling into a sound check several hours before London's Trendiest Band swaggered onto stage, the Higsons' pop-press popularity was instantly intelligible to our party of lubricated hipsters.

The Higsons are a gang of normal lads who seem refreshingly devoid of the pretension which surrounds many similarly attired pop prats. The glaring defect of their approach was identified by a Fresher: 'They don't exactly play to the audience...'. The all-male make up of the band also creates a conceivably offensive machismo, but your reporter is not a strident feminist. The lyrical style and content seemed to owe much to the anonymous poets who compose the lyrics at all London football matches.

This band do have the ability to create a moderately 'charged' ether-though the cockroach of a lead vocalist could purchase a more effective deodorant. A special mention must be made here for the Eastbourne demi-skinhead who was scandalously denied fame when ejected from the stage for attempting a dying fly breakdance manoeuvre.

Jazzerwocky, the support, spunkily completed the bill: a bunch of dodgy characters with a dubious socio-political stance-but oodles of 'street cred' nevertheless.

A sense of humour is a rare and invidious asset in a band: any such extravagantly liberated wimmin who can respond that cheerfully to a 'Gerrem ort dahli!' can buy me a Guinness anytime. Their 'jazzy' day-glo disco funk stimulated a few unlikely boppers: combat-jacket headbangers.

I apologise insincerely for labelling the best all-female line up that I have seen or heard of-my 'typical music journalist's' constructive cynicism may have been dulled by the 'remarkably lively' ground floor disco and cheap (everything is cheap when you have just received a large cheque) booze.

Beam Me Up

Tinker

TINKER

Welcome to the puzzle column. Let me start by telling you what sort of puzzles will appear in the column over the next year. Firstly preference will be given to off beat, clever and difficult puzzles even if they are quite well known to the keen puzzlers. None of the puzzles will involve any kind of trickery deceit or slight of hand one normally expects to find in such articles.

The puzzles will be graded 1-5 and unless the puzzle is grade 4 or 5 a bin full of algebra will be fair indication of an incorrect approach.

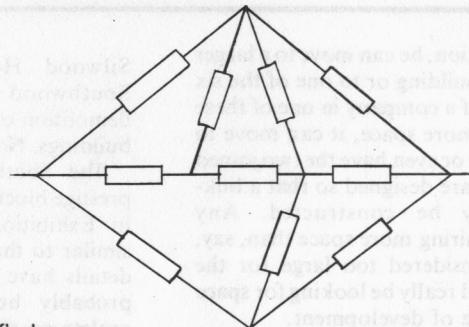
For people wishing to send puzzles, solutions or correspondence to me, I will operate at the Felix office under the pseudonym TINKER.

Each solution received before Wednesday will be put in a hat from which one winner of the £5 cheque will be drawn.

And so to the first Puzzle

Divide a rectangle of side 65 by 47 units into ten squares no two of which are of the same size.

You have the following clues.



Kirchoff's Laws

The sum of the currents into a node is zero.

The sum of the voltages around a loop is zero.

Suggest another circuit to solve the same problem.

GRADE four.

Friday 5

- **PRAYER MEETING** 1.00pm Union Building. Islamic Society.
- **CHEESE & WINE** 5.30pm FELIX Office. Free to anyone interested in learning more about FELIX.
- **PARTY** 6.00pm Botany Common Room, Union Building. Islamic Society Freshers' Party. All welcome.
- **FRESHERS' BALL** 8.00pm Union Building. The 1984 Freshers' Ball featuring 'Misty in Roots' (Roots reggae from Britain's best underground reggae band with many hit singles to their name) a barbecue, discos, a jazz band, films including 'Breathless', and a bar until 1.00am.
- **DISCO** 8.30pm Southside Bar. Witi, DJ, Jamie Bell. Bar closes 11.00pm, disco till 12 midnight.

Sunday 7

- **DRAMSOC AUDITIONS** 2.30pm Union Concert Hall. Meet Dramsoc storeroom. Your last chance to audition for Dramsoc's main production 'Pythagoras', and the 'Comedians'. The auditions are informal and should be fun.

Monday 8

- **HANG GLIDING CLUB** 12.30pm Southside Upper Lounge.
- **THIRD WORLD FIRST** 12.30pm Brown Committee Room, Union Building. Speaker meeting with Mary Wright from National Third World First.
- **KOSHER LUNCH** 12.40pm meet Beit Arch. Religious and non-religious students welcome.
- **UNIVERSITY CHALLENGE** 1.00pm Union Senoir Common Room. A short question paper to select a team for the TV quiz.
- **RED CROSS** 6.00pm Holland Club. British Red Cross Society First Aid course commences. Open to all staff and students.
- **WELLSOC** 7.30pm Mech Eng 220. Richard Adams, author of Watership Down, talks to Wellsoc about his life and work. Refreshments afterwards. Free admission to members.
- **COMEDY NIGHT** 8.00pm Union Concert Hall Featuring WINNERS OF 1984 TIME OUT STREET ENTERTAINERS FESTIVAL—THE VICIOUS BOYS, JOHN HEDGLEY, RORY BREMNER and SKINT VIDEO.

Tuesday 9

- **SURF** 12.30pm Southside Upper Lounge. Surf Club meeting to discuss trip to Croyde on 19th to 21st October.
- **SDP** 1.00pm Great Hall, Sherfield Building. Talk by Dr David Owen, leader of the SDP. Be early.
- **INDSOC** 1.00pm Union Dining Hall. Cheese and Wine. Free.
- **VIDEO** 6.30pm and 9.00pm Real Ale Bar, Southside Dustin Hoffman in Tootsie.
- **OPSOC** rehearsal 7.30pm Music Room, 53 Prince's Gate.
- **Q T** 7.30pm Southside Upper Lounge. First meeting of the Q T Club.
- **VEGSOC BARBEQUE** 8.00pm Beit Quad.

Wednesday 10

- **ISLAMIC TEACHINGS** 1.15pm 9 Princes Gardens (Basement). Introduction to Islam and Basic Teachings.
- **DRAMA WORKSHOP** 2.30pm Union Concert Hall meet Dramsoc storeroom. Regular drama workshop for those interested in acting on a stage or just improvisation.
- **OPSOC** October Show performance of Act 11 of 'Pirates of Penzance' Concert Hall, 8.30 (change of time) followed by a Barn Dance and Party. Workshops starting at 6.00pm. Admission £1.00. All welcome.

Thursday 11

- **STAMP CLUB** 12.45pm Chemistry Room 231. Everybody welcome.
- **UFC** 1.00pm Union SCR.
- **CND LECTURE** 1.00pm Mech Eng 220. Talk on the Peace Pledge by members of SANA.

Careering Along

'For about a week, I was looking at the effects of lead pollution on inner city kids and then I got involved in the fuss about beer glasses, whether they should be brim- or line- measured.' A BBC Researcher describing his job?

'At the beginning, it was the amounts of money that I was dealing with that most horrified me but very quickly, I was talking millions without batting an eyelid.' A merchant banker describing her job?

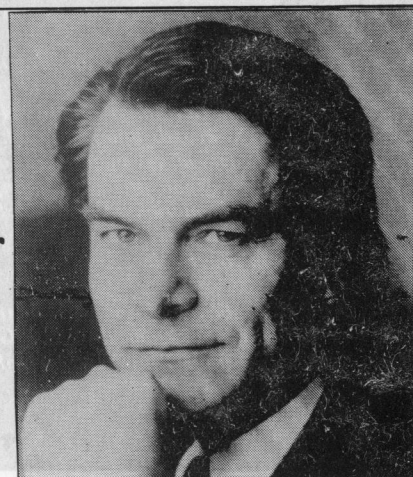
No, not a TV Researcher but a civil servant and not a merchant banker but an insurance analyst. These examples introduce, ladies and gentlemen, one of the greatest enemies to effective career choice ... the STEREOTYPE ... 'The boring unimaginative civil servant, the terrific excitement of all the travelling in the Diplomatic Service, the man with the bowler hat who sells insurance at the door, the careers adviser who doesn't know anything about the real world!' It's all nonsense, there are just as many interesting lively civil servants as there are boring unimaginative people in the advertising industry but by bowing to the stereotypical image, we block out large areas of employment and sources of assistance.

On Tuesday, 9th October, speakers from the Diplomatic and Administrative Civil Service are visiting IC and on Thursday, the Prudential Assurance Company will be here. Why not turn up and test your prejudices?

If you are still baffled by the GRP, confused by GO, GET, DOG and ROGET. If you don't know how to start choosing a career or just want to bombard the Careers Service with questions, Dr Neil Harris (who?) will be talking on Wednesday 10th October.

Annie Martin
Careers Adviser

DAVID OWEN
1.00pm
Tuesday 9 October
Great Hall
Be Early!



continued from front page

Fire alarms

These recent faults with the system highlight the safety problems that have appeared in recent months. Over the summer the doors on the external fire exit from the Southside lower gallery level failed to open. A group of American tourists who were responding to a false alarm found that the doors, which should be released when the alarm sounds, were still locked. At the time of going to press Mr Foggon, the College Fire Officer, was still checking this incident.

Internal fire doors in Linstead Hall are also incorrectly designed. Fire doors on the upper gallery level can only open through 90° rather than the 180° required by law.

As present work is being carried out on the halls, aimed at upgrading the fire alarm and escape systems to the level required to obtain a fire certificated. It will be some months before this work is completed.

Union to oppose fare increases

Fare increases and cuts in services on London Transport are to be opposed by Imperial College Union following a motion passed at the Union General Meeting yesterday. In addition, the meeting was addressed by Delyth Morgan, President of the University of London Union, and heard reports from the President and other Union Officers.

The motion on London Transport noted the recent change in control of LT and that fare increases are expected. Any future fare rises will affect students more severely than past increases because daily travelling expenses can no longer be reclaimed from Local Education authorities. The motion pledged the Union's support to 'Capital', a new pressure group campaigning against fare increases.

The Returning Officer, Hon Secretary Eric Darbyshire, gave

details of forthcoming elections. The most important of them is for the Rag Chairman, who is a Union Officer and member of Council. Also to be elected are two first year representatives on Council. Anyone interested in standing requires the signature of a proposer and ten seconders who must all be Union members. Nomination papers will be posted on the noticeboard at the foot of the central staircase in the Union building on October 23. Nominations will also be open for several other positions on Union Committees, with elections held at the next UGM. In addition, elections are to be held in the Aeronautics, Mineral Resources Engineering and Management Science departments for departmental representatives. Reps in other departments were elected last session.

At the end of the meeting a motion called 'Freedom Motion

1984' was proposed. This motion was also put forward at each of the Constituent College Union meetings on Mondays, at all three of which it was defeated or not heard. The motion was written by Michael Newman, who took up much time at UGMs last year with his anti-porn campaign. Mr Newman is no longer a student, having failed his exams, and the motion was proposed by John Martins. Before Mr Martins could speak to the motion, however, a procedural motion that the question be not put was proposed by Hugh Stiles. Mr Stiles attacked the proposers of the motion for wasting time at UGMs with irrelevant motions all last year, and said that such motions should not be debated. The procedural motion was passed on the vote, and the meeting closed with all business complete shortly after 2.00pm.

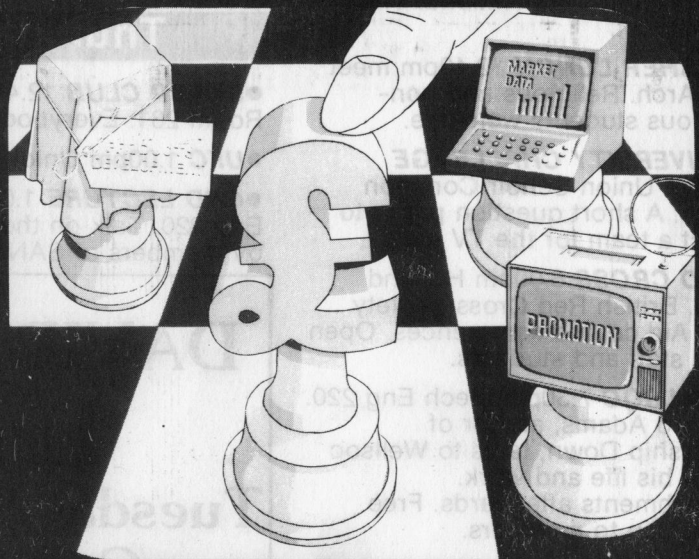
Within 3 years a £50 million business could depend upon your next move

COME ON THE PROCTER & GAMBLE MARKETING COURSE AND DISCOVER THE EXCITING WORLD OF CONSUMER MARKETING

Procter & Gamble are widely regarded as one of the inventors of modern marketing. One of P&G's major contributions has been to create the role of Brand Manager - the person responsible for managing the marketing of a major household brand. Within 3 years with P&G a graduate could become a Brand Manager managing a business worth as much as £50 million.

To give you a chance to find out more about this exciting and challenging career P&G will be running a Marketing Course from December 16-20 1984 at the P&G Head Office in Newcastle upon Tyne. The course which is free will cover all the major areas of the Brand Manager's responsibility [including advertising, consumer promotions, finance and media] and there will be every opportunity to try out some moves of your own.

For an application form ask at your Careers Service or write to John Viola, Procter & Gamble Limited, Newcastle upon Tyne NE99 [telephone 091 279 2000].



Closing date for applications is November 9th 1984.

