

THE NEWSPAPER OF IMPERIAL COLLEGE UNION

Friday, December 7th, 1979

Issue No. 537

# **£1 million CUT IN BUDGET** FELIX arranged a special interview last Tuesday with John Smith, the College Secretary, to discuss how the cuts will affect Imperial.

One percent of IC's budget (£300,000) will have to be saved this year and next year cuts in the order of £1 million are expected. At the end of the next four years the budget of £30 million may drop to £27 million.

Rumours that major departments will be axed were dismissed by Mr Smith as he explained that the College has not taken any specific measures to freeze posts: "When it is known that a post is going to become vacant, the College will look very carefully at that particular area". The History of Science department, for example, has three academics. Two are retiring and College is considering how best to organise the department in the future.

The aim is to streamline the training offered at IC by merging courses that are duplicated in more than one department. However, there will be many talks and discussions and advice will be taken from outside before changes are made.

### DUPLICATION

A College working party is considering the advantages of merging the two departments of Botany and Zoology. The chairs of both have become vacant. Ideally, the merge, if it were to take place, would be followed by the construction of a new building for the combined departments of Life Sciences. However, there is no money for such building projects.

In the example of Life Sciences, the first objective is not to save money, but the priority is to come to a decision that makes good academic sense. Of course, it is expected that money will be saved as a result. The elimination of duplication is the main theme of College's plans for maintaining academic excellence within the cuts that are being made to the annual budget.

The Rector has said that in order to strengthen the management structure of College so that it can cope with different financial ties it must not allow the traditions of the past to impede good management in the future. When FELIX asked for details of how the cuts would effect the Royal School of Mines, Mr Smith said that if similar activities were seen to be taking place in both City and Guilds and the Royal School of Mines, then College would ask 'do we need both activities?': "One should not diversify effort when we don't need to spread scarce resources over a wider area." Mr Smith went on to discuss the departments where courses are similar and mentioned that some courses in Mines and Aeronautics were close to those offered by Mech Eng.



Mr Smith observed that it is very difficult to effect change but relatively easy to start new things. At first it may be hard to pull people together who haven't been working with each other.

In order to save money changes will occur in all aspects of College life. The Rector has asked halls to reduce cleaning costs by twenty percent. College windows will be cleaned twice a year instead of four times in a bid to save £7,000. Water is metered at IC and they are putting in a system to save water.

### WATER

Urinals will stop flushing at a set time, say 10:00pm, although on special nights they will have to be left on for a longer period. Thought is being given to rearranging the Christmas term to give a longer holiday, in order to save money on heating.

When FELIX asked the College Secretary how the cuts will effect IC Union, he replied: "The Union will not be asked to bear cuts, but they might not receive as much money as they will need to cover increasing costs."

Referring to the Rector's Commemoration Day address, Mr Smith said: "If the cuts destroy what is good at IC then it is better that IC should go." However, he expected that there was no danger of Imperial being closed and that implies that its excellence will survive. Imperial College is thought very highly of and there are eight applicants for every place at the College.

### PUBLIC IMAGE

In general, Mr Smith commented: "IC students are probably fairly staid and respectable. There are occasional lapses in good taste. People were very concerned with this year's Rag Mag. The mag came at a politically bad time for Imperial. We must be cautious of our image and not get complacent. Imperial has its strengths and weaknesses and we must build on our strengths."

### LETTERS

### Dear FELIX

Lately I have been very concerned about your letter diet. In fact I think that you, dear pussycat must be pretty sick of eating the same old thing all the time. You had enough of it last year and so far this term it seems to have become your staple diet. But of course, you can only eat what is given you, so let me direct my nutritional complaint to your feeders: For God's sake, will you stop imposing your own views on abortion on other people by giving poor old kitty-cat FELIX here a massive excess of abortion letters. I'm sure that on a subject as sensitive as this one people can make up their own minds and don't have to be told what sort of feeling the should have about abortion.

So all you potential abortion letter writers out there, please, please, no more food for FELIX that comes in a big slop. Let's have something firm and meaty because I'm sure that eight out of ten IC students prefer it. From a bored cat,

Oliver Kleyn Chem Eng 3

#### Dear Colin

To change the subject, I'd now like to mention the Rag Mag. In addition to IC Rag Mag, I've also had the pleasure of reading mags from Oxford and Surrey. The comparison was very striking in three ways:

- 1. Joke content
- 2. Paper quality
- 3. Advertising

The first point has been fairly amply discussed. The second point has been mentioned in defence of our mag, but I can't see why we should be glad that our mag has wasted more trees than mags of other universities.

The third point has, I believe not been mentioned. If my memory is correct, then the main defence for continued sales of the mag was that it would make money for the Rag Appeal, which is obviously desirable. So we wish the mag to raise as much money as possible for chairty, but this makes my observations appear a trifle strange.

RAG MAG	NUMBER OF SIDES	ADVER
IC	42	2
Oxford	34	18
Surrey ·	50	27

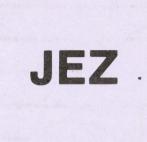
From this comparison, one may see that purchasers of the IC Rag Mag are getting good value for money, but not IC Rag.

Why is there so little advertising in IC Rag Mag? Is it because of lack of effort on behalf of the Rag Committee, is it that people who might advertise are put off by the supposed bad name of IC Rag Mag or is it just not possible to get advertising in London?

If the problem is the first then the solution is simple, if it is the second then the solution is more tricky. It brings us right back to the old argument about the quality of the jokes, but lends considerably more weight to the clean-up-the-mag campaigners, after all it would be indefensible to reduce the amount of money raised by the mag, just to satisfy a desire for distasteful jokes.

I'm not preaching conformity nor morals, I'm just interested in the Rag Mag raising the maximum amount of money for Rag. Yours sincerely Hodgson

NUMBER OF SIDES OF ADVERTS 2 18





Our story begins back on Sunday 9 May 1976. Jezebel, after taking part in the FELIX Treasure Hunt, set off with her crew down the Kings Road to view a 1912 Dennis Fire Engine. While gently decellerating, a bang and clatter is heard from under the bonnet. On lifting the cover, the worst is found. A con-rod is broken and the crankcase is cracked.

The Royal College of Science Union Motor Club are grateful to: Mr Jon Dennis of Dennis Motors, Guildford for a new, unused con-rod and copies of their surviving general engine drawings; David Evans Ltd (Barimar) for trying to weld up the crankcase and sump (even though they made a mess of it); Sir Hugh Ford, then Head of the Mechanical Engineering Department (now Pro-Rector), and the Rector (now) Lord Flowers for agreeing that the machining could be carried out in the Mechanical Engineering Department's workshop; the Metallurgy and Materials Science Department for determining, as found, that the aluminium alloy of the crankcase and sump were unweldable.

The pattern makers, W H Sheppard and Co., who are based just a few hundred yards from the site of the demise of the engine; Mr Terry Sheppard of Met and Mat Sci Dept for putting us in touch with Alcan Laboratories, Banbury, who agreed to cast the new crankcase and sump; Mr Brian Gillett and Mr Keith Latimer of Alcan Laboratories for producing excellent one-off castings of the complicated crankcase and sump; the Mech Eng Dept; Sir Hugh Ford; Mr Peter Moore; Dr Hill; the present Head of Dept, Prof S A V Swanson; the Mech Eng Main Workshop for coordinating the machining of the castings (even though they didn't know quite what to expect); Thompson Engineering for remetalling the main bearings and checking the crankshaft.

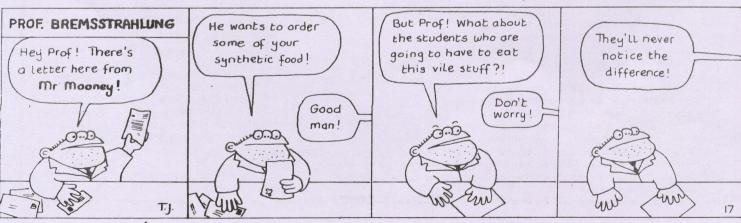
Particular thanks must go to Ken Barham in the workshop for carrying out the demanding task of preparing drawings and dimensions from the old damaged components and producing new parts to fit the existing undamaged parts of the engine. The expertise of his workmanship is demonstrated by the running of the complete unit.

During the three and a half years spent moving the parts of the engine from one expert to the next and a move from one garage (demolished just after moving out) to a new one six months later; the pump has been connected up, and, with the engine running, is found to work. Thanks to: the Merseyside Metropolitan Fire Brigade for the pump; Mr John Dennis for spares for the pump; C W Vass, Ampthill for pump equipment and Mr Lashbrook, Paxman Diesels apprentices for bearings for the transmission.

Thanks also to all those who offered helpful suggestions and other work towards getting Jez running.

And finally, thanks to the Royal College of Science Union, Imperial College Union, the Royal College of Science Departments for financial assistance.

**RCSU Motor Club** 



# An Energy Future for Britain?

Mech Eng 220 was packed to capacity on Thursday for the penultimate discussion to be held in Environmental Week. Chaired by our Rector, Lord Flowers (who is also Chairman of the Standing Commission on Energy and the Environment) the speakers were Nigel Forman (Conservative MP and author of *Another Britain*), Dr David Owen (Labour party spokesman on energy), Lord Tanlow (Liberal spokesman in the House of Lords on energy) and Michael Robson (member of the Science Policy Research Unit at Sussex University). Sir Derek Ezra was unfortunately unable to attend as he was "discussing with the unions".

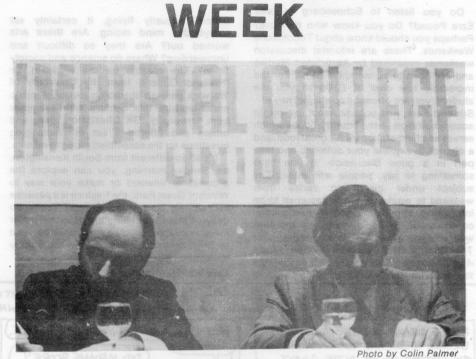
Lord Flowers gave a brief introduction stating the need to formulate a policy which achieves a balance between industrial consumption and growth and conservation.

Throughout the discussion it became clear that Britain's future energy sources are 'Co-Co Nuke', Conservation, Coal and Nuclear power. Mr Forman emphasised that our usage of fueld, especially nuclear, implies a 'Trade-off between generations'. The unfortunate difficulty being the difference between the 'life' span of a politician and time taken for energy research into alternative sources to oil and gas.

Before we go ahead with nuclear power Dr Owen believes we should have a full public enquiry and debate, though, after the speeches, a comment was made that not even the experts can agree on the advantages and dangers of the various, if not all, types of reactors. He also believes that coal production should be increased and research should be carried out into the various uses of coal and other sources of energy and methods of energy conservation.

Lord Tanlow put forward the merits of small urban coal fired power stations with district heating systems and also the electrification of railways as a useful way of decreasing oil consumption, since eventually cars will become too expensive too run.

Michael Robson looked at more specific difficulties in each of the fuel uses. He pointed out that nuclear plants suffer from technological faults which cause delays and increased expenditure which can ruin any government's forecast, and that is also foolish to go ahead with the development of three different types of reactor (PWR, AGR



**ENVIRONMENTAL** 

### Dr.David Owen, Nigel Forman M.P.and The Lord Flowers.

and Fast Breeder) at the same time. There is a need for slow adjustment which gives the power plant industry steady work over a larger number of years. The difficulty with coal is that it is dirty and firms using gas and oil are unlikely to return to coal, though obviously industries (such as pottery and smelting) cannot anyway.

Many interesting points were raised in the brief time that was left for questions such as about the wastage of three quarters of the coal used in power stations due to insufficient conversion and, when asked about the need for Fast Breeder Reactors, Dr Owen replied that the dangers of bombs being made from the plutonium have been overemphasised and that there is definitely a need for a public enquiry since "politicians cannot make these decisions". They need help from technicians.

Mary Freeman



Photo by Colin Palmer



Rag Queen, Viv Brown

Photo by Colin Palmer



Photograph of tonight's Pyjama Party

# **TOUCHSTONE REPORT** 24 — 25 NOVEMBER

Do you listen to Schoenberg or read Ezra Pound? Do you know who they are? Perhaps you should know about Touchstone Weekends. These are informal discussion weekends organised by Associated Studies and are open to all members of IC. For the incredibly low cost of £2.00 to you the student, you are offered a coach journey to Silwood Park, just outside Ascot, overnight accommodation in the country house which serves as a field-station for IC, great food, and a chance to express your opinions and take part in a good discussion. If you have something to say, people will listen. The subject under discussion varies from weekend to weekend, but is designed to be interesting, stimulating and at least mildly controversial. If you'd come on the first weekend you would have been puzzling over The Control Of Personality. Modern Music And Literature - Conspiracy Or Lunacy was the title for this weekend, and if sparks

Seven:

raya's

weren't actually flying, it certainly set everybodys mind racing. Are these arts worked out? Are they so difficult and unrewarding? Where do science and society fit in? The speaker for the weekend, Dr Rowland Cotterill from the University of Warwick gave an absorbing review of music and literature this century with examples from Stravinsky, GK Chesterton, Berg and others and offered a set of challenging questions for the assembled group to resolve.

It's all so different from South Kensington; on Sunday morning, you can explore the grounds of Silwood or make your way to Windsor Great Park; the fresh air is a panacea for all ills. Associated Studies really do deserve thanks for filling the gaps that occur in a college devoted to science and technology and for providing a thoroughly enjoyable weekend.

### Lars Wernberg-Møller

SUPREME GALACTIC REAR FLIGHT SUPERINTENDENT BRATT HAS TAKEN A FANCY TO DRAKE, BUT IS THWARTED BY HIS STUPIDITY . INTEGRITY, I MEAN.

EGWA XMAS BALLOON

DEBATE

FRI 14 DEC

at 1:00pm

in ICWA Lounge with Mary A, Mick B, Ann

Evans and Frank J. The

theme is Women In History. Mince pies

available and everyone is

welcome.





# A career in Computers?

We need good Honours Graduates in Electronics, Physics, Computing Science and Mechanical Engineering disciplines.

If you match up to our high standards, you could find yourself involved in the development of a sophisticated new range of Data Processing Equipment. If you see yourself in:

### **ELECTRONIC ENGINEERING**

responsible for Digital Design of advanced computing systems using LSI technology, Analog circuit design, Power systems, Test equipment and design, component evaluation or packaging concept.

## or SYSTEMS ENGINEERING

concerned with Computer Architecture definition, Microprocessor techniques, Peripheral controller design, CPU design, Data Communications, Microprogramming and diagnostic systems.

### or MECHANICAL ENGINEERING

where you would find yourself involved in the design of sophisticated small mechanisms, Plastics technology and mechanical packaging of electronic components. Plastic technology and cabinetry design for the packaging of electronic components.

### or SOFTWARE PROGRAMMING

involved in Microprogramming Data Communications, Operating Systems, Compilers, Language Design and Specifications user Interfaces, Interpreters, and Interactive Diagnostics.

If it's a first-class career you're after then make sure you meet us when we visit

# IMPERIAL COLLEGE, LONDON 24th January, 1980

or find out more by contacting your career office.

The Burroughs Graduate policy is one of direct involvement — our yearly intake usually makes a substantial contribution to our Development Programs within 3 months. Opportunities for further education, both within and outwith the Company's own schemes are looked on favourably.

Attractive salaries are offered and conditions of employment are commensurate with those of a large international organisation.



# **OBSCURE ENGLISH**

### or why say it in a few words when you can use two thousand

Once upon a time there was a young child who wrote things like "the cat sat on the mat", but society soon put a stop to that. After many years of expensive education (probably including an Oxbridge degree) he started to write things like this:

"Mixed hereditament means a hereditament which is not a dwelling house but in the case of which the proportion of the rateable value of the hereditament attributable to the part of the hereditament used for the purposes of a private dwelling is greater than the proportion thereof attributable to the part used for other purposes."

This eye-glazing wonder of official prose is from a rates bill issued by Fareham Borough Council, and is presumably meant to be understood by ordinary mortals such as ratepayers. If you can't understand it you're in good company. A Department of the Environment form for applying for help with loft insulation was so obscure that thousands of them had to be returned to the applicants to be filled in properly. One local council even issued a leaflet explaining how to fill in the forms, but no-one could understand that either.

But now, help is at hand in the shape of the Plain English Campaign. Armed ony with a shredding machine and infinite gall, they descended on Parliament Square last summer and managed to destroy large numbers of illegible forms before being moved on by the police. Their latest (and slightly more constructive) effort is a glossy magazine Plain English, dedicated to ferreting out samples of gobbledygook and exposing them to the piercing light of public pillory. Tenancy agreements are, of course, notorious. Here is a fine example of the obscure English love of extremely long sentences and dislike of those fiddly little spots known as punctuation marks:

Sub-section (v): "To permit the landlord or his agents with or without workmen and others upon giving reasonable notice to enter upon the premises at all reasonable times during the daytime for the purposes of repairing and painting the outside thereof or carrying out and completing any structural or other necessary or proper repairs to the premises or of examining the state or condition of the interior of the premises and thereupon to permit the landlord or his agents to give the tenant notice in writing...." And that's only half of it.

The Campaign looks promising, for not only is it a protest movement but it is actively helping to rewrite official forms and leaflets, consumer contracts and so on. The organisers, Chrissy Maher and Martin Curtis, have set up a 'Form Factory' to help local authorities, government departments and other official bodies to recast their documents in plain English. A series of Plain English Workshops are planned for next year, to provide crash courses for people working in public information. One person who would benefit from such a course works at the Department of Employment. He uses a computer to write letters like this one, in closely spaced capitals:

"To qualify for unemployment benefit you must, in any one tax year, have paid as an employed person a minimum amount of Class 1 contributions. The minimum amount required is that payable on earnings at the level of the lower earnings limit for that year mulitiplied by 25. For persons who claim benefit early in their insurance life this condition may be modified to treat as paid in one tax year all Class 1 contributions paid up to the date on which benefit is claimed. If this modification applies in your case it will have to be considered before the decision on your claim was made. A similar decision will apply on any claims for later days on which the grounds of this decision have not ceased to exist."

This horror was brought to the attention of the DOE, whose spokesman admitted, "Wahave been aware for some time that letters like this can be difficult to understand." On the urging of the Campaign, the Department is now working on an "improved and simplified version".

What the Campaign needs now are samples of obscure English from official leaflets, forms, contracts and other such documents to use as ammunition. If you can't understand your form for rent rebates or your car insurance policy, just send it to: Plain English Campaign, 78 Wiltshire Street, Salford, M7 OBD or if you're really keen, there's a meeting at the Library Association, 7 Ridgmount Street, WC1 on Monday 10 December at 2:00pm.

Ilford councillors couldn't understand a bylaw they were asked to pass, even though it had been approved by their Highways Committee and the Home Office. Part of it read: "Provided that the by-law shall not apply to any person riding a bicycle or tricycle otherwise than to the obstruction or danger of any person lawfully using such footpath if the person riding has lawful authority so to do." Asked for advice, the Deputy Borough Solicitor admitted that he didn't understand it either: "I was hoping that no member would raise it and ask for its meaning. The person who worded it left the council a week ago."

**Tony Jones** 

# ROCK'N'ROLL

For those of you who like heavy rock and roll but did not go to the ICWA Disco last Saturday, I can only say that you really missed out on something. Cheap Trick, and Quo just to start the evening and a live band, MIXDIX, which one person compared to Motorhead.

Better luck next time!



6

# RAMBLING THOUGHTS OF AN AGING FOOL

Hello All! Well deep in the heart of the Union Store Room (barrel and gnome emporium), things have been just rolling along. As I said last time, the term is waning e'en as I wax ineloquently. I am absolutely shattered and I feel that the week or so of Christmas hols will come only too soon, if not too late.

So you've survived Rag Week and Environmental Week, both of which have taken months of planning by a few people. You probably turned up and went away with neither a thought or a care for the people like Roger and Rae who spent dozens of hours for every one hour of the event, but now I bet you feel really guilty!

Royal College of Science Union RCS

Last Saturday's year collection saw Life Sciences 1 live up to their usual reputation of apathy. This was an attitude which was epitomised by Adrian Black who when asked to go out for the fifth time in twenty four hours refused on the grounds that he had already collected over £100. Such was the extent of this attitude, that they were too idle to collect the extra £80.121/2 needed to make their total up to £1,000.

Enough of this false modesty, they were great really (even if the author is somewhat biased) and led the way in making the RCS year collections the most successful ever with a final total of £2,636.121/2. The top five year groups being:

I would like to add to my defence with regard to a motion passed concerning my nonattendance at University Challenge in Manchester: I was elected to represent the Union at the Student Residence Committee, who were discussing rent levels for next term (something I consider very important). I stand by my decision to attend that meeting, so Yah Boo Sucks! GOOD NEWS

The Rector has decided to ignore the recommendations of the aforementioned Residence Committee and will be recommending no change in the rent levels for next term. Because of this there will be no open meeting of Hall

- 1. Life Sciences 1 £919.871/2
- 2. Physics 1 £656.891/2
- 3. Chemistry 1 £515.51
- 4. Maths 1 £237.321/2 5. Maths 3 £130.191/2

The latter insist that they would have won if their cover had not been blown in FELIX two weeks before the event.

As ever, the day produced an elitist clique who collected over one hundred pounds in the day: Steve White (Cl), Alan Edwards (part-time Cl), Jane Lavers (LS1), Tom Hayes (LS1), Adrian Black (LS1), Andy Needham (øl), Mike Booty (M1) and Steve Sleight (ø1).

The day was a credit to many people, especially the first year social reps as well as to Tansey and Mo who were away from Beit 75 for over eighteen hours!

General Committee on Monday prepared the way for next Tuesday's UGM which will be held at 12:45pm in Physics Lecture Theatre 1. There will be mince pies and free beer from the Three-Handed Pot, as well as the long awaited tril of Zoshia.

#### residents.

The last UGM passed a motion forming a Cuts Campaign Committee. The first of its events will be a leafletting in the tube TODAY. Party leaves at 4:30pm (prompt) from the Beit Arch.

### AT LAST: THE END

With cuts and slashes wounding all and sundry in education it is nice to know that when it comes to the crunch there is always an escape. Come to think of it, that's a slash and cut as well.

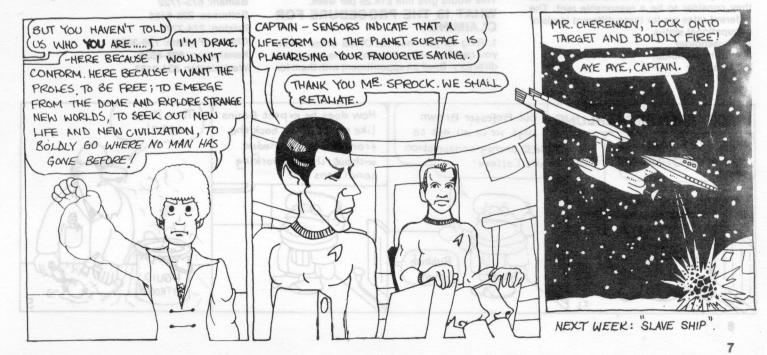
Happy Birthday FELIX, and Colin, please don't worry about the lunacy of an aging fool.

xxx Sir H C



Also next week are several notable social events, which are as follows: **TUESDAY: Life Sciences Christmas** Party in JCR at 8:00pm. Tickets 75p. WEDNESDAY: Ents Christmas Paty in JCR at 8:00pm. Bring a bottle. **THURSDAY: Physics Christmas Party** in JCR and Chemistry Christmas Party in the Union Concert Hall at 8:00pm. Tickets 80p.

Nick Watmough



### THE HEINEKIN BENEFIT OR HOW TO CLAIM RENT DURING THE VACATION

### WHAT'S IT ALL ABOUT?

Supplementary Benefit — known as the Heinekin Benefit because it reaches the parts that other benefits do not reach — is probably the most productive method of recovering the rent that you have to pay over the vacation.

Supplementary benefit is a top-up benefit which aims to bring anyone who is unemployed up to minimum level of subsistence and is payable even though you have never paid any National Insurance contributions.

Supplementary Benefit consists of two components, a living allowance and a payment to cover the cost of your accommodation. In calculating your entitlement account is taken of other resources that you may have available.

These include Unemployment Benefit, interest on savings over £1,200 and, most important of all, the vacation element is taken into account even if you don't actually receive it, eg because your parental contribution isn't paid in full.

### WILL I BE ABLE TO CLAIM IT?

To qualify for supplementary benefit for rent during the vacations you have to satisfy the following requirements:

- 1. Be unemployed.
- 2. Be available for work.

3. Be prepared to sign on in London once a week during\_the vacation.

If you are not thinking of staying in London during the vacation, don't despair because: 1. Depending on where you will be staying, it might be worth coming up to London once a week to sign on.

2. The benefit office may be closed for public holidays on one or more of your signing on days.

3. You may be able to persuade them to give you a 'holiday form' which effectively excuses you from signing on.

### HOW MUCH WILL I GET?

This can get a bit complicated. Firstly, there is the fact that there are, in practice, three rates at which benefit is paid. Secondly, the Department of Health and Social Security may feel that you are paying too much rent and only reimburse you to the extent of what they consider to be a reasonable rent. The different rates are for three different kinds of occupational status:

- 1. Householder
- 2. Non-householder
- 3. Flat sharer

There isn't actually a proper definition of what a householder is, but in general terms it is someone who is responsible for outgoings such as electricity bills and so on over and above the rent, while a non-householder is usually thought of as someone who just pays rent and has no other financial responsibilities towards his accommodation.

A householder gets some extra money tacked onto his living allowance to cover these extra responsibilities and pay for things like standing charges on service bills. A flat sharer is treated as a part-householder and gets a share of the householder addition, which depends on the number of people in the flat. The rates at which supplementary benefit is paid are as follows:

Householder - £18.50 per week

Non-householder — £14.65 per week Non-householder — £1.70 per week rent allowance

Flat sharer — £14.65 plus (£18.50 - £14.65 divided by the number of people in the flat).

The non-householder rent allowance is paid to people who are not paying rent eg if they are living rent free with relatives.

### EXAMPLES

1. Harry has a place in hall and is going home during the vacation so he isn't paying any rent. His requirements are £14.65 (nonhouseholder living allowance) plus £1.70 rent allowance which totals £16.35. His resources are £16.35 vacation element. As his requirements equal his resources, he will end up with nothing.

2. This time, Harry is living in a bedsit with a coin-slot meter paying £15 per week rent. If he goes home and claims there, he will only get a £2 per week retainer (owing to an

get a £2 per week retainer (owing to an arbitary and discriminatory policy invented by the DHSS). If, on the other hand, he stays in London and claims or at any rate can sign on each week, his requirements will be £14.65 plus £15 rent which totals £29.25. His resources are £16.35 (vacation element) so he ends up with £13.30 per week. If Harry had been classified as a householder he would have got £18.50 plus £15 less £16.35 which gives him £17.15 per week — £3.85 per week more.

3. Supposing that Harry was sharing a flat with three others and paying the same £15 per week rent. He would then get what he got as a non-householder ie £13.30 per week plus a quarter of the £3.85 householder addition. This would give him £14.28 per week.

# WHAT IS THE PROCEDURE FOR CLAIMING?

1. Ring up your nearest DHSS office which you can find under 'Health' in the telephone directory. Book an appointment with them for

say, the first day of the holidays (if you ring them up now they may send you a form which may or may not make things easier). While you are talking to them ask which Job Centre and Department of Employment office you should go to and check on the documents that they will require you to bring to the interview. (They usually want to see proof of your savings eg bank statement and savings books and proof that you are paying rent eg lease or rent book. A handwritten letter from your landlord is unlikely to be accepted except under protest.)

 Go to the Job Centre and look for a job.
Next, go to the Department of Employment offices and sign on as unemployed.

4. Turn up for your interview.

### 5. Sign on each week as instructed. WHAT DO I DO IF THINGS GO GO WRONG?

If they won't pay and you think that they are in the wrong, you have 21 days in which to appeal. This doesn't cost you anything and simply means that you tell them that you are unhappy with their decision (s) and wish to appeal. The case is then reviewed by a supervisor in the office and if they still think that they are right it is passed on to an 'independant' appeal tribunal.

You can get help with the tribunal hearing from the Welfare Centre. If any of this articles doesn't make sense, you can always come up to the Welfare Centre and ask me about it.

Finally, a word of warning, if you make a claim for supplementary benefit you have to sign on as unemployed which means that you are claiming unemployment benefit. Because of the 13 week rule, a claim now means that if you have earned over £438 in one tax year you may have an entitlement to unemployment benefit next year which a claim now could endanger, alternatively a claim now could mean that you will be able to if you hadn't claimed. If you are not sure how you stand on this, it might be better to check with the Welfare Centre before you claim.

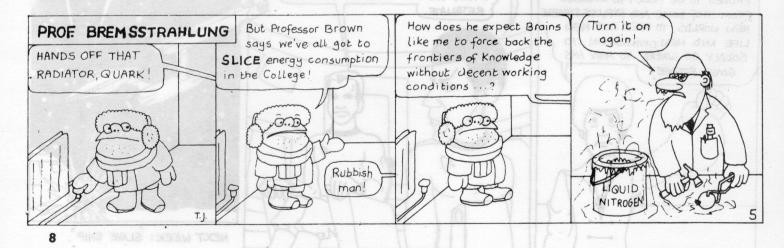
Michael Arthur Welfare Adviser

re great really (even if the author

### **DHSS OFFICES**

Acton (covers part of Hammersmith): 743-9131

Balham: 673-7722 Battersea: 228-6454 Brixton: 274-7777 Chelsea/Fulham: 736-3399 Kensington: 603-4633 Westminster: 834-8433



# WEDNESDAY 28

### 257 LOST, IN DC 10 CRASH

An Air New Zealand DC 10 crashed into a volcano off the coast of Antartica during a sightseeing excursion. There were 257 people on board and there were no signs of survivors among the wreckage spotted by US Navy planes.

### **PRY FORUM OFFER**

The National Economic Development Council was re-erected by Sir Geoffrey Howe as a major forum in which the Government might be able to do business with unions and employers. At the same time however the Chancellor warned that pay rises at present levels could lead to tax increases instead of the tax cuts promised by the Tories.

### BSC LOSS THREATENS MORE

The BSC is expected to announce a half yearly loss of £150 million. It is planning fresh reductions in capacity and redundancies to meet a deteriorating situation. The Corporation has been hit by a drop in demand of 15% and this has been aggravated by the effects of the Government's monetary squeeze.

### THURSDAY 29 NO SUCCESS AT DUBLIN SUMMIT

At the EEC talks in Dublin the EEC countries rejected Margaret Thatcher's demands for a vast reduction in Britain's contribution to the EEC budget. The Prime Minister demands were for a reduction of £1 billion as opposed to the reduction of £350 million to £400 million which the other governments were willing to discuss. She warned the meeting that their refusal risked provoking a crisis in Britain's relations with the EED. The present budget imbalance could mean that Britain would pay £1,200 million more into the EEC next year than it will receive.

### **US RADIATION DAMAGE**

The US Government have for the first time admitted that radiation from atmospheric atomic bomb tests in the South Pacific from 1945 to 1962 may have caused cancer among the troops exposed. The government accepted responsibility in a case brought by a former sergeant who is currently dying of cancer. It is estimated that 250,000 personnel and islanders were exposed to radiation in 183 tests.

Residents of a town in Utah are suing the Government claiming that a radio-active cloud drifted over their town causing outbreaks of Leukaemia. A Hollywood film crew made a film in the same town and since then its stars: John Wayne, Susan Hayward and Agnes Moorhead, have died of cancer as have the director, production manager and wardrobe mistress. Some people are connecting these deaths with the alleged radiation exposure.

# FRIDAY 30

DAY BY DAY

### BRITAIN'S EEC BUDGET

Mrs Thatcher told her fellow EEC leaders to find an acceptable solution to Britain's EEC budget demands or else face unilateral action by Britain to cut its payments which would result in a European political crisis. Mrs Thatcher left the conference empty handed after a six month campaign to reduce Britain's payments admitting that there was little hope of a solution in the next few months.

### SHAH'S NEXT MOVE

The Shah said that he still intended to leave the US despite the Mexican Government's decision to bar his return. He is said to be considering other offers of political asylum.

Concerning the hostages, the sense of crisis is deepening with no apparent way out of the impasse. The US ambassador at the UN acknowledged that it was unrealistic to expect any action by the UN which would lead to a quick release of the hostages.

# **SATURDAY 1**

### THATCHER'S EEC PLANS

Under the Prime Minister's orders, plans to freeze Britain's relations with the Common Market go ahead. The plans are to be held ready in the event of a final breakdown of negotiations with the EEC over Britian's demand for a reduction in its contribution to the EEC budget. The contingency plans are reported to cover everything short of a British walk-out from the community.

### **NO MORE DINKY CARS**

The Liverpool factory which produces Dinky cars is to close because of labour costs and lack of productivity. Meccano, owned by the same company, face the same fate. In nearly 50 years history of Dinky cars 900 models in crash-proof, diecast metal have sold in their millions. Collectors predict that the present models will be snatched up and carefully 'garaged' for their investment value. Earlier this year a model of a Pickford removal van, sold for four shillings in the thirties, was auctioned for £340.

# **SUNDAY 2**

### ATTACK ON US EMBASSY IN LIBYA

The US Government protested to Libya after an attack on the US Embassy in Tripoli by a rioting mob. The mob included men in military uniform according to the State Department. The attack came shortly after the Shah had been moved from New York to a military hospitai near San Antonio. For the first time the US Government admitted that it was to help the Shah find somewhere to live.

# **MONDAY 3**

### LADBROKE LOSES APPEAL

Ladbrokes, Britain's biggest games group, has closed three of its West End casinos because the group's appeal against the loss of licence for the clubs has been rejected. Licensing magistrates had ruled in July that Ladbroke was "not fit and proper" to hold casino licences. The three casinos involved are estimated to have contributed half of Ladbroke's 1978 profit of over £41 million. Evidence was produced which show that an operation had been set up to entice gamblers away from rival casinos.

### **BBC DISPUTE SETTLED**

Settlement occurred after a peace formula was worked out by the Broadcasting Union and the BBC. During the dispute 610 technicians were suspended for staging oneday strikes and the BBC lost 123 programmes at a cost of £2 million. Priority will now be given to the recording of Christmas shows.

# **TUESDAY** 4

### DOCTORS TO SPY ON MIGRANTS

Doctors are being asked by the Home Office and DHSS to help pool confidential facts about health service patients suspected of being illegal immigrants. A consultant has complained to the BMA that private information was passed on by the DHSS to the Home Office without the patients' consent. The Home Office denied this but said that doctors have been asked to watch out for patients suspected of being ineligible for NHS treatment.

### **RHODESIA MEDIATOR SOUGHT**

A mediator is being sought to save the Rhodesian talks from collapsing. The first mediators move came from the President of Siberia, in the form of a telegram to Mrs Thatcher in his capacity as chairman of the Organisation for African Unity. The conference is deadlocked on the framework of the ceasefire. Lord Carrington's demanding straight acceptance by the PF leaders which they are unable or unwilling to give.

### ELEVEN PEOPLE KILLED AT ROCK CONCERT

Widespread drug taking, badly thought out ticket arrangements and the late arrival of *The Who* were the main factors for a stampede at a rock concert in which eleven people were killed. The concert had been due to start at 8:00pm and those with numbered and reserved tickets were allowed in. *The Who* arrived at 8:30pm and as their warm-up began the teenagers outside began to panic. The crowd surged forward and during the panic eleven people were killed and twenty seriously injured.

### MINES



### 9th - SAT 15th SUN DECEMBER

**FOREIGN STUDENTS WEEK 1979** 

This year we will be hosts to seventeen students from various European mining schools. During this week, by day, our guests will be visiting various companies in the mining and metallurgical business. There may still be room for RSM students on these trips - check on the RSMU noticeboard for details of vacancies. In the evenings we will be organising events for their and YOUR entertainment, namely: GLUCKAUF PARTY in Stan's Real Ale Bar starting at opening time, and ending late.

Sunday 9th: -Monday 10th: --Tuesday 11th: ---

There will be free beer for all from the Gluckauf Stein. Visit to pub - we will probably attempt to drink it dry.

DE LA BECHE CLUB CHRISTMAS PARTY in Watts Library. Tickets from DLB Committee or RSMU Office.

Wednesday 12th: BARNIGHT in the Union Bar (where else?). Need any more be said? Till late. games and a few drinkies à la Freshers Dinners.

HON PORN'S NIGHT in Union SCR at 8:00pm. Some films and one or two exotic Thursday 13th: --dancers.

MINES BALL: the event of the year. Double tickets £17.00 from RSMU Office. Friday 14th: -Saturday 15th: - Our guests say goodbye and go home, tired but hopefully impressed with RSM. Sunday 16th: ---- The Foreign Students' Officer (Mike Lee) goes into hospital for a rest.

**Captain Inadequate** The Amazing Adventures of HE IS SO INTENT THAT HE FAILS TO NOTICE A LARGE ROCK, AND TRIPS ... AND SO THE KEEPED OF THE ETERNAL BOOK SCAMPERS OVER THE CRYSTAL ROCKS, READING AS HE GOES, WITH CAPTAIN INADEQUATE IN PURSUIT... OVER .... Partillie OOPS! TOO FAR BACK! QUIET! IF I CAN FIND THE PAGE, ICAN REASSUME MY SUPERNATURAL PERSONA! -YOU CAN'T TAMPER WITH FORCES YOU DON'T UNDERSTAND! AHA!) DON'T! LEAVE ME ALONE! I GUARD THE STRUCTURE OF TIME. I PROTECT CAUSALITY, THE NATURAL FLOW OF EVENTS, AND A COMPLETE SET OF BRITISH RAIL TIMETABLES FOR 1973! CAUSALITY WILL BE VIOLATED M CONSEQUENCE TO NONSENSE IS CAUSE APPERTAIN HISTORY CEASES TO AND! AND EVERYTHING BE CONFUSED OH NO! YOU'VE DROPPED THE GIVE ME THE BOOK, CAREFULLY ... WILL! LATE IT'S TOO! UP TIME MESSED WE VE! ETERNAL BOOK! DON'T DROP IT!









# EDITORIAL

Happy Birthday to us! We're thirty years old and good for another thirty — at least!

A long long term's glaring over a paste-up board has not been in vain. Mistakes - I've made a few, but then again too few to mention .... I did it my way! FELIX is alive and well, but I still need people, people, people; as reporters, proof-readers and collators to mention but a few. All the issues I've delivered on Friday mornings have sold like hot-cakes, but although it's great to see you read FELIX, with the economic strains that have been imposed on the College as a whole, you're the people who have to show that FELIX is justified in getting all the aid it can. And that goes for everything else that keeps you amused in College. Go to the Devils this week, go to the Ents Free Gig next Tuesday evening, but above all show that you care. It's easy to criticise, but what can you offer as alternatives? If you've got some good ideas, come and tell me, because you know what apathy equals? Cuts! So be warned: Don't be a dodo!

FELIX was born on 9 December 1949 as a fortnightly newspaper costing 3d. Its purpose was, and still is, to comment on topical affairs around College, bring to attention the activities of College members and also to entertain. It was felt that The Phoenix, the litereary magazine of Imperial, could not hope to fulfil these roles and should remain the tempremental bird it is, dying in some years and rising gloriously from the ashes in others. On looking through the first year's FELIX it is quite amazing how the paper has maintained a constant image.

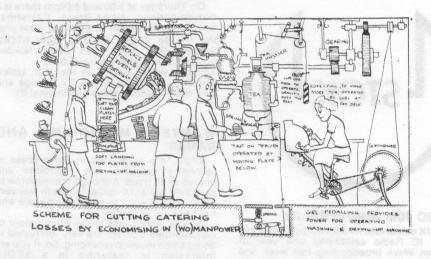
The first issue reported various events, including the arrest of sixteen people at the annual Rag Bonfire on the steps of the Albert Memorial. A Morphy Day report and a sports review were supported by regular features like the 'Diary of Forthcoming Events' and the already controversial letters page.

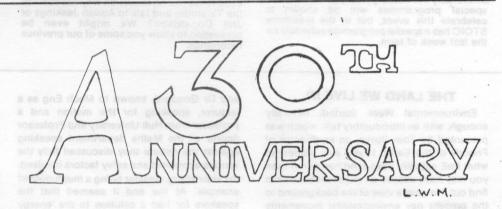


The Felix Society will hold its last meeting this term on Monday at 12:45 in the FELIX Office. Subscription to the Society is now fixed at 30p (cheap!). Come along and hear what's happened this term in FELIX and tell us all your ideas for next term.

Austin, Lars, Mark, Mary, Ian, Fred, Margaret, Jeremy, Paul, Archie Evans, Jill Dawson, Dave Bryan and anybody else who with true Christmas spirit has helped on FELIX.

CREDITS





The first six hundred copies sold quickly so the second issue increased to one thousand copies to avoid a black market. To quote the editor, E M Hughes: "....and it was reported that some sportsmen were offering their copies to latecomers at 4d, and finding plenty of takers."

Having overcome the threat of a black market, the staff decided to include some regular features: 'Profile' and 'The Drinking Man's Guide To London'. The first subject of 'Profile' was our own Union bar: "....and in a few years its place in history was assured by the formation of four clubs closely connected with it and by its firm installation next to the lavatory. The 21, 22, Chaps and Links Clubs made the Bar a congenial meeting place, a good talking shop, a place for warriors to return to tell the tale and lick the odd wound (from rag or honest game), and of course a place in which to liberate great exuberance for such is the joyous outcome of bibulation." There was also a letter from the Ents Chairman discussing methods of keeping numbers down at the Saturday night 'hop'

Issue three indicated more diverse material was being attracted; a crossword, poetry and an article on the emancipation of women. The trend continued in future issues. By issue four the accommodation problem was being aired — issue 7, refectory prices and soon the various political societies were edging for space.

Issue 10 saw a new style FELIX; printed rather than duplicated on a Roneo machine as had previously been the case. A map of College supplied to Freshmen gave particular emphasis to the local public houses. Times don't change much.

With a new editor and new format the paper was undoubtably destined for better things. The first anniversary issue summarised the status of FELIX very well: "The end of the year found the paper established as part of the College and recognised and constituted by Council as the official newspaper of IC."

FELIX had emerged a great success, its coat well groomed and as black as printers ink. Now, thirty years later, we celebrate another birthday. Perhaps it is best to look back at the personal view of the first editor, Ted Hughes:

"Although the paper is financially responsible to Council and exists by their consent, it is free to express such opinions as it sees fit. The FELIX Board therefore carries a considerable responsibility for in the hands of irresponsible persons the paper could be a powerful and mischievous weapon. In the event it would undoubtably be suppressed, and I should be extremely sorry to see that happen. I hope, therefore, that future FELIX Boards will bring new ideas and new life to the paper, but will maintain essentially the same spirit."

Hopefully we have kept true to these ideals during the ensuing thirty years as deviation from these is inexcusable.

Happy thirtieth birthday FELIX, long may you continue!

MARK SMITH

### STUDENT TELEVISION OF IMPERIAL COLLEGE



### **STOIC 10th ANNIVERSARY**

FELIX celebrates its 30th birthday with this issue, IC Radio celebrated one year of Medium Wave broadcasting last week and STOIC will be celebrating its 10th anniversary in February next year. A series of special programmes will be shown to celebrate this event, but in the meantime STOIC has a special programme schedule for the last week of term.

### THE LAND WE LIVE IN

Environmental Week started, naturally enough, with an introductory talk, which was presented by Tom Burke, an ex-director of Friends of the Earth. If you ever wondered what FoE actually does (and has done) then you may have missed an excellent chance to find out. He gave a view of the background to the present day environmental movements which developed from the concern of our ancestors about the preservation of footpaths and monuments in the 1890s. Today, after the rapid birth and growth of many environmental groups in the sixties, the economic rather than altruistic pressures are bringing home to people the need for conservation.

It is not a crisis of capitalism as the communists would have it, nor is it a crisis of communism as capitalists call it, rather it is a crisis of society.

Though energy is the most obvious and most advertised, commodity that needs conserving there are many different aspects of energy production that need looking into. This is the function of the Standing Commission on Energy and the Environment of which Lord Flowers is a member. His talk, given later on the same day, gave a brief, but detailed, explanation of this function.

Starting with the government's green paper on-energy policy they are now studying the various aspects of energy production, use and its environmental side effects. Their first report, on coal, is due to be completed in 1981.

Though Lord Flowers' committee decided that nuclear power could be left until late of their list of energy sources for discusiion Thursday week saw an almost full Physics Lecture Theatre 1 waiting avidly for the debate of this particular topic. They were not disappointed. With Mr Brookes, economic adviser to the UK Atomic Energy Authority

### CHRISTMAS PROGRAMMES

On Tuesday at 1:00pm and again at 6:00pm Paul Johnson will be talking to the Rector (colour).

On Thursday at 1:00 and 6:00pm there is a not-so-serious News-Break Christmas Special, featuring Bryan Steele in a kilt plus the It'II Be Alright On The Night STOIC Special. The parts even Denis Norden couldn't show (with coloured bits). You can watch STOIC in the JCR. Union

You can watch STOIC in the JCR, Union Building, Southside Lower TV Lounge and Beit and Southside Halls on Channel 21.

### WANTED: MUSICIANS AND BANDS

STOIC are at present in the process of recording sessions with musicians and groups of all types. Although the response to an article in FELIX earlier this term was very good, we still want to hear from people who have not yet contacted us.

We can record sessions in either colour or monochrome and we are very interested in doing some location recording. So, if you are interested in featuring in a STOIC programme and would like to see what your band looks like on television why not come to the TV studio and talk to Adrian Jeakings or Jim Donaldson? We might even be persuaded to show you some of our previous recordings.

### IDEAS

STOIC is YOUR own TV service so why not develop it? (Don't worry, no work involved unless you want to!). If you would like to help with STOIC productions or have any ideas for STOIC programmes, come to the TV studio or ring int 2637 and talk to Adrian Jeakings or Grant Richmond.

and Dr Goodard, known to Mech Eng as a lecturer, speaking for the motion and a professor from Hull University and Professor Scorer of the Maths department speaking against the debate they discussed fully the various economic and safey factors involved, the Harrisburg disaster being a much quoted example. At the end it seemed that the speakers for had a solution to the 'energy crisis' and the speakers against thought that the solution was wrong and there might not be a crisis at all. Both sides however seemed unhappy about nuclear waste storage and nuclear arms proliferation.

The discussion on the Chemical Aspects of Farming And Food Production was designed to encourage people to think whether that ordinary lettuce leaf on their plate is *really* good for you, seeing as, when commercially produced, it is sprayed with a pesticide every week of its growth and traces will always remain and the undertakers do very well out of preservatives in our food, they can now keep dead bodies for days without refridgeration or decay......

Now hands up those who like helping children. Now keep your hand up if you put theory into practice. Yes, as I thought, most went down again. Put you hands down the few that are left and thank you for attending the Adventure Fun Days at the weekend when a playground was to be rebuilt and painted for London children with no other place to play except the streets.

The debate on what to conserve seemed to be of interest only to 'conservationists' judging from the turnout, but the talks, especially the one given by Mr Hookway of the Countryside Commission were very interesting and in some ways eye-opening. Did you know that IC destroyed a beautiful 19th century square in order to build Southside? Mr Hookway started with a quotation: "What has posterity done for me?" Perhaps this sums up the attitude of IC students to the environment.

At the Environmental Fair on the other hand it was hard to judge the amount of interest, but a lot of people did come for a look around. Societies, such as Friends of the Earth, the World Wildlife Fund, the National Society for Clean Air and even the Vicotian Preservation Society were present. The Cyclists Touring Club was of particular interest to students since the London branch is trying to create 'bicycleways' in various streets in London.

If you did not manage to attend any of the events but are still interested in joining or finding out more about any of the societies, here are some addresses:

Friends of the Earth, 9 Poland Street, London W1V 3DG

Nature Conservancy Council, 20 Belgrave Square, London SW1X 8PY

National Society for Clean Air, 136 North Street, Brighton BN1 1RG

Transport 2000, 40 James Street, London W1M 5HS

Campaign Against Lead in Petrol, 63 Dora Road, London SW 19 7HH

The Soil Association, Walnut Tree Manor, Haughley, Stowmarket, Suffolk 1P314 3RS. (They offer a special student membership). Cyclists Touring Club, Cotterell House, 69 Meadow Godlaming, Surrey

Weadow Goulanning, Su

National Conservation Corps (South East), Zoological Gardens, Regents Park, London NW1 4RY

Town and Country Planning Association, 17 Carlton House Terrace, London SW 1Y 5AS Railway Development Society, BM—RDS, London WC1V 6XX

The Victorian Society, 1 Priory Gardens, London W4 1TT

or ask for Mary in the FELIX Office. Mary Freeman

# **REACTION TO LAST WEEKS MICRO ARTICLE**

I was interested to read Mary Attenborough's article in FELIX no. 536.

Ms Attenborough presents a scenario and then just leaves it without pointing out its consequences or how things got like that. I refer to her remark "Of the people in work, we could be left with a technocratic elite and deskilled masses."

No government would survive for very long if this state of affairs existed (except a regime like the one in Cambodia which was prepared to kill off a large fraction of the population for purely economic reasons), as the "unskilled masses" would 'revolt'.

What is more interesting is how the situation could get that bad in the first place. The answer is that in this country it couldn't because of the way that the technology works. Very few of the factory 'robots' which will replace human jobs can do so without having been taught how to do that job by the human operator. Whenever a factory starts producing a new item, the machines have to be taught how to deal with them, by skilled human operators.

There are very few paint sprayers, for example, who would teach a machine to spray a chair if it meant the he/she and his/her mates would be out of a job as soon as they'd done it. So what is the answer: Hide vour head in the sand (the Australians have a lot of that)? No, chiefly because the chip gives a great chance to improve the environment, as I shall explain.

The answer is for the paint sprayer to copywrite his work, so that each time the machine paints a chair the company pays him, well actually not him, but a union who distributes the money amongst the paint sprayers who are registered as working for that factory.

So what to do with the time that used to be spent spraying chairs? Oddly enough, much of it will be spent painting chairs because; the guy who gets the next job is the best paint sprayer around, so every one keeps in practice.

The reason I say that micros are going to improve the environment is because economic policy of firms is based on reducing unit costs, conventionally this is done by reducing labour costs, but if labour costs are fixed (as above) then the only way to reduce unit costs is to use less resources, land energy, raw materials etc, and therby doing all the things the environmentalists want us to do.

Actually micros aren't that clever either, the brain surgery machine mentioned by Ms Attenborough couldn't deal with any thing it hadn't met before (well actually t's programmer, who would also have to be a brain surgeon) whereas the experienced human could, not for any spiritual reason but simply because the data storage and data handling capacity of the human brain cannot as yet be rivaled by any computer around today (or tomorrow).

Any one who has written software for a real problem will know that most of the skill is defining the problem and selecting the compromises (there are always compromises). The coding is a very minor part of the work, computers can do the coding but none of the rest.

So my view of the future is of a society based on skill not 'slog' where people do what they are good at, and sell the copyright on their skill. I believe this future is inevitable, economic and social pressures will ensure it goes that way.

If you are frightened by, or even interested in micros then come to one of the micro computor club meetings at 7:00pm on Tuesdays. This week our illustrious editor is giving a talk.

**Tim Panton** 

# COMPOSING MUSIC BY COMPUTER

### BY THE FELIX EDITOR, COLIN PALMER

Somehow they (micro club) managed to rope me into giving a lecture on Music Composition by computers. Before you turn to page 12 of this illustrious newspaper I promise not to bore you with detailed descriptions of 12,000 line Pascal programs.

For those of you who remember my election campaign for FELIX Editor, last March, you may recall a weird election poster based on my experiments with computer music composition. Most programmers create games packages which use up large amounts of units. In these days of cuts I believe one should write programs that create usable output rather than eat up units .... however the program had a 6 hour CPU execution time and thus defeated the objective of saving units (it was run over the summer vacation 1978).

If you are interested in computer music composition then come to the Micro computer club next Tuesday (I don't know the venue but I suppose it's in the Union building?). To wet your appetite i'll try and give you a brief description of the main elements of the program.

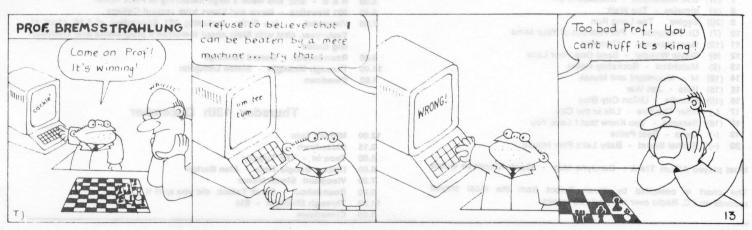
Before composing music one has to write an output package that will display the notes in a readable format. It is useless trying to interpret millions of numbers and symbols. Fortunately several students have developed an attractive plotting package for the Kingmatic plotter (a great device that also produces attractive spirographic patterns). However, I decided it would be interesting to develop a package that would output musical scores on a lineprinter.

After a few weeks the lineprinter was merrily churning out single voice random tunes. I was not satisfied with just one voice being composed and set to work producing a program, that would output four-part harmony on the lineprinter! 3 months and 20,000 units later the program began to run. It included a self-checking subroutine that needed a checking routine to detect bugs in the check program. Before long the first aim to produce a program that composed music had been amended to producing a good output package.

I was able to compose some canons which could never have been constructed by a human being because they had a mathematical perfection and harmonic 'fit' that would have taken years to compose. The program was able to give a mark out of 60,000 points for each attempt that it composed. The computer stored the 'best' attempts and reproduced them at the end of the search to find special canons. The ability for a machine to evaluate its performance smacks or artificial intelligence and that is one of the areas in which I next hope to write articles for FELIX.

If you'd like to see some of the output please drop into the FELIX office.

RCS CAROL SINGING NEXT MONDAY MEET RCSU FOR FREE PUNCH AT 6 p.m.



# I.C. RADIO TIMES



#### 301m/999kHz Medium Wave

Whatever you are doing between six and nine p.m. tomorrow - cancel it. Situate yourself by an outlet of I.C. Radio and let some real ethnic music put your brain into overdrive. This week Neal Kay, top Rock D.J. resident at the Bandwagon, on the road with the Soundhouse Roadshow, concert compere (for Rush, Motorhead etc.) et al, will be co - presenting the show. He will be bringing with him some unreleased Demo Tapes which you will be able to hear; you can also ring in on internal 3440 and talk to Neal during the programme. Also listen in for new releases by Riot, Sammy Hagar, Triumph, Iron Maiden, Praying Mantis, April Wine etc..

So give Larry and Isla a miss and let it all hang out.

Julian Pitt

P.S. - If I have magnesium flares and dry ice will you listen?

### I.C. Radio Top Twenty 3/12/79

- Electric Light Orchestra Last Train to London / Confusion 1 (1)
- Boomtown Rats Diamond Smiles 2 (4)
- 3 (11) Status Quo Living on an Island
- Madness One Step Beyond 4 (2)
- 5 Jam - Eton Rifles (3)
- 6 Joe Jackson - It's Different for Girls (-)
- 7 (5), B.A. Robertson - Knocked It Off
- 8 (8) Inmates - The Walk 9 (20)
- Eagles The Long Run Dr. Feelgood - Put Him out of Your Mind 10 (7)
- 11 (13)
- Gary Newman Complex Stevie Wonder Send One Your Love 12 (6)
- Matchbox Rockabily Rebel 13 (9)
- 14 (19) M - Moonlight and Musak
- 15 (15) Ruts - Jah War
- (10) Blondie Union City Blue 16
- (-) · After The Fire Life in the City 17
- 18 (16) Santana You Know that I Love You
- Darts Reet Petite 19 (-)
- (-) " Rachel Sweet Baby Let's Play House 20

Most played Album Track : Carolyne Mas - Quote Goodbye Quote

The chart is compiled by Sarah Talbot from the most played records on I.C. Radio over the past two weeks.

### Friday 7th December

- Tune In Simon Littlejohn 5 00
- American Rock Dave Hodesç 6.00
- Viewpoint Chris Dalton; with weekend T.V. guide 7.00
- Roundabout Aiden Sutcliffe 9.00
- Through Midnight Gererd Jennings 11.00

Closedown 1.00

### Saturday 8th December

- 8.00 Wake Up With Jon Jon Firth; including local cinema guide at 10.30 and featured long album track
- Harvey Nadin 11.00
- Alan Higginson 2.00
- Paul Farrington 3.00
- **Steve Moses** 4.00
- Heavy Metal Show Julian Pitt and Neal Kay; see feature 6.00 including 301 Sportsdesk at 8.30
- 9.00 Roundabout - Sahara Blott; Ring in requests on 3440 to keep her quiet 11.00 Through Midnight - Jeremy Nunns; with music to relax you after your Christmas Party.
- Closedown 1.00

### Sunday 9th December

- 8.00 Wake Up With Sarah Sarah Talbot 11.00
- 1.00 The most Outstanding Albums of the Decade - Jon Firth
- Roundtable Nick Melling; a panel of guests review the new releases 4.00
- 5.00 Focus on E.L.O (part 2) - Harvey Nadin

S&M - Simon Milner

- 6.00 Sunday Special
- 8.00 I.C. Radio live from Stan's Bar - Simon Woods & Sarah Talbot
- **Through Midnight** 10.45
- 1.00 Closedown

### Monday 10th December

- 5.00 Tune In Barry Wareing
- 6.00 Folk: Ragged Heroes - Eric Jarvis; producer: Sid
- 7.00 Viwpoint - Huw Baynham; with I.C. Radio Top Twenty at 8.30
- Roundabout Simon Littlejohn 9.00
- 11.00 Through Midnight - Gerard Jennings
- 1.00 Closedown

### **Tuesday 11th December**

- 12.00 Midday Spin
- Closedown 2.15 5.00
- Tune In Mark Jones 6.00
- That's Jazz Harry Magnay; producer Simon Milner Viewpoint - Karen; featured group: Skids, Gig Guide for Wednes day at 7.00
- 8.45 and her favorite records of 1979 Roundabout Simon Woods; spot the swap with Thursday. 9.00
- Through Midnight Ken Strachan 11.00
- Closedown 1.00

### Wednesday 12th December

- 5.00 R & B - Sid; this week a large flavouring of Punk Rock.
- 6.40 301 Newsline - News and Views from around College
- Viewpoint Jon Firth; including 301 Sportsdesk at 8.30, chart of 7.00 Yesteryear, chat with Stoic about tomorrow's programme and Thursday Gig Guide
- Roundabout Gerard Jennings 9.00
- 11.00 Through Midnight - Simon Littlejohn
- 1.00 Closdown

### Thursday 13th December

- 12.00 Midday Spin
- 2.15 Closedown
- Tune In Tim Tuggey 5.00 6.00 Disco / Boogle Time - Alan Burton
- 7.00 **Viewpoint Simon Milner**
- Roundabout Sarah Talbot; did you spot it ? 9.00
- 11.00 Through Midnight - Sid
- 1.00 Closedown



### **CITY-AND GUILDS**

Time for the penultimate FELIX article of this term. Due to good arranging there was a whole week to recover from Carnival, some of us needed this. By Sunday enough people had recovered to participate in the rugby sevens. This was a good day out at Harlington despite the fact that some of the matches didn't turn out the way that they were intended. TT won the plate and the women's team of ten fared well despite some of the opposition not entering into the spirit of the game. The food afterwards was good and the film was rather funny.

The nomination papers for Hon Sec came down last Friday with only one name on the sheet, so it only remains for Sara McGuiness to be ratified at the next UGM. We will be requiring a new Assistant Hon Sec to be elected at the next Gen Com in the spring term. Anybody who thinks they would like to stand should come and see Jo in the office.

### FORTHCOMING EVENTS

Saturday 8 is the Year Rag. This is the event where all the years of Guilds compete with each other to collect the most money during the twenty-four hours between midnight Friday and midnight Saturday. So come and collect the cans on Friday from the Union Office if you want to start collecting at midnight. There will be a half barrel for the year that collects the most and another for the year that collects the most per head. We need a good turnout as RCS collected £2,700 last week. If you want to start on Saturday be at the Office at 9:30am (don't forget your licences).

Sunday 9 is the Bar Games Night. This is a slightly more refined Bar Night. There will be a selection of games such as cards, nine mans morris, dominoes, darts, chess and many others. Singing will also take place as well as a few quiet pints. Meet in the Union Bar at 7:00pm. The Christmas UGM is at 12:45 in ME 220 on Tuesday. Father Christmas will be giving out pressies to the Exec. Other things will also happen. In the evening we will go carol singing in London with Scarf. Meet in the Union Bar at 6:00pm for a really good evening. There will be mince pies and punch afterwards in the Union Office.

Thursday 13 we are going ice skating at Queens. Meet at the Union Bar at 6:00pm.

Friday is the end of term when we all get pissed and go home.

As this is the 30th anniversary issue I decided to look up some information from the last thirty years.

During the 1950s Guilds were quite active with large numbers turning up for the events. Morphy Day was similar to today with more participation from the boys in blue especially when a brick wall was built across Putney Towpath and the trapping of an innocent pantechnicon. In 1958 Southampton University stole Bo only to find the police called in to get it returned as it was as inviolate then as it is now. The old C&G building began to be demolished at the end of the decade. In 1961 the old wooden Spanner was stolen only to be found three months later in the left luggage office of a small railway station near Koblenz in the Rhine Valley.

Also during the early part of the 1960s a thirty foot Spanner was fixed to the side of the new physics building by some mountaineering Guildsmen. It took College two days to remove one night's work. In 1963 we lost Spanner again and at Morphy Day we won the

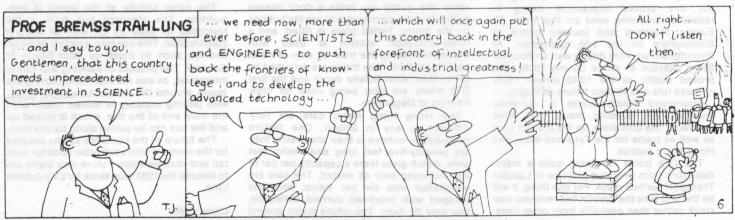
Morphy and Lowry races and covered two police motorcyclists in flour and tomatoes. In 1964 Theta was taken by a Guildsmen dressed as a waitress during a Freshers Dinner. In 1965 our Union Office was furnished. The police academy joined in Morpyy Day in 1967 and they got a bit mucky. 1969 saw ideas to dissolve the CCUs (things don't change), 650 people turned up at a Guilds UGM to protest and a sixty foot dragon containing twenty Guildsmen was marched through Harrods. During the years of Jenny Jones, 1974-1975, Guilds had many mascots. Cheers, Bryan.

# GUILDS CAROL SINGING

With Scarf Mince pies and Punch after



Meet Union Bar 6.00 pm Tuesday 11th December Also UGM 12.45 ME220 Same day



15



On Thursday 29 November, IC Liberal Club hosted a very successful meeting with David Alton, Liberal MP for Liverpool Edge Hill.

David, the youngest member of the House of Commons, spoke for about half an hour on a wide range of issues under the broad title Britain Needs A Liberal Government. His speech included the following points: 1. That we need a system of proportional representation to end the two-

party system and the endless pendulum-swinging that goes with it. The cycles of Labour nationalisation and Tory denationalisation are detrimental to the health of the nation.

2. That we need greater workers participation in industry and they must partake in the profits of industry.

3. That violations of human rights are occuring all around the world. He severely attacked Mrs Thatcher for continuing to recognise the regime of Pol Pot in Cambodia. This regime may well be the worst in the history of the world and was responsible for genocide on a massive scale but *still* we continue to give the stamp of approval to it. He also referred to the plight of dissidents in the USSR.

4. That public spending cuts are a myth. In fact, total public spending will be increased next year with large increases in defence and law and order. He attacked the government' ideological 'dismantling of the welfare state' and the proposals contained in the Education Bill.

5. That we need to invest more in alternative energy research. He mentioned that many buildings now derived their energy from solar panels.

Questions from the floor included one on David's attitude to the Corrie Bjll. He replied that he was against abortion for deeply-held moral reasons. He was also asked about Liberal philosophy, and referred the questioner to a cassette of the philosophy debate at Margate. At the Assembly, David had spoken on the 'Troops Out' motion on Northern Ireland and he was asked about this. He replied that he had never condoned the activities of the IRA and was looking for a negotiated solution involving the withdrawal of troops.

#### **CLUB NEWS**

IC Liberal Club has elected Philip Cole as Secretary and Ian Prosser as ordinary committee member. The annual dinner of the Club will be held on Tuesday 11 December at the National Liberal Club. The cost is £5.05 and anyone can come along (you don't even have to be a Liberal!).

Finally, don't forget our informal meetings at 1:00pm on Fridays in Stan's Bar.

### **Richard Earl**

Metropolitan — Cammell, of Washwood Heath, Birmingham is Britain's last remaining private builder of rolling stock and as such was the subject of a Railsoc visit on Wednesday 28 November.

Initially we had planned to travel to Birmingham on the 8:50 from Paddington, but this proved impractical owing to railcards not being valid on this train. To Euston therefore and journey hence to Birmingham on the 9:35 'Clansman'. At Birmingham we were due to wait an hour for Steve Clayton to arrive on the 10:40, this proved elastic as the 10:40 arrived thirty minutes late due to loco failure at Rugby.

Washwood Heath works is currently engaged on building trains for three contracts, the D78 stock for the District Line as well as trains for the Tyne and Wear and Hong Kong metros.

The D78 trains represent quite a major departure from previous practice in London Transport surface stock. For one thing, it will be the first time the District has recieved new stock rather than cast-offs from other lines. RAILWAY

An all-aluminium train, they have only four single leaf doors per vehicle and these are equiped to be operated by the passengers by way of a button next to the doors. When the speed of the train has fallen to a suitable low value, the guard can press a door release button to allow passengers to use the buttons on the doors. Tinted glass is fitted, and a force-ventilation system is used with distribution along the train by way of small centrifugal fans. New trains are delivered by BR to their West Ruislip depot and the first D78 trains are now being used for crew training at Dagenham.

The Hong Kong metro cars are very different to any in Britain. One feature immediately noticed is their sheer size, they are seventy-five feet long and twelve feet wide, which gives them a capacity per car of 450 including only 45 seated. The cars are marshalled into six car trains, and one equiped with overhead current collection, this time 25 Kvac. The whole metro project

### TORY REFORM GROUP vs MONDAY CLUB

The Conservative Society recently invited Mr Tim Smith (a member of the TRG's National Executive) and Mr Brian Rathbone (a solicitor and member of the Monday Club) to take part in a friendly discussion about the merits (or otherwise) of their respective groups. The TRG and the MC are pressure groups within the Tory party, the former on the leftwing and the latter on the right. They try to present alternative policies, put forward particular points of view and generally promote discussion within the party.

Giving a brief summary of the development and beliefs of the Tory Reform Group (founded in 1963), Mr Smith emphasised that there is no 'right' answer to the problems facing us and consequently there is a need for organisations to put forward alternative views. No party should be monolithic and it is foolish to rule out certain courses of action simply for philosophic reasons: "There is no room for dogma". The power of any government to intervene is limited — this fact must be recognised.

Replying for the opposition, so to speak, Mr Rathbone explained that the Monday Club also dated from 1963; its formation was a response from members of the party who felt it was going through a bad patch and losing sight of traditional Conservatism. In the early 1970s, everything went wrong again, culminating in a "richly deserved defeat" in 1974 for the Heath government.

Mr Rathbone expressed approval of the present administration, now taking determined steps to reduce the power of the government "....the hard disciplines which this country must endure because of mismanagement dating back almost to the end of the last war. This government will maintain its policy with vigour until it gets results. It will however, take a long time to reap these benefits".

The essential difference between the TRG and the MC was stated as being once of emphasis: a question of priorities. For the Monday Club, freedom of the individual and traditional Conservative values were very important; for the Tory Reform Group, equality of opportunity.

Some interesting comments were made in answer to questions from the audience. On trade union reform, Mr Rathbone said firmly that the limited reforms proposed were not enough; the power of trade unions was quite frightening. He added: "The true doctrine of monetarist policies will not work if the economy is distorted by an agglomeration of union power". Both he and Mr Smith agreed that the 1976 act should certainly be repealed.

Less agreement was reached on electoral reform; Mr Smith said that he had gradually moved round to favour the idea of some sort of proportional representation. When Mr Rathbone voiced fears of this producing a 'soft centre' government and fragmentation of parties into small units, Mr Smith said he thought it would help to preserve some kind of political stability. Under the present system and with the rather gloomy prospects for the 1980s, he foresaw with some anxiety the possibility of dissatsified voters swinging wildly from left to right and back, voting in different governments every five years or so, which would be pretty disastrous.

Further discussion on schools and education was unfortunately cut short through lack of time, and the audience dispersed, enlightened, to seek knowledge of a different kind.

IC Conservative Society

has been a really exciting engineering venture, involving the construction of a tunnel across the harbour, that is really a series of tubes sunk into position from the surface.

The other activity at the works is busbuilding. The standard bus built is the Metrobus as used by LT with all integral construction. This can take a variety of diesel engines such as those by Rolls-Royce or Gardner. The process of painting was rather interesting, as was the method of moving the buses around the works. An electric trolley with jacking capacity is moved underneath the front end of the bus, which is jacked up and the bus can be pulled along by one man.

The future of the company seems assured for the moment with a full order book for both rail and road vehicles. Future new trains are to include the 1983 tube stock for LT's Jubilee Line.

**Chris Veale** 

#### Sir

On this, not immoderately salubrious occasion, may I most humbly and I hope graciously, proffer my warmest (and even most heartfelt) thanks, regards, best wishes congratulations to your extremely worthy, and notably unpretentious publication; on reaching its thirtieth anniversary, despite the frequent, possibly even boringly, repetitiously, unpunctuatedly regular occurences of traumatic, catastrophic and usually far-reaching interruptions, sometimes as if conspired at and effected by an almost Jesuitical inquisitory panel of warped evil minds (of obviously, by necessity, awesome and majestic mental capabilities) intent with total obsession, on their goal of the complete annihilation of the perpetrators of discussions on the correct juxtaposition of conjunctions; a topic that reminds me of the words of dear old Bertrand Russell, it was at a British Kidney Patients Association Annual Airlines Ball, when whilst listening to an embarrassingly, interminably uncomfortable after dinner speech, by the then young Patrick Campbell, that he turned to me and (in his characteristically, clinical, concise style) mildly, morosely, murmured, mischievously "maybe, and and it, but not and and and or and and but, are also but and if. and if and if, but not if and but and if, despite if but also and which and and and and which, being and but then, not then and which, but instead but if only, are also which is then and but not and then, is is is?" "Maybe' I tentatively replied and of course he was forced, albeit reluctantly, to agree with me, though these perennial "is is is?" discussions are as objectionably irrelevant as his sort of unwieldly sentence structure is annoving and incoherent: that have occurred during this period, that have occurred during this period. Yours unobtrusively

Bernard Levin Physics 3 (Hon)

# PHOTOSOC PRINT COMPETITION RESULT

n Ltd, on Monday 14 January 1980 at 6:00pm

1st

Terry Arnold (Chem Eng 3)

bn2ture Theatre at the Royal School of Phillip Hollinshead (Metallurgy)



# 3rd

John Guidon (EE3)



Royal School Mines



# ROBERT N PRYOR MEMORIAL LECTURE

The Mining and Metallurgical Society is sponsoring the First Annual Memorial Lecture to the late Professor Robert N Pryor. The lecture will be given by Sir Mark Turner, Chairman and Chief Executive of Rio Tinto Zinc Corporation Ltd, on Monday 14 January 1980 at 6:00pm in the Mining Lecture Theatre at the Royal School of Mines, South Kensington, London SW 7. The lecture will be on the topic of International British-based Companies in a Nationalistic World. All are cordially invited to attend.

# ROWING

On Saturday, the whole of the IC Boat Club turned up at the UL Boathouse by Kew Bridge, to compete in the Allom Cup Regatta for UL colleges. In the evening, we returned to Putney with nine pint tankards, nine halfpint tankards and five men's medals together with the Allom Cup for Men's Open VIIIs and the Roderick Hill Cup for Men's Senior C VIIIs. Even more encouraging, was that the 2nd VIII reached the final of the open event, proving that IC has two VIIIs faster than any other London college. The results were:

### ALLOM CUP (OPEN VIIIs)

In the first heat, the lst VIII raced against arch-rivals and probably the only crew who could beat IC, University College and Hospital. Off the start, UC&H took an early lead, but could not get away from IC. As the race progressed, IC found their rhythm and stroke by stroke, came back at them, and eventually passed them and won by the narrowest of margins: two feet. In another heat, the 2nd VIII raced the King's College 1st VIII. In this race, IC led from start to finish and won by a comfortable one and a half lengths.

The final was between IC I, IC II and an VIII from London Hospital. London took the early lead but the 1st VIII soon found their rhythm and were in front by the half way point. At about this time, bad steering by the Hospital

### cox caused a clash between them and the IC 2nd VIII (who were level with them). This caused the umpire to stop the race and London Hospital were disqualified. Our row then took place between the 1st VIII and the 2nd VIII and as expected the 1st VIII won by about two and a half lengths.

### RODERICK HILL CUP (SENIOR C VIIIs)

The 2nd VIII were climbing up in this event and discovered that no other college could produce a second VIII to match them, and came away comfortable winners.

### **NOVICE VIIIs**

This was the first opportunity for the freshers to get a taste of racing. Their first race was against Chelsea College and Guy's Hospital. They got off to a bad start, due to not hearing the starter correctly and were never able to make up the deficit. They lost by about one length to Guys, who went on to win the final.

#### LADIES OPEN IVs

We entered two crews in this event. The A crew beat London Hospital A and QMC by two lengths and easily won their heat, while the B crew had an easy win over London Hospital B. In the final, the two IC IVs were joined by a crew entered as University College and Hospital. It turned out that the UC&H girls — a University of London crew and were actually competing in UL equipment. The race was very close with UL leading all the way but they were pushed very hard by the IC A crew. The final result being a win for UC&H by one length.

### **LADIES NOVICE IVs**

ALLOM CUP REGATTA

Mining &

**Metallurgical** 

Society

In their first race, our girls novice crew had a very comfortable win over St Bartholomew's Hospital and Chelsea College. In the final, they set of slowly against QMC, but in the latter stages of the race, proved they had paced themselves perfectly by rowing through and winning by a half a length.

### TEAMS

1st VIII: P Moysley, W Bradbury, J Urry, S Webb, M Fellows, A Rowe, P Gerrard, A Reynolds and I Simpson.

2nd VIII: R Maddock, S Collier, E Hobhouse, C Adams, C Geary, P Allen, T Joslin, M Pritchard and S Crampton.

Novice VIII: P Tebbutt, P Allen, S Allinson, A Purdy, R Redhead, J Marsden, P Mance, M Agnew and M Johnson.

A Crew: A Toney, G Griffiths, N Ray, C Weir, and M Canvin.

B Crew: E Lindsay, S Gray, J Pearson, A Burgess and W Partridge.

Novice IV: J Jendrick, S Drane, H Johnstone, A Clough and M Canvin.

# REVIEWS MIKE HARDING at the Dominion Theatre, 4 Dec

Mike Harding first came into the limelight with his single *Rochdale Cowboy* and since then has delighted audiences up and down the country with his own brand of Lancashire humour and wit.

His show contained a highly entertaining selection of experiences, past and present including childhood, his life on the road, his tour of America, life in a rock band in the sixties and his first time in London.

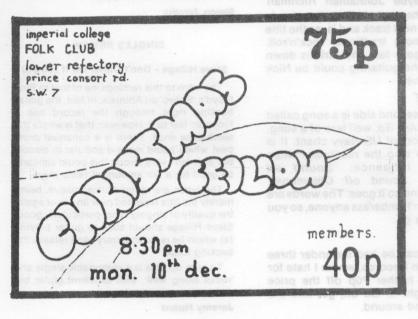
As well as showing his superb talent for telling stories he also proved his worth as an extremely versatile musician by accompanying his songs with acoustic guitar, electic guitar, ukelele, banjo, mandolin and harmonica.

During the three hour long show he did two monologues: one as a drunken vicar with a witty parody of the Noah's ark story and the other as a Carruthers type Colonial (complete with a set of flying ducks on the wall).

Mike Harding showed another side to his performance in singing a very sad but beautiful song about the First World War during the Christmas of 1914.

Mike Harding is and always will be the man to see if you want a thoroughly enjoyable night out with a Lancashire flavour. Lesley Horrocks IC CHOIR'S XMAS CONCERT IN THE GREAT HALL ON FRI 7 DEC AT 8.00 pm. TICKETS £1.10 (75p for students) FROM THE HALDANE LIBRARY OR THE UNION OFFICE.

Tickets for THE DEVILS are on sale at £1.00 from Dramsoc (store room, Union East Staircase). Posters also available.





### THE GOLDEN LADY (Director: José Larraz)

Julia Hemmingway (Christina World) is hired by a business tycoon to help him obtain an oil concession by eliminating the three other bidders for the concession before the ruler of the small oil-rich emirate arrives in London.

With the help of three 'specialist' (and very attractive) assistants, Dahilia (Suzanne Danielle), Lucy (June Chadwick) and Carol (Anika Paviel) and a computer, Julia begins a preliminary investigation of all the bidders and discovers that more is at stake than she had supposed.

Most of the 'action' takes place between Heathrow and the Hyde Park Hotel, despite an over-complicated plot involving the Greeks, the Israelis, an ex-Nazi and the American and Soviet intelligence services.

During the investigation, we are taken to a chic night club in London for the pleasure of seeing Blonde on Blonde and Hot Gossip perform, presumably to remind us of the high-living and sophisticated world in which the Golden Lady operates. However, this disco interlude, together with a couple of dull bedroom scenes, serves only to lengthen an already uneventful story, in which even the chase sequences lack any pace.

Simon Hodgson



# REVIEWS

### MADNESS AFFECTS STUDENT

The new album by Madness, that is. Titled ONE STEP BEYOND it is their debut album. Of the three groups currently enjoying success by reviving ska, whatever that is, Madness are arguably the best, certainly at writing good tunes. The Specials' first single was excellent but they have since failed to follow it, and the Selector are really non-starters.

### STIFF

Madness have now changed labels to Stiff Records from the original ska revival company, 2-tone. Stiff were never slow to capitalise on any new trend, and they have got themselves a band here who will soon be a very powerful force in the world of pop. They are to reggae what the Bootown Rats were to punk when they started so long ago, when Peter Powell was an undreamed nightmare and the Sex Pistols were still the greatest rock'n'roll band in the world.

### NME

OK so you've read about them in the music press, you know all about them already and you have heard the rumours that some of their fans are NF supporters, but last week the *NME* featured an interview with the band in which they all renounced the Front, and one claimed to have some black friends in the Front as well because they disliked Greeks and Italians. Surely this shows the ignorance on which the Front is based, and bands like this do not deserve bad publicity because some of their fans are stupid.

### MUSIC

In case you forgot, this is a record review so I'd better mention the music now. There are fourteen tracks on this album and to go through each one in detail, as all deserve, would only be a bore and you'd probably stop reading, which you are **not** to do OK? I must therefore attempt to single out a few tracks which I shall arbitrarily claim are the best.

### SINGLE

Side one begins with the title track *One Step Beyond* currently a single and zooming up the charts. It is typical of the Madness style, heavy on the sax with a reggae beat, inject some rocking guitar and a loony pianist and the whole thing vibrates with life.

The next track is a sort of ballad called *My Girl* it begins with the line "*My girl's mad at me....*" and a heartstring twangs in every male who ever had a girlfriend who got mad at him. A gentler approach this.

Night Boat to Cairo bounces magically around a middle eastern sound, which I'll mention again later. The Prince was their first single and this version is still very catchy. As we romp on to the end of side one and we come to....

### NUTS

Tarzan's Nuts. If you remember Ron Ely as Tarzan in that wonderful TV series you will be zonked by this reggae/ska version of the theme tune. Side two is slightly less memorable, but has its moments. In The Middle Of The Night is about a nice old newsagent who unbeknown to his customers nips out under the cover of darkness to nick their underwear off the line. (Perhaps a relative of Arnold Layne?)

### SEX

Have you ever wondered what would happen to Swan Lake if it was given a reggae beat? Well, you can find out on this album. It comes out like Egyptian Reggae; maybe Johnathan Richman was really ahead of his time. Rocking In A Flat is the next track and is, as the title suggests, more tradtional rock'n'roll. The piano goes fast and furious down below and the guitaring could be Nick Lowe in places.

### VIOLENCE

Closing the second side is a song called Chipmunks Are Go, well less of a song, more of a sort of US Navy chant. It is great fun to sing the responses when under the influence: "Sound off Chipmunks, Sound off Chipmunks, 1234 1234" and so it goes. The words are easy and don't embarass anyone, so you could have a go.

### VIRGIN

The record can be had for under three quid at Virgin Records, whom I hate for chopping a further 70p off the price since I bought it. Go on, get into the nuttiest sound around.

### **ALBUM REVIEW**

### Survival - Bob Marley and the Wailers (Tuff Gong/Island ILPS 9542)

This is the first album from Bob Marley and the Wailers, since Marley's pilgrimage to Ethiopia (and the rest of Africa) and consequently the album's main focus is upon Africa. The cover has the flags of all the African nations (as well as the Zapu and Zanu flags) as well as the storage plan of a slave ship upon it.

And so to the music. The overall sound is very polished and is not 'hard' as some of the sounds currently emanating from JA. However, the lyrics and music are some of the most powerful that Marley has written, especially, 'Zimbabwe', 'Africa Unite', 'One Drop' 'Babylon System' and 'Wake up and Live'. The lyrics deal with the problems that the black man faces today, as Marley sees them, also the percussion and bass are consistently good throughout although I felt that the I-Threes vocals were a little obtrusive sounding like the Shangra-Las' in places. The many good points of this album far outweigh the bad, the best part being (in this critic's eyes) the opening to 'Zimbabwe' - 'Every man gotta right/To decide his own destiny' - which sums up the basic message of the album.

This record is Bob Marley at his militant best and is definitely a record worth buying, even if you don't like reggae.

Simon Jerome

### SINGLES REVIEW

### Steve Hillage - Don't Dither Do It (Virgin)

The intro to this reminds me of that to Pink Floyd's 'Sheep' on Animals. In fact, the guitar backing right through the record has a Floydian feel to it. However, that is where the semblance ends. There is a continual drum beat which could make it popular in discos, but as it isn't very strong this could similarly be good for a fair amount of radio play.

The lyrics are rather unimaginative, being merely the title repeated over and over again; the quality of singing is not particularly good. Steve Hillage should stick to guitar playing (at whcih he is exemplorary) and release the backing track.

To sum up, this is a reasonable single and 'rocks along well', with excellent guitar but sadly disappointing singing. Jeremy Nunns



# NEWS FROM THE IC WINE CELLARS

Any member of the College including students can buy for personal use direct from the cellars. An extensive selection of French and German wines is available with token examples from Italy and Yugoslavia. A folder was prepared last session with some general notes setting out the aims and aspirations of the Wine Committee. The folder is designed to hold some wine lists, one for each of the major regions, and these have been updated recently. Copies of the new lists can be obtained from the Refectory Office, ground floor, Sherfield. Some of the wines and the wine list are to be put on display in the Sherfield Building.

Members of the College are to be encouraged to experiment and to 'drink their way through' the choices offered for each region. The Common Room Wines have been shipped in bulk by the College direct from France and

### THE

### CONSORT CHAMBER ORCHESTRA

presents

Vivaldi's 'The Four Seasons' with soloist HIDEKO UDAGAWA on TUES 11 DEC at 1:00pm. Admission FREE!

# SPORT

### IC HOCKEY CLUB

Bank of England fell to the long awaited backlash from the 3rd team which has had a series of disappointing results.

The match started with IC doing most of the attacking but Bank worked their way into the match and after fifteen minutes Chris Bird had to save off the line from a Bank short corner. Two minutes later IC opened their account with a goal from a long corner. Phil Webb was the scorer with a sparkling display of stickwork.

The second half started well with an early goal for IC. Chris Pound ended a good run down the right by passing the ball across the area to Tim Mitchel! who scored with a fierce shot. Ten minutes later Bank were back in the match with a well struck goal from a short

### **TENPIN BOWLING**

Last Saturday the annual charity marathon was played at Birmingham. This involved bowling from midnight Friday until noon Saturday with the aim of scoring as many points as possible.

The Imperial team, scraped up at the last moment, fought will coming fourth to last, beating Salford Ladies, Salford B and Brunel C teams. John Knight (159 average) with consistent bowling come fourth overall whilst erratic bowling resulted from the rest of the team. A few minor injuries were sustained, represent a better class of wine for the same price than the usual 'plonk' served in many a restaurant.

It should be remembered when studying the wine list that the prices are for use at College functions and these are to be compared with those charged in restaurants for wines of similar quality. To assist members of the College with purchases for private use a discount of seven and a half percent is offered for orders of six or more bottles, which can be made for purchases of a single bottle of the fortified wines (Madeira, Sherry, Port) and of brandy and spirits. Everyone is welcome to widen their knowledge by buying from our cellars but stocks must be protected and substantial orders are not allowed. Stocks have been laid down of some fine Bordeaux and Burgundy wines which need to mature further. The 1978 vintage is still lying in Bordeaux. Stocks of vintage ports, not shown on the list, are very limited and are to be used for special College occasions only. Stocks of the Cockburn 1967 vintage are slightly more plentiful and this port is drinking very well. Orders can be placed with the Refectory Office and should be collected within five days of ordering. The seven and a half percent discount applies only to payment made on collection or against a pro-forma invoice

### **PG TIPS**

If you are a postgraduate, you will probably have received our questionnaire by now. I urge you to fill this in and return it prompty since there is now a widespread appreciation in College circles that PhDs take too long. The Registrar has agreed to compile statistics on the matter and if the postgraduate view could be accurately represented to him (and others), I am sure that some effective discussion could take place.

The PG Dinner was cancelled due to lack of interest. I ascribe three causes to this:

corner. However, IC fought back strongly and victory was secured by a goal from Chris Pound who this time collected a pass from Tim Mitchell and placed his shot well. Mark Talbot's hard work was rewarded when, with five minutes to go, he forced the ball past the keeper to give IC their fourth goal. Any further attacking moves from Bank were scared off by Ralph Dean's slide tackles and the game ended at 4-1 to IC.

The team was: D Moynham, R Dean, C Bird (Capt), M Clift, P Webb, J Watkin, C Pound, T Mitchell, J Ebner, M Talbot, D Woollard, D Benham (sub).

Other results: IC 1sts vs St Bernards Hospital: 0-6 and Bank of England 2nds vs IC 2nds: 4-2.

Chris Bird

mainly to right thumbs, although a severe scratch appeared on Paul Jeynes' ball after hitting the gate.

Many thanks to Simon Engwell and Heather (sexiest member of the team) Jeynes who bowled at a last minutes notice.

Team: Miss Heather Jeynes, Pete Lucas, Tim Hillyer, Paul Jeynes, Simon Engwell and John Knight.

Everyone had a great time and it was a pity a few more members of the club weren't more enthusiastic towards such a good cause (stiffos). JB

### **CITY & GUILDS AEROSOC**

At a short cermony yesterday Professor P Owen, the head of the aeronautics department, was awarded the Royal Aeronautical Society's gold medal for his 'outstanding contribution to the field of aeronautics'. This award is made once each year and previous recipiants have been the Wright Brothers (the first so honoured), G De Havailland, Dassault and Kuckemann, to name a few.

It was followed by a lecture by Handel Davies, CB, also a previous recipiant about 'Barriers to progress in aerospace, past, present and future'.

Anyone interested in becoming a member of Aerosoc can contact me via the letter racks in the Aero Dept (especially those of you who expressed interest at the beginning of term; I'm afraid I lost your names). Some of you may be interested in lectures held at the Royal Aeronautical Society, being only twenty minutes walk away, especially if considering a career in aerospace. Merrie Mannassi Aero 3

President Aerosoc

- 1. The high price of the tickets ( $\pounds 6.50$ ).
- 2. General postgraduate apathy.
- 3. The unattractive nature of the event (ie it was to be held in the evening).

Therefore we shall not be staging a ploughman's lunch on Thursday 13 December at 12:00am in the Union Concert Hall. Nobody can complain about this - tickets priced 50p will not be on sale. There won't be any free ale and I won't see you there!

Richard Earl PG Affairs Officer

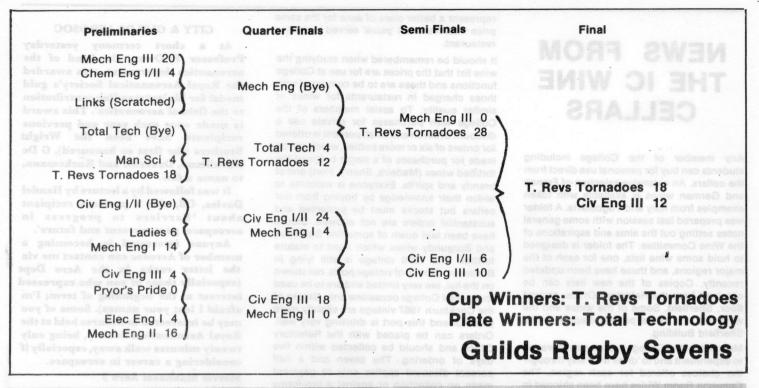
### IC VOLLEYBALL VICTORIOUS AGAIN!

After a somewhat debatable start to the season, IC Volleyball Club have finally entered into the spirit of the game and have started to win matches!

Since our last report in FELIX, two further matches have been played. The first, against Middlesex, was on 21 November and was won in a convincing style: 15-6, 15-5, 15-6. The valued points from this match helped us to gain a few places in the 'Seetech League'. The second match was against Hendon, to whom we had previously lost earlier in the season the IC team really rose to the occasion with a dramatic victory with a final score of 13-15, 15-3, 15-17, 15-10 and 15-11. This had everybody biting their fingernails up until the very last point had been won.

The victory has taken us into the second round of the cup, where we should play against University of London in the second match.

Thanks are, of course, due to all members of the teams, without whom this report would not be possible. These heroes are: M Banasiak, H Szyszko, S Kalirai, L Bogdanowicz, D Penty, S Tam, P Diaz-Lalcaca, B Hermanssen, C Wachnicki and A Ciuksza. Thanks must also go to our few, but vociferous supporters.



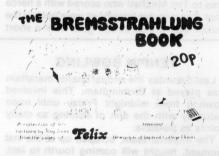


The Ladies Rugby Team in Action

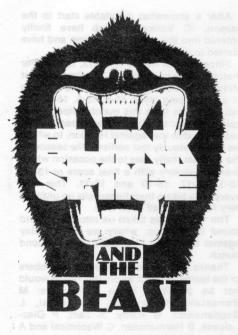
Memorable Environmental Week says Roger Stotesbury

Two of the events were indeed memorable, and reflect a wide interest in Energy Policy.I refer to the Nuclear Power Debate and the Energy Future for Britain discussion. These I will remember for a long time. The other events were more specialized, of less general appeal. Yet all were graced by interesting, if in some cases controversial speakers and held our attention for two hours. In addition the fair allowed everyone the chance to speak to various environmentalists and see the research carried on here connected with the environment.Thankyou to everyone for taking part and to those who helped me in any way.Thanks ..... I've thoroughly enjoyed the last week and feel pleased that the Union has been able to contribute to College life in this way.

Dickie would like to say a very special thank-you to the boys and girls who eat in the Union for their kindness in helping to collect £6:98 for lovely prizes presented at the charity ball. Miss Trimma regrets the delay in thanking you .... this was due to illness.



BREMSSTRAHLUNG CARTOON BOOKS WILL BE ON SALE IN THE FELIX OFFICE FROM TODAY PRICE 20p (for Rag)



### SPORTI

### IC BILLIARDS AND SNOOKER CLUB

On Wednesday last, three teams of snooker 'haven't quite made its' were supposed to play matches. In fact a tragedy happened. The A team won 5-0 by default, frauding their opponents of what would have been a negligible effort\*anihilation like when Wales beat England at rugby.

The C team played QMC at home. Our immortal team were defeated 3-2. First to play was our entrepreneur and raconteur buffoon David whose consistancy kept up his zero record. Graham 'not Tony' Curtis floundered to the table next, bravely fighting off the US seventh army and the wobbledy gobbledy Damian 'Omen II' Kelly, in that order. So with typical nitro glycerine stability D Kely fumbled his feeble way to the cloth. Owing to the fact, his opponent had a severe attack of 'two left feet' in his hands, Damn found he was able to shake his wobbly cue to an underestimatable win and a night win racquel Welsh's mother. So at this point in the proceedings I approached the sacred cloth knowing that the night before I had attempted to break the 'Fuller's passport knowing that certain PAs in Physics 2 had done it in twenty days (must be a record). Well I might as well have drowned myself for the contrasting impression I made on my opponent who knew I was the greatest snooker player anyone could ever know.

The B team played LSE A team away and although being as harmonious as a stringless guitar, they won 4-1, the only loser being the 'I can't help complimenting you, because you keep winning' Tomsk. The LSE A team's first player approached the table followed by our first player the rotund Simon Bennet, described by spherical coordinates his snooker compares favourably with a flat pint of Albrights bitter (I'm a member of the AAA Albrights Apathy Association). Securely tied down so as not to float away like a hot air balloon, he scintillatingly sent his opponent round the bend and won his first glorious match.

Nest on was Rasputin's grand son, Randy Crusewski who between swigs of Cossack Vodka and the odd Ukrainian folk dance potted a few balls chanting KGB slogans like: "I like a Gremlin in the Kremlin" and "Buy a one way return ticket to Moscow". After this his nervy opponent was finished and gave him the game in return for (a visit to the) Political Assylum.

Well, Steve Means Beans cautiously approached the table next, brimming with the confidence of a religious Iranian. Well, not wanting to lose again and knowing the loser ve as much chance of continued existance as a DC 10, he astonished the bewildered yet stupid audience and won. What a let down the next match was, Tomsk who must be one of the best snooker players around, next to John Binden in drag, played like he had a half starved ferret down his trousers.

. The final chapter of this boring saga of snooker misery was completed by Alan 'I don't rip snooker cloths much' Leclezio, still looking like an overweight Mosha Dayan with his black eye, he confounded his oppenent with an exhibition of ture fairyness. The problem was, he saw 'Lord of the Rings' at the pictures the night before and now knowing what a true Hobbit looks like he came in wearing a funny pair of feet and a rather stupid nose that made him look more gormless than a roman nosed Toulouse Latrec. On this form winning was as usual just a formality, so the B team won 4-1.

### SAILING CLUB

IC Sailing Club sailed their second league match of the season last Saturday, against Oxford. Oxford brought a strong team and in the first race, IC were 'caught cold' and easily beaten. Race two started well for IC, and after the first lap, they were in a commanding position. On the final leg they fought through to take the first three places and so tie the score with the final race to decide.

This race proved to be very close, with IC coming through from behind to take the race, thanks to some excellent teamwork.

The standard of sailing within the team is improving all the time and our chances of winning the league now look good.

Team: John Williams (captain), James Baxter, Dave Culshaw, Colin Murray and Caolan Patterson.

#### **BUDWORTH PAIRS**

IC were invited to the Budworth Pairs competition last weekend along with London University.

Cambridge fell to IC after a closely fought first race, but the second race was lost on the starting line with West Kirby SC taking first and second at the finish. With the wind increasing, gear failure marred the third race with Chris Lewis and Alan Beany taking a ducking as their mainsheet parted from the boom. The last race of the day saw a decisive victory against Manchester University.

After Saturday night's festivities IC sailed UL losing only on the last leg after having a winning position. With the chances of qualifying for the semifinals now diminishing, the IC team sailed the remaining races with determination, but little success. IC were represented by lan Robson, Chris Lewis, Alan Beany and Carolyn Jaffy.

UL having won our league were narrowly beaten in a semifinal by Castaways after winning the first race from the best of three. Dave Derby and Geoff Titmus from IC were sailing for UL's team.

### TABLE TENNIS

Due to the lack of quality humour in recent articles, I'm not writing this one....instead he is.

Hello, well after that succinctly instructive introduction, batten down the hatches and button up your flies 'cos we're off!

Just to celebrate FELIX's 30th Birthday (perhaps het roofpreading will imperve) IC managed a clean sweep of victories (yes, we gave every one the brush off) in league matches, but **lost** their return friendly with QMC (more later abut the QuagMire Cretins). Let's deal with victories first:

### IC 1 vs Sarah Siddons (home): 7-2

With 'Rutherford Scattering' all his opponents before him, Kartick flabbergasting his, and Wild-Man-of-Borneo Hong tearing limbs and screaming incessantly in the inaudible tongue of his native land, this slip of a girl....er, team stood not an earthly. (Phew!)

### IC 2 vs Dept of Employment (away): 9-0

It really was time the 2nds won again (this is the second time) especially with an ex-Lebanese international and a Clive Lloyd look-a-like in the side.

#### IC 3 vs BSC 33 Club 3 (away): 9-0

Bending British Steel before them like trees in a hurricane (quaint huh?), the thir reinforced their claim to the championshi and (the serious bit) only have to defeat 13 House to be certain (I think) of the championship.

#### IC 4 vs LUCS (home)

Well the sandwiches were nice, but I don't like waiting an hour for a team, and then being told on the phone that the Chine captain has gone home for six matches!

A joint mens and ladies tie ended with QMC winning the mens and IC winning their first ever ladies match 4-2.

Yet again fielding a team without IC's best half-dozen players (who only play for ULU) but nevertheless a good team of regulars, IC gave QMC's strongest trio a very good run losing only 3-6 and taking almost every set to three games. Special credit to Eze (2nd team IC only) who outshone even Kartik and Kumar (well he looks so nice when he's playing) Singarajah. Each player won one set.

Even better though were the ladies, Chili Pang (not Chi-Chi Panda), Eva Something-Chinese and Aine all winning at least one set (the one from Eire — guess which — won two).

If you didn't enter the Handicap Competition you don't know what you missed.

### I'll be back next week - The Other Write



### BUNAC

Interested in working and travelling in North American next summer? For more details come to a BUNAC meeting. They're held every Friday between 12:30 and 1:30 in the Green Committee Room on the third floor of the Union Building.

### BLOOD DONING RESULT 19 and 20 November

The free barrel goes to Civ Eng 2 who gave more blood than any other department at the above session. The leading departments were:

 Civ Eng 2 with 17 pints.
Elec Eng 1 with 12 pints.
Mech Eng 2 with 10 pints. The totals of exclusive of yesterday's session.

FOR SALE: BIKING GEAR. Waterproof jacket and overtrousers £20. White full-face helmet £15. Contact Phil Harper, Physics 3. OBOE LESSONS given by experienced teacher. For more information contact Martin Browne, Biochem 2.

£30 REWARD to anyone who can find me a s/c one bedroom flat I like, at about £30 a week. Ring 258-3928.

A cheap return coach to PORTSMOUTH will be leaving Beit Archway at 10:00am on Sunday 9th December and returning about 5:30pm the same day. Cost: £2.50

EMERGENCY RAG MEETING to elect delegates to the National Rag Conference will be held at 6:00pm on TUESDAY 11 DEC in the Green Committee Room, third floor, Union Building.

### URGENT

Crisis at Christmas needs food (non-perishable) and clothes and helpers to bring Christmas to homeless people in Central London. Contact John Whitehouse or Fiona Sinclair(666 Selkirk or internal 3357). FELIX is published by the Editor, on behalf of the Imperial College Union Publications Board, FELIX is printed on the Union premises in Prince Consort Road, London SW7. Editor: C R Palmer

FELIX ISSN 0140-0711. Registered at the Post Office. Copyright FELIX 1979.

XMAS SPECTACULAR DEBATE: Exec vs CCU reps on Thursday 13 December at 1:00pm in the Union Concert\* Hall. Free Beer. Be there!

### UNDERGROUND

Ever wanted to take Victoria Station by storm? Well, on Friday evening you'll get the chance, as the IC 'coffin' will be taken to Victoria Station, where leaflets will be given out. There will be a brief meeting about this TODAY at 12:30pm in the Union Office and the assembly will meet in the Union Office at 4:30pm. **BE THERE!** 

### FRIDAY 7 DECEMBER

COMMUNIST SOCIETY BOOKSTALL selling Marxist and Radical Books will be in the JCR between 12:30 and 1:30pm.

IC CHEM SOC CHRISTMAS LECTURE with Dr P W Atkins asking the question Why Physical Chemistry? in Chem Th C at 5:30pm. Sherry from 5:15pm. Admission FREE.

IMPERIAL COLLEGE CHRISTIAN UNION club activity in the music room, 53 Princes Gate at 6:30pm.

WIST CHRISTMAS PARTY in the ICWA Lounge at 8:00pm. Everyone welcome. Bring a bottle.

ENTS DISCO in the Union Lower Lounge at 8:30pm. Admission 20p.

BALL in Bedford College Union Common Room at 8:00pm. Tickets £3.30 from Ken Strachan, Mech Eng 2.

### SATURDAY 8 DECEMBER

LAST NIGHT: THE DEVILS in the Union Concert Hall at 7:30pm. Admission £1.00.

### **MONDAY 10 DECEMBER**

EXTERNAL AFFAIRS COMMITTEE MEETING in the Green Committee Room at 12:30. Members MUST attend, but observers welcome.

CAMPAIGN FOR PLAIN ENGLISH MEETING at 2:00pm at the Library Association, 7 Ridgmount Street, WC1.

COMMUNITST SOCIETY MEETING on the Communist Party Congress in the ICWA Lounge at 6:30pm.

BEDFORD COLLEGE JAZZ CLUB in their Union Common Room at 8:00pm. Admission 75p and SU cards are required.

CHRISTMAS CEILIDH in the Lower Refectory at 8:30pm. Admission 40p members, 75p non-members.

JOINT COMMUNIST SOC, SOCIALIST SOC, AND LABOUR CLUB PARTY in the ICWA Lounge at 9:00pm. Bring (a) bottle(s).

.

### TUESDAY 11 DECEMBER

IC SOCIALIST SOCIETY MEETING with speakers from the Socialist Student Alliance and Left Alliance in the SCR at 12:30. STOIC TRANSMISSION with an interview with Lord Flowers at 1:00pm and 6:00pm.

RIDING CLUB MEETING in Room 1110 (level 11) Elec Eng between 1:00pm and 2:00pm.

NAT HIST SOC LECTURE on *Protozoan Motility* by Dr Lawrence Bannister of Guys Hospital Medical School in Botany Basement Lecture Theatre at 12:45pm.

FILM: *Mr Hulot's Holiday* at 5:30 and 8:30 in Bedford College Tuke 97. Admission 25p and 30p and SU cards are required.

RBS NITE OUT to the Dickens St Katherine's Dock. Meet at BSH at 7:00pm or at the Dickens at 7:30pm.

FREE GIG with Blank Space, The Beast and the Androids of MU in the Union Concert Hall at 7:30pm.

SF CLUB PRESENT: *Barberella* at 7:00pm in Huxley 213. Admission free to members, but 20p to non-members.

LIFE SCI CHRISTMAS PARTY in the JCR at 8:00pm. Tickets 75p available from Katy Tatchell and Life Sci Soc Reps. MOPSOC LECTURE CANCELLED.

### WEDNESDAY 12 DECEMBER

TENPIN BOWLING CLUB CHRISTMAS BOWLING WITH PRIZES. Coach leaves from Aero (opposite Beit Arch) at 2:30pm prompt. IC SKI CLUB ANNUAL 'PISTE UP'. Meet Union Bar at 6:00pm.

HANG-GLIDING CLUB SOCIAL EVENING at 8:00pm upstairs at Stan's Bar.

### **THURSDAY 13 DECEMBER**

HANG-GLIDING CLUB MEETING in Mech Eng 342 at 12:45pm.

STOIC TRANSMISSION with News-Break and Christmas Special at 1:00pm and 6:00pm. OPEN MEETING TO DISCUSS THE SETTING WOMAN'S RIGHT TO CHOOSE GROUP in the ICWA Lounge at 1:00pm. ASSOCIATED STUDIES PRESENT:

1. FILM: Edward VII And The House Of Windsor in the Great Hall at 1:15pm.

2. Lunch-hour Concert: Venetian Serenade with Marie Angel, Helen Watkins and Dan Sanders in the Music Room, 53 Prince's Gate. GLIDING CLUB MEETING at 5:30pm in Aero 254.

### FRIDAY 14 DECEMBER

ICWA CHRISTMAS BALLOON DEBATE (with mince pies) at 1:00pm in the ICWA Lounge.

### **TUESDAY 18 DECEMBER**

IC CHEM POSTGRAD GROUP CHRISTMAS CHEESE AND WINE PARTY at 12:30 in Room 231. Tickets 80p.

THE EXPLORATION SOCIETY HOLDS INFORMAL MEETINGS EVERY LUNCHTIME AT 12:30 IN SOUTHSIDE UPER LOUNGE. FOR FURTHER DETAILS CONTACT MARTIN JUDKINS, BIOCHEM PG, INT 3184.

# WHAT'S ON