



# Felix

The Newspaper Of Imperial College Union

Founded 1949

## Union Clash with Chaps

**IC Union Officers have clashed with one of the CCU tie clubs once again. Following the annual dinner of the Chaps Club, the Royal School of Mines drinking club, on Wednesday Night, there were several reports of disruptive behavior in the Union building. Union Deputy President Jackie Peirce, who was duty officer for the evening, was subjected to verbal abuse from a group of Chaps Club members.**

The incident comes at the end of a difficult year for relations between ICU and the College tie clubs. In November a motion to ban the clubs from Union premises was brought to a UGM, backed by the ICU President and Deputy President. At one of the few well-attended Union General Meetings of the year, the motion was defeated by 23 votes after some heated discussion.

On Wednesday, Ms Peirce was present to see that club members left the Union Concert Hall, which Chaps had booked until 1am, in good order. Ms Peirce described the behaviour of some members as "quite abusive" and added that they "told me exactly what they thought of me and Christine".

Speaking to FELIX yesterday, Chaps president and former RSMU

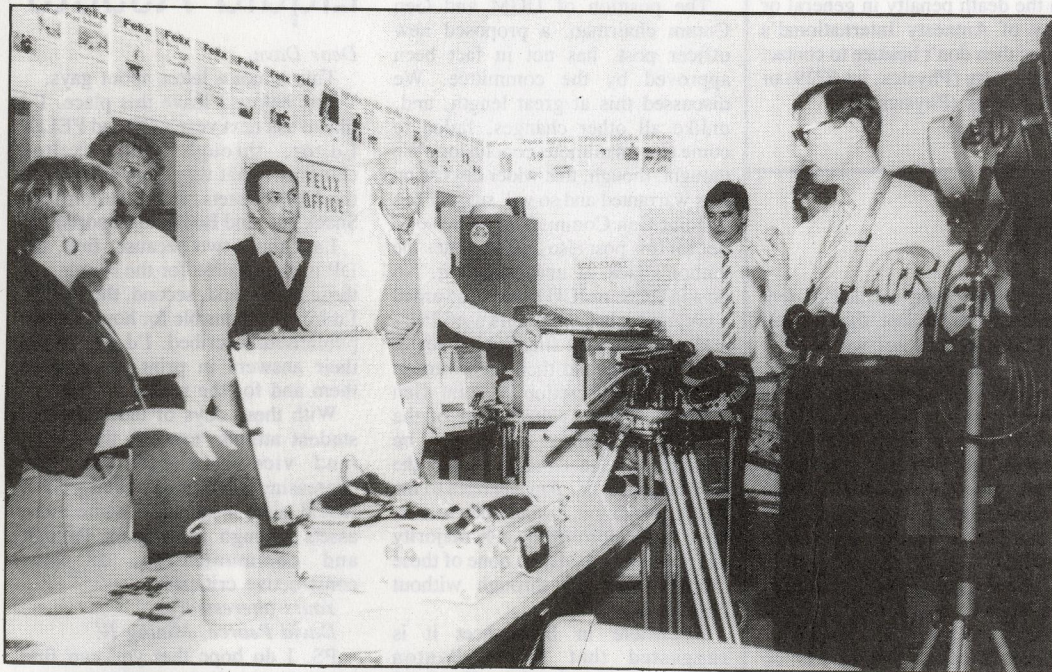
President Dave Pearce admitted that some members of Chaps had been abusive on a personal level, but denied that there had been any obstructive behaviour, or opposition to Ms Peirce when she asked for the building to be cleared. He added that, as President of the club, he had probably not taken charge of the situation as early as he should have done. He said that Chaps had taken longer to vacate the Concert Hall than had been planned because they were not aware that they would be expected to clear up. The incident, he said, had been a personal disagreement between the Deputy President and a few ex-student members of Chaps, and that there had been no argument between the Union and Chaps Club as a whole.

Though there have been reports that a group of Chaps had gained access to the roof of the Union Building and had thrown a large missile into the Quad, these rumours were denied by Mr Pearce and Chaps Club Secretary Chris Griffin.

ICU Executive will be discussing possible disciplinary action against the club. In addition, Chaps Club will be re-examining the responsibilities of the Club President.

Mr Pearce and Mr Griffin said that the dinner had been a great success, and that the Union Snack Bar manager Mr Norman Jardine had done an excellent job.

## FELIX on the Box



It was all smiles and screen tests in the FELIX office yesterday when a production team from Channel 4 turned up to capture the Thursday afternoon panic on film. After word of the imminent arrival of Stephen Spielberg got about, the office was suddenly filled with keen staff members, anxious to get FELIX on press before the cameras left at 1.30pm. After a series of half-hearted rehearsals, the Channel four people managed to film the really big scene where all the pages had to be ready "in ten minutes". Notable absentee was former FELIX editor and SDP agent Clive Dewey, who turned up a day too early and sat in the office for fourteen hours on Wednesday, waiting for the crew to turn up and getting in everybody's way.

Channel four were at Imperial College to film a half hour programme on the University of London.

Clive Dewey is 57.

## Death penalty bias

### Louisiana Injustice

There has been a sudden and worrying upsurge in the number of executions in the United States. Several States have now resumed executions, after waiting for the landmark Supreme Court ruling on racial discrimination in the case of *McCleskey vs Kemp*. Louisiana intends to put to death six prisoners between June 7th and 18th, despite evidence of racial bias in the application of the death penalty.

### McCleskey vs Kemp

Warren McCleskey appealed to the US Supreme Court against his death sentence in Georgia on the strength of evidence which showed that blacks were far more likely than whites to get the death penalty for an equivalent offence. The evidence consisted of an extensive study by Professor David Baldus of Iowa State University in which he examined the effects of race on capital sentencing in more than 2000 homicide cases in the period 1973-79. He found that defendants convicted of killing white victims were *eleven times more likely* to get the death sentence than killers of blacks.

### The Supreme Court Decision

Despite this finding, the Supreme Court ruled with a narrow majority (5-4) that the defendant would have had to prove a discriminatory intent on the part of the court that originally convicted him—an exceptionally tough burden of proof. Amazingly the Supreme Court did not dispute the findings of Baldus' study and referred them as a matter of interest to the State's law-making bodies. The four judges who dissented from the majority decision were stunned that the clear 'risk' of racial bias in McCleskey's case was not regarded as a relevant factor. Justice Brennan wrote "the risk that race influenced

McCleskey's sentence is intolerable by any standards".

### Amnesty's Concern

Since there are also reports of racial discrimination in Louisiana, Amnesty International is making strenuous efforts to appeal for clemency in the cases of the six prisoners there. Amnesty believes, and rightly, that the process of execution cannot be permitted to continue whilst there is a significant risk that sentences are not being applied fairly. In any case Amnesty is totally opposed to the death penalty as a cruel, degrading and inappropriate punishment.

### What You Can Do

The gravity of the situation in Louisiana calls for swift, effective action. You can easily participate in that action by writing to the Governor of Louisiana. Simply write a brief, courteous letter expressing your concern at the imminent executions of the six prisoners. It doesn't have to be very long at all—a couple of lines will do. The important thing is that the authorities should be inundated with letters of concern. Amnesty has shown time and time again how effective letters can be; so please, make the little effort that is required—even if you do have exams.

Write to:

**The Hon Edwin Edwards**  
**State Capitol**  
**Baton Rouge**  
**LA 70804**  
**USA**

If you would like any more information on this particular matter or on the death penalty in general or on any of Amnesty International's concerns then don't hesitate to contact Stephen Curry (Physics, int 6729) or Simon Boshier (Physics II).

*Stephen Curry*

## Clements' last letter

Dear Dave,

Having read this last issue of RCS Broadsheet (Vol 19 Issue 11) I feel it necessary to comment on many of the factual errors contained within it, especially those concerning the RCS Constitutions Review Committee which I have been chairing. The presence of the numerous errors quite clearly demonstrates that whoever wrote the article (it was unfortunately anonymous) has made no attempt whatsoever to find out the real facts, but is prepared to write an article based on his own prejudices and guesswork.

To start with the front page: "Round 2 of the Great Constitutional Debate begins June 12th". This is total rubbish, since the Review Committee has to report back to Gen Comm before anything goes to a UGM. The next Gen Comm is on June 15th, and the earliest UGM to which changes can be put will be the second of next term, since no serious business can be conducted at the Freshers' UGM.

Next, the description of the RCS Constitution as an "unwieldy monster". If that is true of it scant 16 pages I would like to know the author's opinion of this multi-volume epic of the ICU constitution.

The proposed addition of a requirement that the president should have completed 2 years in RCS indeed would not affect Clare, next year's president. However, the suggestion that it would have prevented Simon, this year's president, being elected is entirely false, or hadn't the author noted that Simon is a 3rd year physicist who will be leaving at the end of this year?

The position of UGM and Gen Comm chairman, a proposed new officer post, has not in fact been approved by the committee. We discussed this at great length, and, unlike all other changes, failed to come to a unanimous conclusion. We thought, though, that wider discussion was warranted and so will suggest this to Joint Gen Comm. The matter of a pot for this post also demonstrates the author's lack of understanding. No post in RCS, or ICU even, is awarded a pot until it has proved its usefulness and durability by functioning for at least 3 years, and then the award is only at the discretion of Joint Gen Comm. As far as the holder of the post is concerned this would be decided by Gen Comm, should the post be approved. Any changes to the RCS constitution, I would like to add, have to be approved by a 2/3 majority at 2 separate UGMs, so none of these changes will get through without popular approval.

Elsewhere in Broadsheet it is suggested that Simon Banton graduated with a 3rd from Physics 3 years ago. Wrong again, as just about anyone will tell you, he got a pass and

graduated 2 years ago.

Finally I would like to make some general comments about Clare's editorial. How she can call the cover of Not Broadsheet offensive when she herself published the not only offensive but dangerous AIDS article by Julian Moore (Vol 19 Issue 8) is beyond me. Also, I would like to ask her how she expects to have an effective working relationship with Steph Snell and Dave Williams (next year's HJT) when she subjects them to vicious personal attacks. I find the lack of understanding of human nature revealed by this to be among the best reasons I have seen for suggesting that RCS presidents should be 3rd years. Research in FELIX and Broadsheet archives has shown that never before has there been a 2nd year president.

It has, however, been suggested that the editorial in question was not actually written by Clare. The signature at the bottom certainly bears more of a resemblance to Dave Smedley's earlier in the issue than it does to Clare's normal signature. Should this be the case I would apologise unreservedly for the comments in the above paragraph, and would suggest that the person responsible for such an irresponsible damaging impersonation never be allowed to touch Broadsheet again.

Many thanks for the time you've spent reading this.

*Yours,*  
*Dave Clements*

## Liquid Assets

Dear Dave,

This is not a letter about gays. Just before I leave this place, I'd like to ask next year's DP and FELIX Editor, through your exalted columns, what they plan to do with the Union assets, ie the Union Bar, Snack bar, and Bookshop/Sportshop.

I ask those two because, first, the DP is responsible for the running of those assets, and, second, the FELIX Editor is responsible for how they are publicised/described. I'd like to see their answers in print to compare them and for the record.

With these days of indeterminate student attitude towards the Union (and vice-versa perhaps), and decreasing real money budgets, it would seem a shame to waste those assets through insufficient thought and communication, or non-constructive criticism.

*Yours interestedly,*  
*David Pearce, Mining IV*

PS. I do hope that you can find room for this little request amongst your frightfully important FELIX news.

## £22.10 per week

Dear David,

Just a quick note to highlight the impending destitution which will fall upon us in the event of a Conservative majority on June 11th. There now follows a bit of number crunching.

The maintenance grant is at present £2236.

Next year we will receive a 4% increase, "in line with inflation", giving us £2325.44. For our 39 week year, we can allocate £59.60 per week.

The average private accommodation, within 45 mins walking distance of College, inclusive of rates, costs about £37.50 per week, per person.

If the bill is deployed to prevent

students from being entitled to rent rebate, from the 1st Sept, then we will be left with £22.10 per week.

That is £22.10 per week to feed, clothe and water ourselves; let alone buy books and stationery or even going out (God forbid!). Maybe, in the event of poll tax, or even landlords wiseing up to the fact that students cannot afford to live in their expensive slums anymore, there could be a reduction in the rent. This does seem like a good ploy to make us desire student loans, or use our parents as crutches.

Support Tactical Voting '87 on June 11th.

*Katie Cook, Biochem II*

# Felix

## Strength in numbers

I should like to draw attention to the letter from Amnesty International on page 2. Though they have been organising letter-writing campaigns throughout the year, I have not noticed a great deal of support from the students as a whole. Even if you cannot be bothered to vote next Thursday, try to spare a couple of minutes to support Amnesty in its campaign. We can argue for hours about the relative benefits of the political parties; there are no grey areas when we see evidence of racial discrimination in capital sentencing.

## Letters and Opinion Articles

It has been editorial policy this year, as in many previous years, not to edit or cut letters and opinion articles without discussing any changes with the author. The reasons for this are

quite simple; I do not wish to run the risk of distorting anyone's reasoning. In practical terms, this means that we have to decide whether to print material in full, or leave it out completely, and this approach is not always very satisfactory when we are trying to produce a balanced newspaper. In the remaining issues of this term, all letters and opinion articles which FELIX receives may be sub-edited or cut. Due consideration will of course, be given to preserve the meaning of any article. I hope this will help the College's favourite bores to resist the temptation to write six pages when one would suffice.

## End of Term

Only four weeks to go before I'm unemployed (and unemployable). For anyone who is interested, I am

planning to bring out two more issues—next Friday (12th) and Friday 19th. There is a possibility that the last issue will be delayed until Wednesday 24th, to fit in with our usual policy at the end of term, but the deadline for *all copy* for this issue is *next Wednesday* (10th). I appreciate that this is well in advance of publication date, but at the moment I am hoping to bring out about 36 pages, so everything needs to be done early.

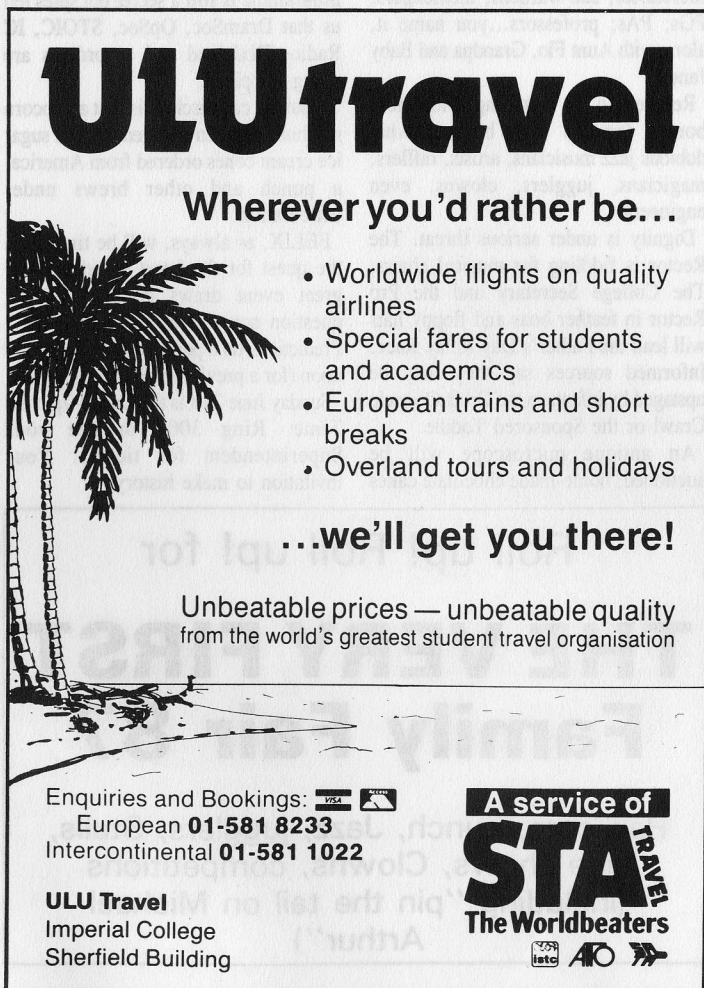
## Credits

Many thanks to Pete Wilson, Chris Edwards, Judith Hackney, Dave Burns, Chas Jackson, Pete Higgs, Dave Williams, Andrew Bannister, Pippa Salmon, Kamala Sen, Chris Martin, Clare Ash, Steve Kilmurray, Sunny Bains, Liz Holford, Mark Cottle, Al Birch, Steve Gutteridge, Christine Taig, Rachel Black, Rose Atkins and Steve Shackell.

## The last box ad of all time

If you think FELIX has begun to look more like the "FELIX Advertiser" recently, do not despair. As from next week there will be no more superfluous box ads in the paper. Please note that the Small Ads deadline is 1.30pm Monday. For anything bigger, I will be happy to supply a copy of our ratecard.

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

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# Election fever grips IC (honest!)

**Elections**

I got some post this morning, for the first time in ages. I was almost overwhelmed with excitement until I noticed the words 'Election Communication' on the top right-hand corner of the envelope. Well, SDP propaganda may not be top of my list of Things I Would Like to Receive in the Post, but it's quite comforting to

know that my name's on the electoral roll, at least.

Mind you, it's difficult to take an election seriously when the propoganda from all major parties seems to rely heavily on bad-mouthing the opposition; hardly a positive approach. Perhaps it's because there is really less difference between them than they'd like us to think?

During one of our long, which-way-to-vote discussions in the office, I came to a sad conclusion. Given that the party I'd really like to vote for doesn't exist (and that the nearest thing to it stands zero chance under the current voting system); recognising that my preferred major party stands no chance in this particular constituency—I may well end up voting for a third choice. What a wonderful system it is!

This, however, is an aside. The point of this spiel is quite simple. Everyone who lives in College accommodation is registered, and most of the rest of you should be, too. Whatever the faults of the electoral system you owe it to yourself to find out the facts and get out there and vote next Thursday. Kensington, for example, is a marginal

constituency; your vote will really count. So get out there and use your vote; use it wisely. Let's just hope that this election isn't as depressing as the last one.

**And Now...**

I'm now so exhausted after writing all that without mentioning the parties by name that I'm not going to attempt to say anything useful. I was going to finish with a small poem but apparently it's too politically biased for Dave to print. So here is something completely different.

**Q.** What runs round Paris at midday wrapped in a plastic bag?

**A.** The Lunchpack of Notre-Dame.

Well you can't get much worse than that. Have a nice week.

*Love, Christine.*

# Gay/Lesbian update

Because, like everyone else, I am in the middle of exams at the moment I haven't much time to write this week. I'd just like to remind you all that IC Gay Okay will continue to meet on Wednesday until the end of term, and that at the start

of next term we will start off with a stall on Freshers' Fair—all ideas will be appreciated. Thanks to everyone who turned up: keep 'em coming!

*Andrew Bannister*

# Today's the day the Teddy bears have their picnic

FELIX scores again. On our usual beat to cover the fact behind the fiction, we probed. What is this 'First Fantastic Family Fair' affair?

The low-down. Queen's Lawn is in for a shock. Just everybody will descend on it: 8 days old to 80; clerks; chefs; cashiers; cleaners; students; sparks; secretaries; sub-wardens; messengers; PGs; PAs; professors...you name it, along with Aunt Flo, Grandpa and Baby Jane.

Reputed to be mingling with these honest families will be somewhat dubious jazz musicians, artists, rafflers, magicians, jugglers, clowns, even engineers.

Dignity is under serious threat. The Rector is fiddling for musical chairs. The College Secretary and the Pro Rector in feather boas and floppy hats will lead the Father's Day Relay Race. Informed sources say they may be upstaged by infants in the Great Obstacle Crawl or the Sponsored Toddle.

An antique microscope will be auctioned, home-made chocolate cakes

on offer, as are amazing clothes, toys and a host of unclaimed memorabilia. Rumour has it that vintage cars will be available.

Still hush-hush is the contents of dozens of stalls. Department Superintendents behind closed doors W2 in Beit Quad may reveal all next Tuesday. The main programme is still a secret but spies tell us that DramSoc, OpSoc, STOIC, IC Radio, Dixieland and accordians are vying for place.

What we can disclose is that a popcorn machine has been engaged, special sugar ice cream cones ordered from America; a punch and other brews under deliberation.

FELIX, as always, will be tireless in the quest for the latest scandal as the great event draws closer. The big question now—Who will be the MC? Predictions on a postcard by Wednesday noon (for a preview of the brew) please.

Sunday June 21st is the Day; 4-7pm the Time. Ring 3004 or see your Superintendent for tickets: Your invitation to make history.

## 2 STUDENT MANAGERS required for Head Tenancies 1987/88

- Duties include reporting defects, liaison with landlords, neighbours and College Administration, issuing keys and maintaining discipline.
- Rent-free or reduced rent accommodation provided.
- Successful applicants are likely to be postgraduate students with at least one year's study remaining, though undergraduates may also apply.
- Application forms should be collected from the Student's Union Office, Beit Quadrangle, and returned there by 4pm, Wednesday 17th June.

## Roll up! Roll up! for THE VERY FIRST Family Fair 87

Pop corn, punch, Jazz, jugglers, Stalls, side shows, Clowns, competitions (including "pin the tail on Michael Arthur")



# CAREERS

# TEACHING?

Teaching seems to be the thing that most students want to avoid at the moment—the status is poor, the pay is lousy and the work is gruelling—these are the reasons usually cited for giving teaching a wide berth. Whilst it is not my job to ‘sell’ any particular career to anybody—I do have a duty to help people to assess possible career paths as objectively as possible. So read on if you are interested.

What’s it all about? The job of a teacher doesn’t need any description. You’ve all been through about 13 years of primary and secondary education. Your memories of what it was like are probably the single most influential factor determining whether you become a teacher. But try, just for a minute, to put yourself in the shoes of the teacher whose subject you would most like to teach. How does it feel? Terrifying? Threatening? Challenging?

Your reaction may help you to think about teaching from a different angle.

How would I be trained?

Anyone wanting to teach in a State school has to take a Postgraduate Certificate of Education (PGCE). This lasts for one year and may be taken at a wide range of colleges throughout the UK. A central clearing house operates called the Graduate Teacher Training Registry (GTTR) through which most applications must be channelled. The important point to remember is that applications can be submitted as early as September and places are filled on a first-come first-served basis. It is therefore important to apply early if you want to get your first choice. Courses include both theory and practice. You will have opportunities to teach under observation. LEA grants for courses are automatic once a place has been offered.

Engineers, physicists and mathematicians should note that Bursaries exist which boost their mandatory grant by £1,000—£1,200. Details are available in the College Careers Office.

Would I be suited to it?

An interest in and rapport with young people is a good starting point, as is the ability to put a subject across in a clear and interesting way. It helps to be able to speak confidently and remain calm under pressure. Teaching can be tiring and a high level of physical and mental stamina is an asset. Patience is required when dealing with slow learners. Most Heads require their staff to participate in some extracurricular activities such as helping out with school plays, chess club, sporting activities etc.

What about career prospects?

This will depend upon demand for your subject. Currently, physics teachers can expect to progress faster than most other teachers because of staff shortages. New teachers are likely to start on Scale 1, the position on the scale depending upon your age, degree class, work experience etc. Promotion to Scale 2 usually requires taking on an additional responsibility such as becoming Head of First Year or running the school library. Scale 3 posts usually involve running departments. Further promotion leads to deputy headships and headships. These jobs are often entirely administrative.

Can I survive on the pay?

Starting salaries vary depending upon the point on Scale 1 on which you start. The range is currently £6,533. Scale 2 is £7,302—£10,986. Scale 3 is £8,910—£12,627. Scale 4 is £10,533—£14,151. Senior teachers earn £11,349—£15,330. Heads of large comprehensives can earn above £20,000.

What next?

If you want to follow up the idea of teaching, why not come and have a chat with one of the College Careers Advisers in Sheffield Building. Your Departmental Careers Adviser would also be happy to talk to you. Alternatively, you could read the Information Booklet—‘Teaching in Schools and Colleges in the UK’, copies of which are available in the Careers Library, Room 311, Sheffield.

Whatever you decide, I hope this article has been of some help to you.

Russ Clark,  
College Careers Officer

## UNION ROOM BOOKINGS

Bookings for next term can only be made after 22nd June, 1987. These will initially be provisional until UGM dates are confirmed.

Thank you,  
Kathy Tait, Union Receptionist

## GYM BOOKINGS

To all clubs & societies who use the gym facilities (ie Union, Southside & volleyball court), if you are not using the space over the summer vacation. Please let me know ASAP. Also, although you managed to get a space this year, you still need to apply for space next year. Applications can *only* be made after 5th October, 1987.

THANKS,  
KATHY TAIT, UNION RECEPTIONIST



## The Great Knock & Poll Swindle

**Even before they are elected, the political parties try to rip off Pete Wilson in this searing exposé of blatant profiteering**

I rang up the three 'main' party's central offices to ask for copies of their respective manifestos. The Conservatives told me 'with all due respect' that FELIX was not really a newspaper, and I would have to go to their bookshop and buy a copy. They relented after I pointed out that Imperial College has a hall of residence in Westminster—a Tory marginal—and most students are first time voters. The Labour party sent me a free manifesto and invited me to some press conferences, including one good one on the arts with Billy Bragg and Ben Elton, but they later rang up to say I couldn't go after all. The first time I rang the Alliance, they cut me off on their switchboard. I don't know if any of these events are significant.

The Tory and Alliance manifestos cost one pound, while the Labour Party's brochure is a snip at just seventy-five pence (always assuming you don't pretend to be a journalist and get them for free). I cannot see any reason why

folded sheets, while the Tory one consists of two booklets, and comes in a rather nice plastic wallet.

You may be wondering why I have spent so long on trivialities: the covers, who said what on the phone etc...this is because the contents of all three manifestos are dull, designed only for the party faithful, and TV commentators. This might seem like a sweeping generalisation, and maybe I should be more respectful when talking about the propaganda of those who would govern us for the next four to five years, but there is no escaping it—they do not make good reading.

They all start with an introduction. The Conservatives talk of strength and pride, and a new spirit of enterprise, and then try to convince us that they care an awful lot, honest. The Labour party uses words like fair chances, care for all, work for people, and then spend the rest of the intro slagging off the Tories, and, to a lesser extent, the Alliance. The Alliance, for their part talk about a united Britain, using lots of alliterations—confident, compassionate and competitive, slag off both the other parties in general, and our electoral system in particular.

When I first thought about doing this piece on the election, I was going to compare some of the policies of the three parties, but since then there has been, to my mind, too much in the media in general about the election, and surrounding issues. Someone suggested a poll of students, to see which way they are going to vote on the eleventh, but I figured that the replies would either be 'what election?', or 'I haven't got time on the eleventh, I've got a lab report due on the twelfth'. Maybe I should have interviewed Dave Colley about electoral reform.

So there you have it. I wouldn't advise buying any of the manifestos, but it might not be a bad idea to watch a little television and actually vote next Thursday. I'm sorry if you expected FELIX to bring you an informed debate on the issues—this is all you're getting.

This article was compiled under Dave Jones' reporting restrictions.

anyone should want to buy them, as their contents have all received a liberal airing on television over the last two weeks. They all have catchy slogans on their covers: 'The Next Moves Forward', 'Britain Will Win', and 'Britain United—the time has come'. The Alliance and Labour manifestos are A3



# BLIND CURVE

**While looking at the wars fought between 1820 and 1945, a British meteorologist found a curious relationship. Chris Edwards looks at his discovery, the Richardson Curve.**

While politicians argue over whether the possession of nuclear weapons has prevented a major war, few bother to pay even cursory attention to the patterns that war has conformed to in the past. Patterns that may help avert an all-out nuclear war. In the wake of the destruction that was World War II, a British meteorologist, Lewis F Richardson took an interest in the fickle causes of war. His approach to the problem was very similar to an approach in studying the weather. International conflicts can be regarded in much the same way a storm begins, both have systems that are almost impenetrable in their complexity—but their bulk properties can be studied and tabulated. The patterns can be found that lead to war, and their frequency can easily be plotted, so that a reasonable waiting time can be found for a war of any severity—even World War III.

In the 19th Century the Reverend Thomas Malthus had theorised on the causes of war being due to nations trying to expand their populace. Whilst it left a gaping hole for those wars fought purely on a religious pretext, or sparked off by traditional hatreds, it could explain a whole range of conflicts. However, Richardson's work was of a more fundamental nature; he produced a graph which accurately reflected the period of waiting between wars of a particular severity.

He collected data for the hundreds of wars that had been fought between 1820 and 1945, the results of which were published posthumously in the book "The Statistics of Deadly Quarrels", in

1960. He defined an index for the number of deaths it caused directly, M. Magnitude  $M=3$  might be only a skirmish killing a thousand, while  $M=6$  would be far more serious, with a million dead. He found, quite expectedly, that the more serious a war the less frequently it would occur. He also found that the data fits a smooth curve that can be continued from  $M=0$  (a single murder) right up to  $M=10$  and beyond (the total annihilation of the human race). The frequency for murder he extrapolated from the main graph to arrive at a figure of a murder occurring once every five minutes somewhere in the world—an answer of approximately the right order of magnitude. The odd thing is that both murder and holocaust represent just two extremes of a

continuous curve.

Just as one person can commit murder either in a rage, or to effect a larger plan, then nations can cause others to do the same on a far larger scale. The efficient fighting of wars has often depended on a good propaganda system to encourage people not only to fight the enemy, but to loath it as well—with images of "cruel heathens" in the Crusades through to the "red menace" of Vietnam, and the "evil Argies" in the Falklands.

There is a certain inevitability about Richardson's figures; they do not just represent the time to wait before a war of a given magnitude might occur, but the time before it does, or is supplanted by a succession of smaller conflicts. While politicians claim that nuclear arms and the attendant theory of Mutually

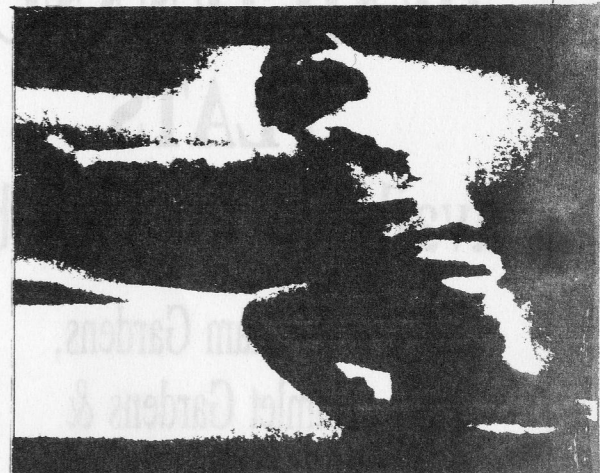
Assured Destruction, have ensured world peace, the truth is that the superpowers have become more circumspect in how wars are fought. With the exception of Korea, Vietnam and Afghanistan, the Superpowers have declined to involve themselves, but act by proxy, supplying the weapons and the know-how to smaller nations only too eager to expand their spheres of influence.

Continuing the graph past World War II, an approximate figure can be found for a nuclear holocaust—for the simplest model this gives a value of  $M=9.8$  (5 billion people). The expected gap between 1820 and a conflict of that magnitude would be about 800 years, giving total devastation of humanity in the 27th Century. However the Richardson curve only applies to mortalities resulting directly from a war. The further deaths from radiation and cancers after Hiroshima and Nagasaki were not taken into account in the Richardson Diagram. So, it would be the fatalities by blast damage alone that would govern the M value on the diagram, and correspondingly that value would be much lower, bringing Doomsday that much closer.

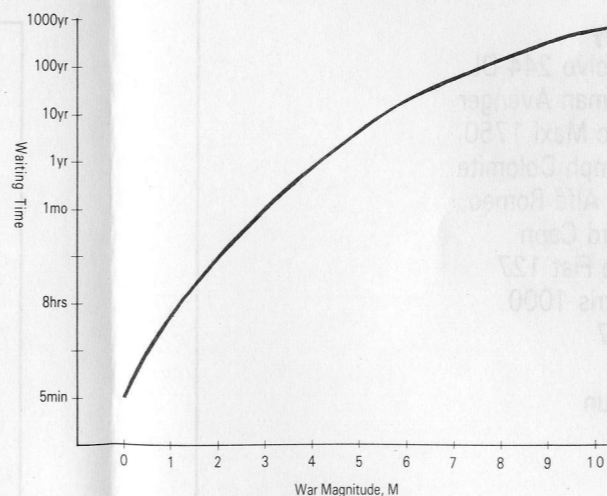
However this assumes the worst case scenario of an all-out nuclear conflict. More likely is the theory put forward by General Sir John Hackett and others who postulate that World War III will again be fought in Europe in a 'limited' exchange, whereby much of Western Europe is laid waste. Using a simple model for population of Europe that gives 500 million people killed, it gives

$M=8.7$ . Crossreading on the graph produces a figure of 200 years after 1820. So the destruction of Europe could have happened by 2020—a period commonly ascribed by strategists is between 2000 and 2020.

The most worrying thing about the graph is that it seems to indicate that



warfare is for the while, a part of the human condition and that the only way to avoid large conflicts is to let tension dissipate through a series of smaller battles. In the wake of World War II, General MacArthur was in favour of invading Russia while it was still recovering from the effects—hoping to defuse a future conflict. However, the analyses of human nature suggest that the West would now be skirmishing with China instead. No matter how decisive a war, a new enemy is always around the corner to satisfy the Richardson relation.




The Richardson Graph



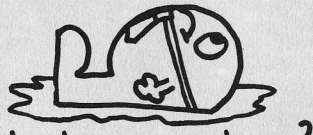
# MR MEN No 9 ... What's the f\*\*\*ing point.


In which Mr Easy meets Mr Mark and discovers the reason for his miserable & pathetic existence


This is Mr Mark he draws Mr Men  
  
 Why? He's a cr#artist

He's sick of living in a place full of people like Mr Dork - a place most Mr Women have the sense not to be!

Mr Dork hates people who aren't like him  
  
 KILL GAYS! KIBBER  
 BCS CONSTRUCTION MUMBLE

Mr Dork likes lying in pools of vomit  
  
 Is there any hope?

Not in Felix!  
 Zzzzzzz  
  
 How can Mr Easy cope?

He's s#dd#ng off to the real world  
  
 Yuppie & Co  
 CHARTERED ACCOUNTANTS

And what about Mr Mark...  
  
 SORE  
 So Long suckers!

By Mark

## HEAD TENANCY FLATS available for October

In Lexham Gardens,  
 Hamlet Gardens &  
 Earl's Court Square  
 for 1, 2, 6, 7 & 8

Deposit of £75 per person  
 secures flat

### Derelict and Abandoned Vehicles

Several vehicles appear to have been abandoned on the campus. This prevents vehicle users from parking.

In future, any vehicle abandoned on College premises will be removed after a period of two weeks from when a notice of intention has been attached to the vehicle by the traffic warden.

If the owners of the following vehicles have not removed the vehicle, or contacted the security officer, within two weeks, the vehicles will be removed.

### Behind Old Chemistry

- WNK 935N Maroon Volvo 244 DL
- YKY 423L Orange Hillman Avenger
- AOP 95T Gold Metallic Maxi 1750
- MFL 307P White Triumph Dolomite
- OJW 137R Navy Blue Alfa Romeo
- TOU 254H Orange Ford Capri
- NPU 22P Metallic Blue Fiat 127
- MJD 973D Green Morris 1000
- SDU 435R Yellow TR7

### Southside

- WAR 671M Red Datsun
- PWB 207R
- MWL 4575

Reviews: Film

# The Big Easy

It is unusual for the FELIX office to be sent *four* tickets for a press screening; the immediate conclusion I came to was that the film must be dreadful. With this in mind I was quite pleasantly surprised; the film is a straightforward tale of police corruption in New Orleans, and makes fairly easy watching for a Saturday night. The plot is a little thin, and quite a lot of the acting is coarse, but on the whole it's a lively film with some nice humorous touches.

Dennis Quaid (of *The Right Stuff* and *Enemy Mine*) plays the police lieutenant who followed his father into the force and has, like all his friends, been accepting 'protection' money ever since. He is happy to treat lightly a series of murders, seemingly part of a gang war between rival drugs dealers, but the Assistant DA, played by Ellen Barkin (of *Tender Mercies* and *Desert Bloom*) is

determined to look more closely and investigate police involvement.

The film is depressingly predictable, in that from the first appearance of Ms Barken, everyone knows that she and Mr Quaid are going to end up in bed together. In fact, it's one of those films where most of the audience might concentrate hardest on lusting after one another of the two stars (well, I did anyway). One can't help wondering how many detectives in New Orleans spend as much time as Mr Quaid in the weights room, and I'm sure no Assistant DA has ever looked anything like Ms Barkin.

The film is hardly the 'saggiest, sexiest, coolest thriller in years' that the publicity blurb made it out to be, but it's a good enough film for an intellectually relaxing night out.

*The Big Easy* goes on general release in September.

David Jones



## Hello Out There

I'd like to bring to everyone's notice the existence of Environmental Society. As some of you may know, Environmental Society was formed in the Centre for Environmental Technology by the postgraduate students there. During the summer term, though, most people at Env Tech do field courses then leave, and so at this time every year Env Soc folds up.

It is our aim to keep this society running through the summer term in order to have a full program of events for next year and a stall at Freshers' Fair. We also intend to run another Environmental Week following up this year's highly successful event.

So if you think you care about the issues that affect the environment today and want to learn more about our intentions, please get in touch soon.

Can I also mention that if anyone is interested in helping to run Third World First could they please get in touch with Penny Bourkes, Physics II.

Tim Norman, *Life Sci II*

Rich Heap, *Life Sci II*

### NEXT WEEK ON

# 999

## IC RADIO BRINGS YOU "IC YESTERDAY"

Each day from 7-8  
*Alan Barnett looks back to the music and events around IC in years past*

On Wednesday 7-8  
*the QT epic "Charlie Chaplin"*

## Ap-Tech Applicants

We have now purchased a number of books on the environment, energy issues, development, etc., which should be available shortly on our shelf in the Haldane Library.

If anyone is looking for 'appropriate' projects (3rd year, etc) for next year, we have a number of staff contacts in different departments who can help. Please get in touch if you are interested.

Finally, although we have a committee for next year, we would be very please to see anyone who would like to help with events, speakers, etc. Again, just drop me a note if you're interested.

Sue Browne, *EEII*

## Faultless

Tennis  
*Imperial College 5, University of East Anglia 4*

IC 1st team beat University of East Anglia 5-4, to go through to the last eight in the UAU Championships. The team, who have not lost a match all season, seem set to go on and win the finals. Also, they have reached the semi-finals, of the London Cup, without dropping a set. The team's success, is due to the experience of various national & international players, especially that of the veteran Ricardo Babamartin.

## URGENTLY WANTED

1 male actor to play a part in "The Collection" by Harold Pinter at the Edinburgh Festival. Anyone interested contact Miles Henderson via DramSoc or Physics pigeonholes.



# Brave New World

Whose right and whose choice? Paul Rice examines the contradictions implicit in Abortion and Embryo Experimentation.

As graduates of Imperial College we will exert influence on society not least in those areas related to science. The creative bounds of scientific research are being challenged by a society that feels increasingly threatened by science's growing power. For instance, there was intense media interest and public debate last summer centred around the Powel Bill, which proposed to make embryo experimentation illegal, resulting in our MPs voting to produce majorities of over one hundred in the bill's favour. These majorities stemmed partly from the weak evidence supporting the scientific value of experimentation, but also from an instinctive distaste for the arguments of the eugenics movement, which are an integral part of the case for human embryo experimentation. No doubt the thought of experimental embryos growing into adult human beings weighed heavily upon the minds of MPs.

The implications of the Powel Bill for the legal and moral status of the human foetus, if it had been allowed enough time to pass on to the statute book, have not been lost on our more forceful advocates of abortion. A leading feminist, writing recently in the Guardian, pointed out, that, banning all human embryo experimentation would be equivalent to presenting the embryo with a fully human right to life, and would nullify the moral force of any law advocating abortion. In other words it is contradictory to ban embryo experimentation whilst preserving the right to kill the same embryos at much later stages of development. It is this conflicting state of affairs that is producing a reassessment of the 1967 abortion debate which was fought on three grounds; a woman's claim to exercise exclusive rights over her own body; the rights of the human foetus; the suffering involved in the birth of (unwanted) children with physical or mental handicap and in to socially and psychologically difficult situations. In the cases involving rape and danger to the mother's life abortion had been permitted before the 1967 act.

We have a significant claim upon the law to respect our bodily integrity. If abortion was to be made illegal, then, the right denied would be the ability of a woman to prematurely end

a natural state of her body (by removing a foetus from her womb); a state she shares the responsibility for initiating except in the case of rape. This would undoubtedly form a valid right provided that you could show that the foetus itself does not warrant any pre-eminent respect over the mother's claims.

The foetus does not exhibit many of our distinctive human attributes, including the capacity for rational thought, but they are part of its nature because it quite naturally attains them as it develops. The human foetus is genetically predetermined to live out and experience a unique human life; in killing it we are denying it no less than if we killed any other person, simply their only opportunity to experience their life. We award legal rights in order to protect and publicly indicate respect for those aspects of our existence that we value greatly. Respect for the human body is but one facet of our respect for human life; so much so that it is difficult to perceive how a mother can have a moral claim over her child's life or body simply on the grounds of the rights she claims over her own body. You cannot without contradiction claim to be respecting the human body whilst destroying the human foetus.

The objection may be raised, however, that what actually matters is not abstract objective respect for human life but the quality of human life; we cannot expect people to suffer for an abstract concept. Indeed, the foetus need not suffer pain and if killing it is a great moral evil, then, we should see a correspondingly severe degree of human suffering accompanying it. One cannot correlate these two concepts in such a crude manner although many people do. Murder in which no physical and emotional suffering is involved is still clearly morally repugnant. However, to an extent that would have been impossible in 1967, disturbing medical evidence of the long term psychological harm, technically termed post-abortion syndrome, has recently surfaced (1) (2). This is strongly undermining the use of abortion as a palliative for other social evils. The case for abortion on the grounds of humanitarian compassion is being severely damaged. Those who want to see an end to abortion

still recognise that much more needs to be done to support and protect expectant mothers and mothers with young children, particularly at work but also in numerous other areas. It is difficult to see how these problems will be faced when the blame for them can be so easily placed on the mother with the question; why didn't you have an abortion?

As the connection between foetal and adult human life continues to be reformed, so the concept of abortion will become increasingly repugnant. This process is well under way in the development of ultra-sound scanning, the probable outlawing of embryo experimentation, and our increasingly detailed knowledge of the effects of the experience of life within the womb on our later human development.

Nevertheless we can effect the pace of change in this outlook. As the general election approaches we will have an important opportunity to influence the views of our future legislature. I suggest that we exert our influence to hasten the process and to protect the unborn by making our opinions known, and using our votes for their future benefit.

Paul Rice, Maths PG

#### References:

(1) *Abortion in a Relationship Context* by Vincent M Rue, in 'International Review of Natural Family Planning' summer 1985.

(2) *Coming to Terms: Post Abortion Stress Syndrome* by Speckhard & Selby, Terry published by Harper & Row, 1986.

## UNION BAR

# END OF TERM BASH

Featuring:

—NORMAN & THE NUTBURGERS—

—STAGE FRIGHT—

& OTHERS

(main band to be announced)

FRIDAY 19th JUNE

late bar & cheap drinks

WATCH THIS SPACE!!

## What's On

### FRIDAY

**Friday Prayer .....1.00pm.**  
Union Building. See Islamic Society.

### MONDAY

**Recitation of Holy Qur'an .....1.00pm.**  
9 Prince's Gardens. See Islamic Society.

**Dai Rocking .....11.00pm.**  
IC Radio on 999kHz. The best in hard rock music thro' midnight including the featured album every week with David Williams. FREE!

### TUESDAY

**Prayer Meeting .....8.15am.**  
Union Upper Lounge. See Christian Union.

**IC CathSoc Mass ..12.30pm.**  
Chemistry 231. Quiet and contemplation between lectures or exams. Food provided (50p). All welcome.

**ConSoc Speaker Meeting .....1.00pm.**

Peter Brooke—Conservative candidate for Westminster South. ME 220. Everyone welcome.

**Holy Qur'an Recitation .....1.00pm.**  
9 Prince's Gardens. See Islamic Society.

**Judo .....6.30pm.**  
Union Gym. All standards Welcome.

**OpSoc Tour Rehearsal .....7.30pm.**  
53 Princes Gate. See OpSoc.

**Nigel on the Wireless .....9.00pm.**  
IC Radio, 301m, 999kHz. Make tea, not love. Rather a screw loose than a loose screw. Free.

### WEDNESDAY

**Explanation of Holy Qur'an .....1.00pm.**  
9 Prince's Gardens. Talk given by Dr Darsh. See Islamic Society.

**IC Gay Okay .....12.30pm.**  
Green Committee Room, Top Floor of the Union Building. See Andrew Bannister.

**Another City .....11.00pm.**  
Driftn', like a ship out on the sea. Ain't nobody, in this world to care for me. Folk, R&B, blues, genuine jazz and who knows what else. Maybe this time on IC Radio 11pm—1am

### THURSDAY

**General Election .....All day**  
Everyone welcome.

**Science Fiction Society .....1.00pm.**  
Green Committee Room, Union Building. Anarchy, occasional events, use of the library, find out what we're doing in the weeks to come. Free to members

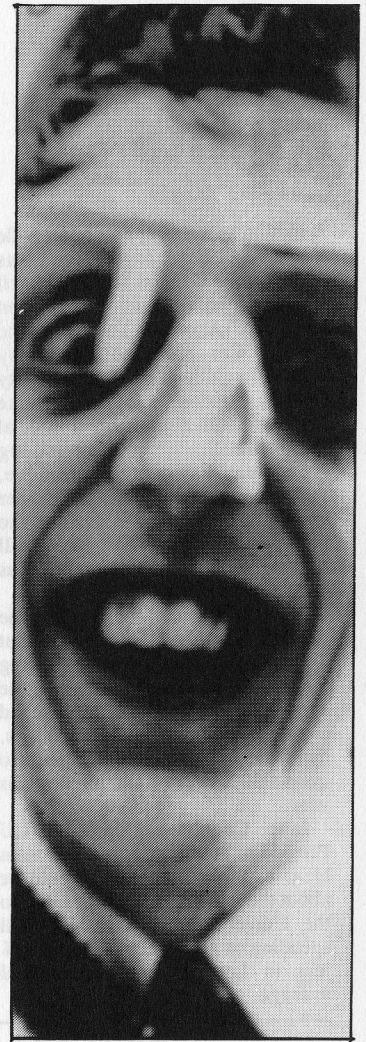
**Science Fiction Things .....1.00pm.**  
Green Committee Room, Union Building. The BBC epic "Hordes of Things"—serialised at SFSoc every Thursday. All this and the library too. Free to members.

**Science Fiction Books .....1.30pm.**  
Green Committee Room, Union Building. Must all be back by today: If you have any books from our library, get 'em back NOW.

**Judo .....6.30pm.**  
Union Gym. Beginners Welcome.

**Gay/Lesbian Group ..7.30pm.**  
ULU Building, Malet Street. Mens group room 3a, womens group room 2e. Meet weekly for speakers and booze.

**Soup Run .....9.15pm.**  
Weeks Hall Basement. FREE. See Imperial College Community Action Group (ICCAG).



## Small Ads

### FOR SALE & WANTED

● **Philips Series 90** washer/dryer, in working order but well used. Price £50 no offers. Buyer collects. Contact C J Morris, 581 8666 anytime.

● **Wanted**—accommodation in London between 12 July and 29 August. Would anyone available to offer such accommodation please contact: Dave Noble, St Andrews Hall, Redlands Road, Reading, Berks, RG1 5EY or telephone Dave Noble on Reading (0734) 875801

● **For sale**—one David Bowie ticket for June 19th at Wembley Stadium. Ring 01-272 6538

● **Moped**—Honda, C reg, no need to pass MOT for 2 years, road tax paid, comp insurance paid until end of 1987, even helmet included, price at new £800 now only £400, contact SIU Elec Eng.

### ANNOUNCEMENTS

● **Beit Hall**—thanks to all those who donated to Christian Aid. We raised £44.



# Human Rights

A motion supporting a London-wide University Human Rights Week was passed at the General Union Council (GUC) of the University of London Union (ULU) last Tuesday. The motion was proposed jointly by Imperial College and University College London, and mandates the GUC executive to form a special committee, comprising representatives of the executive, Amnesty International, and other human rights organisations to organise the event. The week will include a letter writing campaign as well as other events.

An amendment, put in by the London School of Economics, that ULU should commit itself to funding the week was defeated with the argument that ULU should concentrate on specific student issues, like the successful '3Rs' campaign to avert a 50% cut in ULU funding this year.

Jane Cannon, outgoing ULU President, announced that the main ULU campaign next year would be about the issue of student facilities in the University; for example, total spending on sporting facilities is 40% less in London than the national average.



## Islamic students demonstrate

Saturday afternoon saw a demonstration organised by the Islamic Students Association in Europe, to mark the day of Quds. Some 500 people marched from Speakers Corner to Prince Consort Road to show their "solidarity with the opposed Palestinian Muslims". Anti-Zionist and anti-American

banners were much in evidence, and an effigy of Ronald Reagan was paraded before the crowds assembled outside the Royal College of Music. A heavy police presence including a cordon in front of the Iraqi Embassy accompanied the demonstration, which had been heavily publicised at Islamic prayer meetings at Imperial.

# Questions on AIDS

Members of Imperial College will be able to put questions to an international panel of experts on AIDS tonight. To mark the close of the International AIDS conference in Washington, a live teleconference is being transmitted by satellite to six centres in Europe, including London, where invited medical audiences at Imperial, Kings, University and Royal Holloway and Bedford Colleges will be able to take part in the debate. STOIC will be relaying the broadcast around the College sets, and members of the College may phone in questions on Internal 3949. The programme will be shown between 7.30pm and 9.30pm (British Summer Time). The first hour of the programme will be an open discussion between the panel of experts in Washington, during which the questions will be gathered at each of the European centres; these will then be presented to the panel in the second half of the transmission.

# Printing dispute settled

The dispute between the Imperial College Union and Hamilton Press has been settled. The Union has refused to pay for 9500 copies of the Alternative Prospectus which were delivered to the Union but which were substandard. Instead of £1885, the sum on the original invoice, the Union will now be paying £1600 for the AP including a reprint of 2000 copies. The extra copies should be delivered within the next week.

# Sid the Sparks



Sid Jones has been appointed Electrical Supervisor Residences and will report to Peter Hallworth. Sid is not a new boy! He joined the College as a Botany lab assistant on leaving school in 1944, and apart from a break of two years in the Royal Air Force has worked on the campus throughout his career. He is a popular member of the Maintenance Services staff and is very active in the section's

social activities.

Sid has been involved in the upgrading of the College electrical system as part of the Energy Management Programme and his new duties will include this responsibility in respect of the Prince's Gardens area and all other student residences.

So if you have an electrical problem in one of these areas—in the words of the Gas advert "Tell Sid".

# Motorists to face £25 fee

Students and staff who use the College parking places may be faced with an annual charge of £25 as from next autumn. Parking and Traffic committee have been discussing plans to raise money from the College's parking spaces, including raised daily charges for public parking, as well as an annual fee for College users. Though the new charges have been minuted as a directive from the College Finance and Executive Committee, there is some dispute as to whether there have been any definite instructions. For the moment, the matter has been passed back to the Rector's Policy Committee.

Representatives of the Trade Unions on campus are understood to be unhappy about the proposal for a charge for College members.

SERVICING & REPAIRS  
at

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15% discount on labour for IC students and staff  
(Personal service guaranteed)

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