CENTRE PAGE --FEATURE ON-U.L. YOUTH COUNCIL

# IC ACTS ON FEES

# Lobby of Parliament Petition

## Possibility of a strike

Everyone must now be aware of the intention of the Government to triple the fees of all students from anywhere but Britain and Northern Ireland,—this increase from £70 now to what is described as the economic figure of £250—will take effect from next session.

### Hunger strike at Libyan Embassy

While the uproar over overseas students' fees grows, and LSE Union shouts itself to pieces, a different, but more dramatic form of student activity is taking place on our very doorstep. The Libyan Embassy, midway between Southside and the Mech. Eng. building, was on Monday the 6th largely over-rum by Libyan students from universities all over the U.K. Banners stating their demands were put up outside the Embassy, to signify the start of a six-down strike. The banners have since been removed, but the students are still clustered in the gloom of the Embassy Hall. At the time of writing the situation is that the Libyan Government has cancelled the students grants, and that the situatoum strike has become a led the students grants, and that the sit-down strike has become a hunger strike with Mr Bashir, its leader, firmly committed to a showdown. IC is not represented.

From what one can gather the Libyan Government has been violetnly opposed to the Libyan students' Union for a long time. Students have been detained, refused grants and teaching facilities, even wounded and killed in what the publicity handout describes as a peaceful demonstration' The present strike is part of campaign to force their Government campaign to force its Government into a more tolerant and reasonable attitude.

J. Mullaly

The concern of the Union Executive for the effect that this change would have on the ability of students from poor countries (or underpriviledged classes in the more wealthy ones) to benefit from our highly developed higher educational system, was expressed in the motion read by Brendan Parker. Subsequently the meeting decided to send the delegates on the NUS sponsored lobby on the 1st February. Presumably the idea was to have one student lobbyist for 1000 members up to a total of 200. The participation of our three delegates (myself, Derek Boothman and Nitim Som) was not accepted but some complimentary tickets to the NUS protest meeting were supplied. At the meeting a number of MPs and prominent academics indicated disagreement with this particular Cabinet gem. The general concensus was that the £5m saved (the sole official reason for the change) would easily have been saved on some other item of Government expediture.

### RSA Triumph

So much for NUS; it so happens that the Radical Students Alliance won the day by calling for a mass student lobby of Parliament on the same day. The three official delegates and about 100 other IC students joined this lobby and waited for hours out in the cold for the Parliamentary process to accommodate them.

The queue outside the House was the longest I've ever seen and I'm sure most of the students never got into the lobby.

However, well over 150 MPs were seen most of whom agreed with our point of view and many were annoyed that the change in



### ALSO IN THIS ISSUE:

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policy was not discussed in the House. Some of these MPs are attempting to get the matter discussed.

### RCS Strike?

Under the terms of the motion passed by the Union the Executive Committee is charged to pursue further action if this is necessary. The Radical Students Alliance (in the absence of a lead from NUS) has designated February 22nd. as a Day of action' Ideas so far are: a strike—which Keele University will certainly support; a telephone 'siege of the Department of Education & Science by affected students and others pulsasing for information; RCS Union is discussing with the Deau the possibility of a token suspension of the Irst lecture on Wednesday, February 22nd., settitions; individual letters to MPs; etc. etitions; MPs; etc.

K. Cavanagi.

### Duke says No to strike

In a recent interview, Union President Tony Duke said that he strongly opposed Mr. Frank Fuch's suggestion at the last Council meeting that students at IC should hold a one day stoppage on February 22nd (the RSA day of protest) in support of the overseas students' fight against fee increases. He said he had the support of the Union Executive in the matter and the opinion of Council was that sufficient action was being taken already and a one day stoppage would only unnecessarily prejudice staff-student relations.

### Sir Owen not worried

Tony Duke also mentioned that he had spoken to the Acting Rector, Sir Owen Saunders about the stoppage and, although Sir Owen was not in favour of it, he had said it would not unduly worry him if students decided to stage a strike.

Thus there will be no stoppage unless Frank Fuchs raises a motion at the Union meeting on February 21st and in this case the President himself will oppose the motion.

David Sullivan

### Southside car parking

The "parking problem" in South-side has recently been somewhat alleviated by the apparently dor-mant Southside Car Parking Com-mittee. At the beginning of term various derelict vehicles (12 motor-cycles and 4 cars) were disposed of and further removals vill take

mittee. At the beginning of term various derelict vehicles (12 motor-cycles and 4 cars) were disposed of and further removals vili take place this term.

The present parking space for cars is still 22 places short of the necessary 100 places, but there is sufficient space for motor-cycles and bicycles. The Committee hopes that the bays and no-parking lines will be repainted over Easter and make more space available.

Other matters being investigated by the Committe include the provision of stand-pipe for car-washing and the prevention of abuse of the facilities by non-college members. Also recommendations are to be made to the College Parking Committee concerning future plans for vehicle use in Southside. Southside

### Acting Deputy **Presidents**

During the current illness of Deputy President Dave McBain, two Acting Deputies will perform his daties. Martin Lack and Rory Redmayne were informed last Monday after the weekly Executive meeting that they are to carry out the job, and will attend Council meetings as observers and Evacutive meetings as co-opted Council meetings as observers and Executive meetings as co-opted members. Both are actively engaged in Union activities, Martin as ICU Publicity Officer and Hyde Park Relay Organiser and Rory as Stoats Club Secretary and Captain of Rugby Fives. It has been suggested that they are both interested in high Union posts next year.

Dave McBain is suffering from glandular fever and may be away from the Union for a few weeks.



### Ruddigore - acting unimpressive

One of the disadvantages inherent in a society devoted to the production of the works of one particular writer or musician is that their choice is limited. Inevitably this leads to the occasional production of an artist's less brilliant works and many Gilbert and Sullivan fans consider that Ruddigore falls into this category.

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It would be nice to be able to say that the Gilbert and Sullivan Society offset this by giving an exceptionally interesting performance, but unfortunately they didn't The common Imperial Col-Society offset this by giving an exceptionally interesting performance, but unfortunately they didn't. The common Imperial College occurence of a small audience probably didn't help the actors—despite the steady arrival of people throughout the first 40 minutes. Allowing for this, though, the general impression was that while the singing and orchestra had been amply rehearsed, the acting had been left very much to look after itself.

### Good opening

The first act opened well, with a well sung solo part by one of the bridesmaids, played by Mary Macphail, and a chorus by the village corps of permanent bridesmaids, who could at all times be heard above the orchestra level. The lead actors who followed immediately afterwards were something of disappointment, not least because Rose Maybud (Susan Browne) looked somewhat older than Dame Hannah (Catherine Robinson). Robinson).

Colin Davis seemed rather unhappy with his part as Robin Oakapple, and was determined to tell the audience so, but he gave a much more convincing performance in the Second Act as the Bad Baronet.

Exactly why it is difficult to say, but the whole production warmed up enormously in the Second Act, perhaps because this part of the script is much more dramatic, and amenable to overacting. Gilbert's many banalities, from being merely infuriating became actually amusing at times in this act, and for this much credit is due to Mad Margaret (Jenifer Caws) and Sir Despard Murgatroyd (Jack Hopkins), whose clear enunciation and carefully controlled underacting made the best of Gilbert's often vicious fronies. best of fronies.

### Not Memorable

As Gilbert and Sullivan the production was entertaining as G & S is entertaining, but it was not memorable production of Ruddigore.

N. Clarke

# Teach Yourself the Complaints System

The complaints system in the College refectories is there so that we can improve the general standard of food and service, and make sure that no-one gets a really bad meal. However, it will work much more effectively if people know how to get a complaint dealt with. Complaints can be divided into three broad categories:

(1) Suggestions about improving the amenities etc.

Examples of those are complaints about lack of cutlery, trays, etc. and bright ideas for keeping the food warmer. Put these in the complaints book, and they can be dealt with straightaway, as such a lack is obvious on inspection.

away, as such a lack is obvious on inspection.

(2) Complaints about standards of food etc.

Examples of these are cold peas, small portions, and lack of choice. Please put anything like this straight in the book. If one person makes any of these complaints, he could be assumed to be, respectively, finicky, hungry, or choosey, but if ten people all say the same thing, then there is certainly something wrong, and we can try to improve matters.

### Lack of choice

With particular reference to the lack of choice' complaint, would you specify which dishes are all, and what the time is. This way we can more easily judge how much extra food is needed.

(3) Complaints about a bad portion of food, or the price being wrong. Examples of these are foreign bodies in the food, etc. If you think your meal is a really bad one, as distinct from one of low standard (see type 2 complaints), then the best way to deal with this is to complain directly to whoever is in charge of the refectory staff at that time. If you ask the cashier, she will tell you who to see. This way you can get a better meal, but put it in the book as well, so that we realise the meat pies, for example, are suspect. If you do not get satisfaction from the staff, though I think you will, then go straight to the refectory complaints officer, if possible with specimens (they have been produced before).

### Price increases?

If you think the price of some meal has suddenly gone up, then please point this out at the time. It could be a mistake, and if you do something about it you could save everyone from paying extra.

There is a fourth 'category' of 'complaint' which gets put in the book, which usually reads somethink like 'Mooney, where did you learn to cook?' Apart from wasting paper, and not being very constructive, I assure vou these comments are irrelevant—Mr Mooney does not do the cooking.

Rex Lowin

South Side Refectorues Officer

# Expeditions and Treks 1967

The Exploration Society is willing to provide all types of information to the members of the College who are planning any kind of expedition or trek in Europe, Asia or Africa. This information on road conditions, food, accommodation and border formalities has been collected from previous journeys and expeditions made by society members. These personal trips shuld prove invaluable to any traveller. The Exploration Society would be pleased to hear a few details of any treks or expeditions planned for this Summer so that they can be given relevant information and also that a record of such trips can be kept for future reference. It is certain that this type of cooperation will be useful to all present and future travellers. Please send any information or queries to The Secretary, Exploration Soc., via Union Rack.

# **ICSASAF**

## underway

ICSASAF, or to give it its full title Imperial College South African Schlorship Appeal Fund is now under way, and more power to it. One of the first acts of the last council meeting was to vote the scheme a sum of £20 to cover initial administrative costs. The main body of this will go towards financing individual appeals by letter to every student at IC. This should start in early March. Following on from this it is planned to approach prominent members of the staff, including Sir William Penney, the new Rector.

It is also possible that a small number of industrial firms, with particular connections at IC might be asked for donations to the fund, but this is something for the future, and is not being presently considered. The whole scheme will, in fact, be run on the lines of a charity, and there is no suggestion of a competition with the Carnival Fund. This would inevitably result in the splitting of allegiances and probably injure both funds. For this reason no rags, stunts or processions are planned. Another important decision is that as far 4, possible, the raising of the fund will be an internal affair, since the scholarship offered applies, of course, only to IC. By when will the required £2,000 be

acquired? Andrew Jordan, who together with Mike Bellchambers is heading the Funds Committee has set as a tentative date the end of 1967, though he admits that everything depends on the response of students and staff. In the late Union Meeting, which approved ICSASAF by a large majority. Jordan and Bellchambers were elected to run the fund, and both are, of course very keen for help of all kinds. Anyone who would like to lend a hand should get in touch with either as soon as possible, through a note in the Union nack. In addition to this Andy Jordan can be found in Tizard Hall, room 627. If you want to help, now is the time to start.

J. Mullaly

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# Comment

The Union is running well. Though there are many faults and complaints, as a whole it is carrying on well. There are Carnival, whose haul so far approaches £2000, the Entertainments Committee, who took great pride in announcing their profit at Council recently and FELIX itself, which shows every sign of breakingeven, a situation which makes it almost unique amongst student newspapers.

It is not only in these respects that there is high activity, with appeal funds for Vietnam orphans and South African students, a lobby of Parliament and the work done on student houses, the usefulness and interest of Union life increases. Whatever one's views of Mr Duckett and his ideals, his enthusiasm could well be emulated by many of those not actively engaged in the Union.

However, to return to finance, the need for success is greater this year than ever before. When the estimates were prepared at the beginning of the year it became apparent that, unless a loan of the order £1000 could be obtained from the College, the Union would run into debt by the end of the year. The Union finance of the past two years has been based on the expectation that the Union fee would be increased to £7 per person per year; in view of the recent remarks by Mr. Crosland at Lancaster and eisewhere, it is entirely possible that this may not be forthcoming. This point was made by Dr. Weale, the Senior Treasurer, to haushed Council meeting (even Phillips was silent).

The loan from the College has still to be settled the fee may not be increased; no longer can the attitude that 'the Union can afford it' be accepted.

accepted.

It is a great pity that Mr Jordan, having raised the question of the publicity given to Council proceedings, could not attend the most recent of these famous convocations. I feel sure that he would have been impressed nay, bewildered by the level of debate which takes place, from David Reich, who always gives the impression of talking rubbish even when uttering the greatest common sense, to flippant Ray Phillips, who is the anotheosis of Mr Reich. Even the present strong chair cannot prevent the members chasing each other into logical cul-de-sacs off the main road Seriously though they've doing a grand job!

The timing of this last meeting was such that it is possible to include the events of it in the main issue. I hope Mr Jordan is satisfied

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# Letters to FELIX

# IC to join RSA?

Sir,

"Keep at them" This was the advice of Jeremy Thorpe and other sympathetic M.P.s to 100 IC students taking part in the N.U.S./R.S.A. lobby of M.P.s to gam support for the tens of thousands of overseas students seriously hit by the Government's decision to triple fees for overseas students (£70-£250). "You have a very good case and saculd win, you must not be put off by nods of agreement and no action." said Nigel Fisher, Tory M.P for Surbison.

a tront organisation with no more effect than the parent body. At present it is very clearly sticking to a non-factional approach. However much the Press and N.U.S. might try to "Red smear" it, the 300 students from 90 colleges who attended the inaugural convention on Jan. 28th/29th know how firmly it strives for change, towards an ideal of freedom and justice in Education and Student life, but it is not partisan. When it becomes

This bore out much of the opinion of the Radical Student Alliance (R.S.A.), who were afraid that N.U.S., while saying the right things, would tone down student feelings. liance (R.S.A.), who were afraid that N.U.S., while saying the right things, would tone down student feelings on overseas student, fee rises to ineffectiveness. Crosland had eulogised N.U.S. at Margate as a responsible, respected body and yet had announced these increases on the first day of the Christmas Vacation without consultation of N.U.S. or Universities. This is what respect gains for you. The plight of overseas students is one of immediate hardship and must be fought with all the vigour that sympathetic students can put into it. N.U.S.'s tactics of miniprotests cannot be allowed to ione us this particular case. This is not multancy for militancy s sake, but militancy because this is a cause we cannot and should not lose. In this spirit R.S.A. assembled an additional 2,000 students to swell the carefully regulated N.U.S. lobby to proportions nat really made people take notice.

In view of rec t press publicity on R.S.A., it seems necessary that I declare myself not a Communist. I am a Liberal and the moment R.S.A. becomes the voice of one faction, be it Liberal, Communist or Cornish National, I will denounce it. Its council of 20 is in fact carefully balanced between 4 each from Liberal, Communist and Labour (non Trotskyite) and 8 Independents. Many radical Tories have also participated. It can only exist as long as it is unanimous, as long as it espouses causes supported by all, the moment it splits, it loses its point. Thus I don't think anyone need fear a takeover by any group, the moment this happens the rest would denounce it and the offending faction would be saddled with running

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by A. KOPIT

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to a non-factional approach. However much the Press and N.U.S. might try to "Red smear" it, the 300 students from 90 colleges who attended the inaugural convention on Jan. 28th/29th know how firmly it was put on this path. Of course it is political and radical, it strives for change, towards an ideal of freedom and justice in Education and Student life, but it is not partisan. When it becomes partisan it dies.

R.S.A. exists to work within N.U.S., to save N.U.S. from itself. Most of all, it provides what N.U.S. stifles, a grass-roots voice, a platform for anyone with something worth saying and with the strength is to the saying and with saying approach.

N.U.S. stifles, a grass-roots voice, a platform for anyone with something worth saying and with enough support. Its strength is munanimity and the number of students supporting it. When an issue such as student loans comes up that IC has supported, it must throw its weight in with R.S.A. and others who feel as strongly about it. By covering our eyes and dissociating ourselves from R.S.A., we will ensure that it becomes what we all fear, unrepresentative, unsympathetic and ineffective, another N.U.S.

Of course IC must decide on its own, what its attitude to issues is, but once it has, let it strive with all of a similar opinion to make its views count.

Mike Mansfield

### CND

Sir,
Our society came in for a great deal of criticism and bad reporting in your last issue. The latter was prevalent both in "That Exhibition" and "demagogic CND". This was obviously not deliberate but has led to some of our remarks being interpreted in totally the wrong way.

May I first of all answer the

May I first of all answer the criticism levelled at the Vietnam May I first of all answer the criticism levelled at the Vietnam photographic exhibition. We accept entirely the opinion that this exhibition was heavily anti-American biased. We, as a society, believe the U.S. forces are in Vietnam illegally, a view shared by U Thant, and therefore can separate the victim from the aggressor. I do admit, however, that I personally did not completely agree with the exhibition. I cancont accept the glorification of war but in the main I am sympathetic to the N.L.F. and can justify their fighting. We did at first make it clear that this exhibition was designed by the Bertrad Russell Peace Foundation but were ordered by the College authorities to remove all reference to them. at the Vietnam

authorities to remove all reference to them.

The reason we put up such an openly biased display was because this would cause the controversy we wanted. In the past, taking a more neutral attitude, at great cost to our own consciences, we have not been able to stir this Union away from its sluggish apathy. During our display I have heard more discussion on the Vietnam War than I have heard before at this college. We will be following this up with discussions

Cont'd

### CND cont'd.

of the history and the basis tor this war. I challenge these people, who now suddenly claim to know all about the situation and desperately want peace, to come to these meetings and give something

these meetings and give to us.

Now perhaps I may be allowed to clear up some of the inaccuracies in your last edition:—

1. C.B.C. spent 1½-2 hours at IC minutes.

1. C.B.C. spent 1½-2 hours at IC not 15 minutes.
2. I attacked the Union Exec. for their lack of help over my Union Motion on Vietnam not for the reasons you stated. May I also point out now that the President has refused to sign the letters to Vietnam. Vietnam

I did ask staff to discuss Vietnam

Vietnam.
3. I did ask staff to discuss Vietnam whilst lecturing but did not use the U.S. staff as precedent. In fact I referred to the Oxbridge dons who spoke so openly about the Spanish Civil War.
4. There were not two counter resolutions over the appointment of the new Rector, the two were both necessary and each bore the other one out.
5. Stewart Barnes' new, twisted version of one of the captions is an outright lie. I have already explained this to him.

Finally to Colcutt I say that it is not childish to defend one's most basic principles. You surely must know that. And don't you think that you were just a little childish (or bitchy?) when you suggested I should disband CND after the appointment of Penney?

Yours faithfully

M.G. Duckett (Chairman CND)

Ed: the members of staff concerned with the articles decried above deny the inaccuracies allegable. Mr. Duckett in section 2, 3, ed by Mr Duckett in section 2,

### P Gs' London allowance

Sir.

I am sure that most postgraduate students financed by the Science Research Council would agree with me that the absence of a London allowance is an actual injustice about which something ought to be done. It is manifestly obvious that the cost of living here is higher than in the provinces.

Undergraduates, technicians and staff all get an extra London allowance. Why not P.G.'s? The argument that we must make a 'sacrifice' in order to get a higher degree is not relevant, the point to press home to the department of Education and Science is that London P.G.'s should not make any higger a sacrifice tha anybody else.

AS IN THE PAST the Editor will be pleased to receive letters for publication. However, the right to withold letters from publication, either in part or in toto, is reserved.

THE EDITOR reminds all con-tributors that copy for any issue of FELIX must arrive on or before the Wednesday before publication.

Only the full weight of opinior Only the full weight of opinion of the students concerned will ever change this. To this end, Harry Fairbrother (an Executive member of the A.Sq.W.) and I, have beeked a room in the Museum Tavern for 19th February at 11 a.m. where a meeting of interested P.G.'s (from all Colleges of the University) will take place to decide on some constructive action. ive action.

ive action.

The cost of publicity and of the room has been paid for by the A.Sc.W under whose auspices the meeting will be held, but those who attend are under no obligation to the A.Sc.W I hope the large number of SRC students at IC will represented.

K. Cavanagh

K. Cavanagh

### Save our posters

Sir.

Last week a FELIX poster was removed from the Mech. Eng. stand well before FELIX was on sale. FELIX is now having to overprint posters in order to make up this deficit. Would people who want a FELIX poster please wait at least until Wednesday evening before stealing them from the stand, or order them from Frank Morris, Falmouth 122.

Peter Munday

# Dissent in Elect Eng

Sir,
We would like to dissociate ourselves from remarks made by "OTOLI" in his first exposition to FELIX. We do not consider that Dr. Gundry's lectures were a waste of time and would like to ponit out that any syllabus grievances can be put before Guilds Academic subcommitte via the year representative.

Elec Eng 2

B. Costin, I.E. Williams, F.J. Morris, K. Pragnell, A.J. Gawronski, R.G. Blakey, D.W. Jewell, P. Inskip, R.E. Peckham, D. Hunt, P.J. Harris, C.C. Parker, C. Humphreys, J.S. Butler, P. Haskell, A. Johnson, R.H. Hackney, A.L. Jones, F.A.R. Haj-Said, M. Newton, C. H. Ling, J. Singer, R.B. Kemp, J.F. Moont, A. Furth, K.B. Simons, J.A. Seed, C.G. Harrison.

### Conference on lecturing methods

Sir,
Two years ago a motion was passed at an IC Union meeting culling for an all-college conference on teaching methods. For many reasons, mostly the inexperience of the committee charged with its organisation, this was not held. However, the problem remains.

Since that time some departments have introduced more sophisticated courses, a language laboratory has been set up and amongst other things a control TV studio with piped lectures and demonstrations for all parts of the College is being planned.

If there is sufficient interest a conference could be called later this term. Farticipation of the constituent College Unions and the branches of the Association of University Teachers and the Association of Scientific Workers would be invited. Anybody interested in assisting in the preparation for such a conference please contact me via Chemistry (Int 2709) or Room 422 Tizard (Int 3634). 2709) 3634).

K. Cavanagh



# **Opportunities** For Graduates

Du Pont – the world's largest chemical firm – is expanding in Europe. Du Pont Company (U.K.) Ltd. is a key part of this growth, with a major elastomer chemicals complex already in operation and two fibres plants now being built at its Maydown Works, Londonderry, N. Ireland.

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Representatives from Du Pont will be at the Appointments Board on 15th and 16th March, 1967

# **Exploration Society: on survival**

For Sale: Special offer of numerous 2 year old lumps of cheese, and chocolate, in as new condition, for only 8 pounds, inclusive of special alumiium foil wrapping. Please apply to the Catering Branch of the Defence Ministry.

Or so the exploration society were told at last Thursday's meeting, by the head of the Air

Forre's Survival Training School in Devonshire. They were also informed that a machette, as included in all airmen's survival kits, makes an excellent wood chopper, "my wife always uses one," that a King Cobra does not "freeze" when you grab its tail (as one tropical survival instructor found to his cost) and that the survival school is provided with 30 knot launches so that they can supple-

ment Nature's wave making efforts off the Devonshire coast (Boat Club Beware).

The lecture was interesting, but, in view of the nature of the society, a little more information on survival, rather than the Air Force Training Schools, might have been useful—even the game traps in the photographs were empty!

N. Clarke

### Means Test: Tony Lunn nominated

In order to relieve the pressure on the Welfare Officer, Pete Finch, who will now be dealing with the Student Houses, Tony Lunn, Civil 3, has been appointed to the subcommittee on the Means Test. It is not expected that the sub-committee will achieve anything tris year which is as well since Tony is leaving in June.

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physics, chemistry and microbiology.

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# This House was Speed-Crazy

# Faster than 70 m.p.h.?

Graham Hill proposing the motion declared that the Ministry of Transport's limit was not constructive but destructive. Motoring as a means of transport could never progress if it was restricted; speed restrictions did not necessarily increase safety; in fact, the bunching of cars travelling at the same speed created danger. Speed limits of 65 to 70 mph in America had produced cars with impossible handling: power brakes and steering mode there to inscribing the same speed creating by the same speed created and produced cars with impossible handling: steering made them too insensitive for anything but parking. Moreove speed limits varied from state to state; there was no agreed best speed.

The French had the best system: there is no speed limit, but police keep a close watch on traffic dangers. The answer to the safety problem is better driver education—the 70 mph speed limit was like 'the man with the red flag who walked in front of early cars.'

red liag who walked in float carearly cars.'

Against the motion, Professor Buchanan proposed the "rule of reason' Mr Hill's argument was appealing but emotional. Automobilies were a good idea, but caused terrible accidents, and short of rebuilding all our roads and ensuring that everybody drove perfectly, we could only exercise care and self-discipline. The 30 mph limit in towns had decreased the accident rate. Since motorways were designed for 70 mph 20-one could complain that the speed limit was unfair, and uniformity of behaviour on them was safer since at 70 mph a driver covered 200 feet before he could react to danger. Moreover, the energy dissipated in an accident was proportional to the

square of the speed. The American situation was better than ours. Seconding the motion, Tony Duke quoted statistics showing that speed limits did not reduce accidents. For example, 76 people were killed on the roads at Christmas in 1965, and 102 in 1966. The Road Research Laboratory had concluded that the 30 mph limit in towns did some good, but administrative costs were out of all proportion to the results. The individual driver should limit his speed to the conditions and to his skill. square of the speed. The Americ-

Brendan Parker, opposing, said that drink propably affected the Christmas accident rate, but the speed limit did not. Expert drivers might be able to drive fast safely, but how many cars were safe at 70 mph?

Points from the floor included: 'Why should we all be restricted to the same speed?' and 'Why should people die for the enjoyment of others?' Advisory speed limits were proposed, as well as the

idea that drivers should be tested as to their maximum safe speed.

Professor Buchanan concluded that the argument that speed limits were unenforceable was ridiculsous. Since motorways were designed for a certain speed, this limit should be enforced. The fact that there was a law against murder in this country and that this was broken was not a valid reason for doing away with the law.

law.

This produced the retort from Graham Hill that the reason that the law against murder was unenforceable was that the police were too busy chasing motorists.

The vote: 145 for, 103 against,

13 abstantions.

### UNION:

### **Associate** Membership

The membership of IC clubs is now to be open to non Union members. This was the outcome of a long discussion at the last Council Meeting. Meeting. There was much discussion about the report of the Comwhich originally

sidered the problem of Associate Membership; this was centred on the economics and who should decide upon the eligibility of applicants. It was eventually agreed that it was unnecessary to limit applications to members of proved organisations as number of people involved would not be large.

### Economics

The use of the phrase "economic subscription" caused some concern to be expressed by some members of Council; most of hem recognised the inadvisability of subsidising Associate members at the expresse of others but at subsidising Associate members at the expense of others but were stil not satisfied. The difficulty was ultimately resolved when Frank Fuchs was inspired to give Council an Economic Lesson. When he pointed out that "economic" inplied availability and desirability ah well as financial considerations, the original phrasing of this part of the report was allowed to stand.

The version of the report that was passed allows clubs who want associate members to apply to

associate members to apply to their Clubs Committee which will

we its discretion about who to admit and how much to charge.

When asked by Frank Fuchs if a letter about this decision would be sent to various institutions, Tony Duke said that he felt it was not necessary to advertise for members. There were people who had already enquired about joining clubs and these would now be ad-

D.M. Harris S. Barnes

LTD/X51

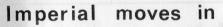


MARCONI HOUSE, CHELMSFORD, ESSEX, ENGLAND

# IC: THE STUDENT AND YOUTH to make, far from stemming from an old fashioned mode of 'do-gooding', owe their origin to nothing more com-

Report by the University of London Youth Council

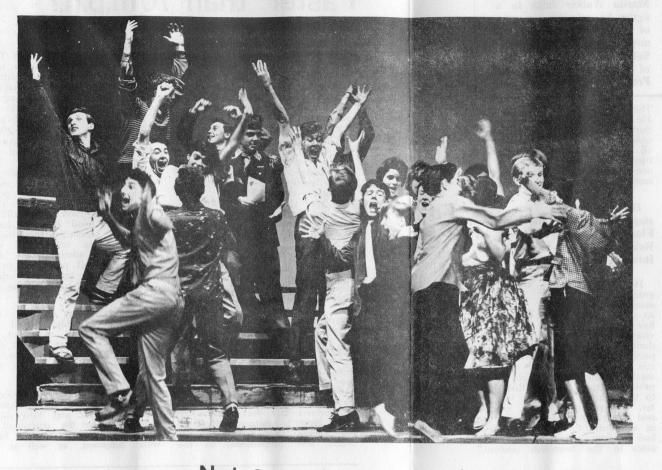
For the past seven years, the University of London Youth Council has been carrying out an experiment in Human Relationships. The object of this experiment has been simply to encourage students to spend part of their spare time meeting and helping other young people in London who normally have grown up in a very different environment. Because of the advantages which a student will often have over the average London youngster, it is felt that there is much that he or she can do within the context of the Youth Serice, to share his or her enthusiasm for life with these young people, while at the same time reaping a harvest of benefit from the experiences to be gathered along the way.



About twelve months ago, a small committee was set up in Imperial, as a sub-committee of O.S.S., to investigate openings for IC students to further Youth Council projects in the South West London area. As this was the first time that students in this area had been involved in the Scheme, it was at first necessary to examine the scope for involvement. Somewhat to the surprise of the Committee, it was soon discovered that, behind the Regency facade of Sloane Square and South Kensington a mere 4d. bus ride from the College, there existed two Youth Clubs which were in desperate need of help.



Coffee bar at Off the Record



Record

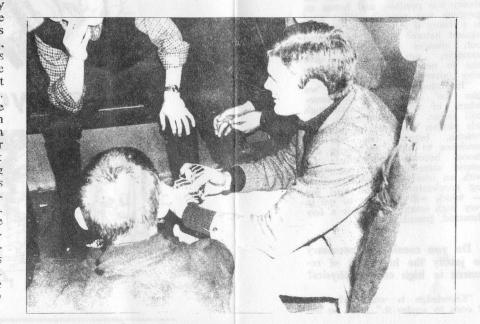
Any illusions which members of the Imperial College Youth Council had previously held about Youth Clubs and Youth Work were immediately shattered on first entering the 'Off the Record' Club. "This Club", reports Paul Shevlin, Youth Council member, "meets in a dimly-lit basement. The Clubroom has a coffee bar at one end and, on a raised floor, a table tennis table at the other, the rest of the room being taken up by half a dozen or so girls dancing, while their boy friends and others look on. Many sit, relaxed, chatting and drinking coffee. This is not to say that there is no purpose in the Club; far from it. Although few members involve themselves in especially creative activities, there is an informal atmosphere which is both pleasant and worthwhile. it is also true to say that the members respect the authority

### Not a take - over bid

The students who are at present visiting the 'Off the Record' Club feel strongly that their reason for going there is not so much to organise the members into creative activities but rather to get to know them as friends. Although the student is older that the average Club member, he has much in common with him. Al-

though often products of different environments, they share a common culture, and by getting to know each other they will be making an immense and very necessary contribution to breaking down the last remains of the social barriers of our society. It can already be seen that the achievements which students at the 'Off the Record' are beginning

Meeting at Off the Record



plicated than a mere desire to broaden their own outlooks and those of some of London's young people.

St. Philip's Youth Club in

Earl's Court Road offers a

### Saints &Sinners

vivid contrast to the 'Off the Record' Ciub. Richard Jeffery, of IC sums up the atmosphere as follows: "The Club meets in a Church hall, but is in no way a Church Club. Membership is open to all, as is only too obvious on looking round at those who attend. The facilities are adequate without being exceptional. Table-tennis is taken very seriously, and there is coaching for this every week. The record-player plays an important part in the life of the Club, but it does not take so prominent a place as it does at the 'Off the Record'. The dart-board, which is on the stage, is used by a large number of members every night. There is a T.V. room, which also serves as the vestry to the Church. The coffee bar does a good trade. The noise in the Club is deafening at all times, especially in the Entrance Hall, where an extension to the record-player enters into open battle with the shouts of young people coming and going, drifting in and drifting out. In recent months there has been a certain amount of trouble in the Club, with some members on drugs. The new Club Leader has had wide experience with drug addicts and drug addiction in general, and is anxious to quash this problem as soon as possible. The Club thus provides ppportunities for both students with interests in indoor games and for students interested in helping members overcome their attachment to drugs, as well as for the student who just wishes to strike up a relationship with an interesting group of youngsters.

### February crisis

In the past few days, owing shortage of temporary help.



As is stated in the Albemarle Report, "...at the operational level, the Youth Service will St. Philips-a first impression advantage of this unique opportunity to involve yourself

> may never function again unless you respond. For further information please contact: Nigel Hardwick Botany P.G

in Youth activities, to the bene-

fit of others, but chiefly to the

benefit of the 'Off the Record

Club and St. Philip's, which

stand or fall by the willingness of the honest-to-goodness adult who comes along to lend a hand regularly ... as voluntary leader... instructor... or just one of those indispensable adults who fulfil the vital function of being on the spot."
At Imperial College there are

some four thousand students,

out of whom there must surely

be sufficient numbers who

Pete Kinsey Civil P.G. Paul Shevlin Maths I could prevent the kind of crissis which has arisen at the 'Off the Record' Club and at St. Richard Jeffery Aero 3 Pam Fornshaw Aero I

### On picking up the Gauntlet

At L.S.E., Bedford, King's, Q.M.C., Q.E.C., S.O.A.S., S.S.E.E.S. and at many other Colleges, the challenge which has been offered to students by Youth Council has for many years been accepted, and hundreds of students every year have been getting to know many thousands of young Londoners through Youth Clubs and Youth activities. Imperial College Youth Council appeals to you to not only take note of what is going on in your College, but to take

### Muggeridge on Youthannouncement

Thursday 2 March at 1.00 p.m., General Studies: Mr. Malcolm Muggeridge speaks on the problems of growing up in a scientific age—sponsored by Youth Council.

Young people

Photographs by N. Clarke



to certain problems both these Clubs have been forced temporarily to close. The main reason for the closure has been

# PROF. ABDUS SALAM

An International

Figure -

by MARTIN WALKER

From a distance Abdus Salam is a small Pakistani gentleman with a moustache. But this appearance is deceptive. His secretary's attitude towards him varies from a mixture of respect and wonder to stark terror. "All I can say," she says, "is that he's a man of the world." She refers to him, in his absence, as "Father". There is clearly much more to the man than meets

A glance in Who's Who gives part of the answer. He is a Fellow of the Royal Society, Science Advisor to the President of Pakistan, and a member of the United Nations Advisory Commit's on Science and Technology. He was educated at Government College, Lahore, Pakistan, where he took an M.A. in mathematics. He also has a B.A. and PhD from Cambridge, where he was a fellow of St. John's College, and worked under Professor Kemmer. He has made 'contributions to the theory of elementary particles,' and has received an honorary degree and several prizes for physics. He is a member of the Athenaeum Club.

When I interviewed him, he was relaxed and talked easily with a sense of humour, leaning back in his chair with his hands clasped in front of him. He appeared pleasant and easy going, but gave the inescapable impression that inefficiency or inaccuracy would infuriate him. While we talked, the telephone rang. I rang earlier, he said. You'd better check with your message service. They don't seem to be doing their job.' He rang off.

The atmosphere in physics at Cambridge in 1947 was very exciting. The discovery or II—mesons in cosmic rays had confirmed Yukawa's prediction of their existence a dozen years earlier, and opened up hitherto undreamed-of avenues of research. Salam was doing part II of the muthematics tripos at Cambridge when the discovery was made. Both Professor F Hoyle, and his tutor, a geclogist, urged him to take the physics tripos, though for different reasons. His tutor wanted to see if someone with a first in mathematics could do the physics tripos in one year: Salam could, and did.

He desribes that year as very difficult: 'I have neer worked so hard, before or since.' He confessed to finding the experimetal work particularly tough and telt that he didn't have the aptitude for it. But the desire 'to be able to look a 'real physicist' in the eye' helped him to persever and to obtain a first in physics.

People with first in physics did experimental research and Salam was duly assigned a problem to do with alpha-particle scattering from tritium. But he disliked having his work depend on the whims of a technician, or on an act of God. An experimental physicist must be patient; Salam is not. When he learned that it would

void of physical content significance. Do von sarae?

Salam did not agree. 'This', he said, 'is nonsense!'
He went on to qualify: some experimental physicists talk this way,



take months for a supply of tritium to arrive from the United States, he asked to be allowed to work in theoretical physics, something which at that time in the Cavendish was reserved for students with only seconds or thirds in the physics tripos! So, in 1950 at the age of 25, he began research on meson theory under Professor Kemmer.

Physics has been Salam's major interest in life. He was attracted by the desire to understand, but mainly by the excitement of elementary particle physics. However he also reads a good deal of economics and enjoys oriental music. He has worked hard for Pakistan in the fields of scientific administration and science teaching

### To what aim is the work in department directed?

...Salam replied: "To the elucidation of the fundamental laws of nature."

This sounds very vague but a little thought will convince the reader that there was no need to expand on Salam's reply to the question. Theoretical physics is that simple—and that complicated

It has been suggested that theoretical physics has become a mathematical game deand indeed some mathematicians probably approach theoretical physics in this way,—but not Salam. He and Professor Matthews look at mathematics from a pragmatic point of view; it is a tool to aid in the formulation of physical problems and in getting answers. 'We construct the maths we use as we need it to understand the physics.'

### What is the role of theoretical physics?

I came across a good quotattion on that the other day," he said, rummaging among some papers, "but my secretary must have taken it away. It goes something like this: "Surely this is a great part of our dignity as men, that we can know and that through us matter can know itself; that beginning with protons and electrons, out of the womb of time and vastness of space, 'we can begin to uderstand; that organised as in us, the hydrogen, the carbon, the nitrogen, the oxygen, those 16 to 20 elements, the water, the sunlight, all having become us, can begin to understand what they are and how they came to be."

He had obviously been attacked before on the question of what, if any, use was research into elementary particles. He admits that, except for those in cosmic rays, elementary particles are purely man's construction.

week starts a new series of articles looking into the lives of some outstanding personalities on the IC campus. In this, the first article, Martin Walker talks to a figure he admires, a man of wide international renown, Professor Abdus Salam who shares the chair of Theoretical Physics with Professor Matthews.

They just don't exist naturally. He joked: "There are only thirteen omega-minuses in the universe—and we made them all. But who knows? Later on they may make bombs out of omega-minuses! But this is nonsense of course." He laughed.

Do you envisage any great steps forward, of the order of Einstein's Special Theory of Relativity say, in the near future?

Here he was on comfortable ground. "Relativistic quantum mechanics is right," he said. with an air of futility, but a lot of work has yet to be done." Salam covisages no dramatic breakthroughs during the next twenty years, partly because in elementary particle physics we must wait for partly because in elementary particle physics we must wait for machines that will enable us to probe distances shorter than ten to the minus thirteen cm. in mat ter, and partly because, as he said "great breaktroughs are a one in a century thing. We've already had relativity and quantum mechanics in the twentieth century."

Do you think that there is any limit to what we can kow about nature?

"Physics will never stop giving us surprises. But whether the surprise comes at ten to the minus sixteen cm. or ten to the minus eighteen cm.—who can sav?" He went on to say that we will stop doing physics only when "for some reason we can no longer do experiments." He gave general relativity as an example. Physicists lost interest in a theory of gravitation when it had been shown Einstein's theory satisfied the 'three cosmological tests' No other experimental check on the theory was possible, and hence no progress was possible. What good is a theory if it cannot be checked against nature? But, as he pointed out, adances in technology—for example, satellites,—could give rise to new experiments and revive interest in relativity.

"Intrinsically," he said, "we can go on indefinitely—somewhere or other, a breakthrough will occur. But elementary particle physics may die for practical reasons, because the cost of machines to probe to shorter distances becomes prohibitive. Of course someone may come up with an idea—for a superconducting accelerator of some kind say—which will allow us to get to very high energies for only a few thousand pounds."

Do you consider it necessary to justify the high cost of re-search in high energy physics?

"Knowledge is worth whatever it costs to aquire it." Here he be-

The Government studen's' the overseas fees increase continues to be hotly debated throughout the country. It is right that it should be. It is essential that the pressure of protest be maintained until the Government resolve is reversed. Seldom in our modern and supposedly enlightened community has there been a more hypocritical and callous action, for the decision is not only a wrong and poor one for Britain, it is an immoral one, particularly so for being made by a Socialist Government.

What then are the factors involved in this startling determination; factors which one assumes Mr. Crosland has considered? One Mr. Crosland has considered? One that he undoubtedly considered, nudged from behind by the Treasury, is the saving in foreign currency—estimated at £5 million. The Government has since stated that the extra fees from overseas students from the under-developed countries will be reimbursed to their respective countries. The saving is therefore even less. For this saving, partly indeed compared with, say, the total expenditure on education—£177 million—or, say, the defence bill—£2095 million—the Government iture on education—£177 million—or, say, the defence bill—£2095 million—the Government is prepared to snuff out in midstream the University or College careers of numerous students now in Britain. These are the students supporting themselves, or supported by private means many of supporting themselves, or supported by private means, many of whom will be unable, quite unable, just to gather the extra monev required. After spending in time, one, two, or more years, in expenditure, money that they could probably ill-afford, and in effort, innumerable hours of energy, concentration and worry, they must now return to their energy, concentration and worry, they must now return to their countries with nothing in return, except perhaps bitterness.

This, then, for them is quite simply a breach of faith. It is as

# FEES INCREASE-Symptom of Insularity

### DAVID POTTER

if a housewife had contracted to by a nousewire had contracted to buy a washing machine on hire-purchase; half way through the payments the company trebles the price of the machine, threatening to take it away if the increase is not paid.

not paid.

There are too the man, students in the future who will now not have the opportunity of an advanced education here, and it is this factor above all which seems to have been callously ignored. There are of course those parochial and purblind individuals who will say "Why should we, in these islands, support the education of people from far countries, countries which sometimes malium us?" An answer can be given in purely mercenary terms. Britain will benefit immeasurably, though indirectly, on her investment. The will benefit immeasurably, though indirectly, on her investment. The immact of British ideas and the British way of life on the developing minds of foreign students here must inevitably be vast and their actions, their decisions, as they become leaders in their communities will be coloured by their experience. Britain will reap eventual rewards for the goodwill given.

But the real answer is far deeper and far more important. It lies in our capacity as human beings to feel; in our social conscience, "r as John Donne has said:

'No man is an island entire of himself. If a clod be washed from Europe, Europe is the lesse..."
In Britain we are well aware of this. We have a well-developed sense of the community. But why is this social conscience or community awareness confined merely to those within the geographical boundaries of Great Britain, and

not extended to the world community, to the whole of mankind? To misquote Gertrude Stein, a man is a man is a man—the same whether he comes from Steeple Bumpstead in the World, Rio de Lancier or Shanghai Lust as we Janeiro or Shanghai. Just as we in Britain make a community decision to support each other so we should extend this resolve to the world community.

world community.

When on a morning in Aberfan a mine dump falls and slays 116 children, it is not only the mothers, fathers and brothers of the children who suffer, it is not only the people of Aberfan who suffer, nor the people of Wales, but the people throughout the country feel the disaster and rush with aid by word and deed to try and fill the gap. But we seem incapable of extending this awareness one step further—to the whole of humanity including those beyond our islands. We seem to be emotion ity including those beyond our islands. We seem to be emotionally insensible to the fate of hundreds of children dying daily in Africa and Asia from callous starvation. We save a fund of £1,600,000 for the people of Aberfan but in a given day send a fraction of this for the children of Africa, Asia and South America It is this lack of awareness of

of Africa, Asia and South America

It is this lack of awareness of the whole community of mankind which is reflected so sadly in the Governments decision to increase overseas students' fees. While the country taxes itself according to the means of each individual, we as a rich ation are not prepared to tax ourseives for the individuals beyond our boundaries. The amount of overseas government grant aid in 1965 was £110 million (compare with Gross National Product—£30,900 eq. million—or Government Income eq.—£14,000 million.)

It is not only capital, however which we can provide but know ledge, technology and learning. ledge, technology and learning. While we hide smugly as a nation behind (in the words of the new Beatles' song) our "privet-hedge" mentality, while politicians squabble, the world knows how to produce more, how to grow more. Thus though we are not affluent on the American scale, what we can provide above all is knowledge, energy and "know-how" And one of the best ways of providing this—at a small cost to ourselves—is through teaching and

viding this—at a small cost to ourselves—is through teaching and education. We should be thinking of taking in more overseas students, not eliminating them.

Hence this decision is not only misguided, it is immoral; immoral for the malaise, the indifference it shows to the world outside. This is all the more cruel for it being the action of a Socialist Government which purports to have a sense of the community. being the action of a Socialist Government which purports to have a sense of the community. It is worse still for it appears to be politically expedient. The Government must cut foreign expenditure to balance payments. This is accepted. If this cut had been made in some other area (for example a further defence cut) the average voter might well complain. The average voter has not complained about the overseas students' fees increase. Few votes students' fees increase. Few votes have been lost. The outcry has come only from the academic world!

come only from the academic world!

Is IC protesting vigorously enough? We as a College are affected more than most, for the proportion of overseas students at IC is one of the highest in the country. Where are our elected leaders now, our presidents, our vice-presidents, our secretaries and the whole top-heavy structure of student representation? Here they have a real obstacle to overcome. It is a worthwhile, nay necessary action to protest strongly now, rather than organising the darts plaving in the Union bar, or quibbling over the price of the next hop tickets. What are we going to do? A petition is being sent round for signatures. Let "s get the maximum number of signatures on it. We can, too, join in the national absence from tutorials and lectures on February 22nd.

### SALAM cont

came mildly excited. (Compare the amount spent' on high energy physics with the Gross National Product, or the expense in Viet-nam. Physics is cheap."

It has been said that man's development hasn't social nearly kept up with his technological development. How do you feel about this problem?

His reaction to this question revealed the humanitarianism that
is often associated in the public
mind with many scientists. He
began by saying that I must understand that his is the point of
viw of an Easterner looking at
Western society and not understanding how its wealth and power
can be so misused, or not used
at all. With all the resources we
have at hand how can there be
so much poverty and starvation in
the world today? Even the Western countries have economic recessions and: "This is absurd.
The world is crying out for knowledge, and goods, and we can
give them these. Why isn't world
productivity geared to making
everyone happy?"

He made the acute observation
that social consciousess has risen
to the point in England that,
if there is gross unemployment in His reaction to this question re-vealed the humanitarianism that

Wales, the English will get excited about it. But if thousands are starving tal Thailand? "Why does everyone think small?" he asks. Where is a global conscience?

Do you think it is the responsibility of scientists teach politicians to appreciate technological the resources that they have to relieve suffer-ing and to distribute goods and knowledge?

"Hell no," he said, "it is responsibility of scientists th selves to run the machine. Frealized this,—what is it? Worder will not come until sophers are kings and king philosophers." them-World bilo-

He went on to talk about the disadvantages of a scientist. The trouble is that he seldom has the opportunity for making big decisions. But this Salam feels is more a lack of experience than anything else, and is easily cured Once faced with the problem of having to be a statesman to take decisions,—a scientist could soon lose his narrowness and become a competent lead x.

ompetent lead at.

He suggested that more people with scientific training should go into the civil service and the administrative end of in dustry. He quotes the case of

France's rapid economic resurg-ence after the second World War one reason for its speed and ef-fectiveness was that there were and are, scientists and technolog-ists at the top, many of them graduates of the Polytechnique in graduates of the Polytechnique in Paris. The Polytechnique was founded by Napoleon to train military engineers, but many now go into the civil service and industry. These scientifically trained men form the backbone of France's de-

form the backbone of France's development.
"Imperial College should consciously develope this role in Britain", he said. We should encourage people from IC to get into position of responsibility, not to get buried in government research laboratories. An-

other example of a technological institute that has national influence, and on which IC could well be modelled, is the Massachusetts firstitute of Technology M.I.T. men have a loud voice in Washington, but Imperial College is hardly mentioned in Sampson's Anatomy of Britain—an analysis of the power structure in Britain today. "Have you heard of it? No? You should read it." The people who run Britain are the BA's from Oxbridge.

There were no more questions, and he stood up smiling. We shook hands, and I walked out past the colourful screen he has between his desk and the door.

Martin Walker

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## "Hello out there"

### Guilds' entries for the Bristol races

For several days now intrepid Guildsman have been living with death, (in the form of lorry Lads of mud) in Imperial Institute Road. Early last week they were to be seen speeding around Prince's Gardens, legs pumping furiously, but one august gentleman, well loved in Southside, objected to the risk of his dog being rma over by a pedal car.

of the day several of the more energetic members of Guilds Umon are to be seen dodging cars, people and post boys bikes, in front of R.C.S.' Chemistry Build-

### Superior car

The purpose of these activities has been to produce a team of fit men to enter the National 24 Hour Pedal Car Race on March 3/4 at Bristol. The team has been training on a pedal car which, it is claimed, is slightly superior to R.C.S. s entry, so that they will be able to do remarkably well on the improved models at present being constructed under the direction of Phil Marshall in Mech Eng. The purpose of these activities

### Secret design

The design of the pedal cars is being kept a very close secret, but it is no secret that one of the cars will be an improved, conventional design and one is stated to be revolutionary. Despite its strange design the revolutionary model is said to be quite legal and should stand a very good chance at Bristol.

I.E. Williams

I.E. Williams

"Hello out there" is the Dramatic Society's entry for the ULU one act play contest. Their first public performance was given recently at IC; it was given a good start by the excellent scenery designed and built by Nigel Nettleship, and this start was taken up well by Ray Croft and Helen Rudge to make this a memorable half-hour. The play, written by William

make this a memorable half-hour.

The play, written by William Saroyan told of the last few hours of a man in jail accussed of raping a local girl. By its nature the play was slow but under the able direction of producer Geoff Keyte it was never allowed to drag and without a filter it built up to the final climax. For the final scenes the principals were joined by John Spence, and two other members of the lynching party with Lesley Wheeler as the local slut.

The actual contest took place on 9 February at ULU.

D.E. Ormiston

### Newspapers stopped in Tizard

Residents Committee Tizard stopped the newspapers provided in the Hall during last

stopped the newspapers provided in the Hall during last week. The intention was to make the residents realise that the Committee takes a serious view of the removal of newspapers from the Gallery Area.

It costs about £50 a year to provide the newspapers, this money comes from a 5/- fee paid by each resident. At present only a few with no 'social conscience benefit from this service and the committee feels that the way these faw systematically steal the communal papers is intolerable.

these faw systematically steal the communal papers is intolerable.

When the papers are resumed they will be stamped with Tizard stamp before release and anyone who removes them from the Tizard Hall gallery will be liable to be brought before the Disciplinary Committee. A letter has been circulated to all residents informing them of these decisions.

### Engineers' Dinner & Dance

### Successful & Profitable

This year's Engineer's Dinner and Dance took place in Southside on February 3rd and proved to be a success and what's more may have made a slight profit, due partly to the increased ticket price and partly to the increased numbers that could be accommodated in Southside compared to

The menu for the dinner, at first glance, seemed completely unimaginative but proved to be quite edible. Thus those present were well fortified, both with food and liquid, when speech-time arrived. It is a good thing they were since anyone in a completely sober frame of mind just could not have sat through those speeches.

### Penney speaks

First came Sir William Penney, speaker for the night, who went to great length to extol the virtues of Guildsmen qua thing this by saying 'If I were not going to be the new Rector I could speak freely and tell you what I really think about the C and G Union.' After explaining that he was of RCS stock he outlined a plan to put 'Bo' in orbit and explained away the expenditure of the UKAEA by putting it down to the telephone bill!!

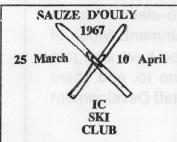
Pete Rober's then spoke for a few minutes about the increasing number of students in Guilds suppressing any form of personal contact between the student body as a whole and its executive but suggested this could be remedied if the year representatives in seach department.

the year representatives in each department formed an efficient liason between them. This indeed is what Guilds have been trying to do this year and, it would

### Buttery bar in use

One member of the Union who objects to the closure of the whole of Southside for an event such as the Engineers' Dinner and Dance is Roy Francis. He believes that ordinary members of the Union should always have access to some part of Southside. With this in mind he made a successful application to the Union for the Staff Buttery to be open on D and D night. Unfortunately, the late approval of the application meant negligible publicity and only £12 was taken in the bar.

F.J.M.



announces its annual trip to SAUVE D'OULY

£49-18-0 for 12 nights at resort, Ski-school, ski-hire, insurance, Particulars from D. Eccles Falmouth 216

seem, succestully. He then, after thanking Ted Adic and his Enter-tainments Committee for the superb job they had done in the organization and preparation of the event, presented Anthony Duke to introduce the Guests to Sir William William.

Mr. Duke then went to great length to introduce all the guests and give their background details including a few jokes and a nasty crack at Malcolm Duckett's opposition to the appointment of the

ition to the appointment of the new Rector.

Among the guests he introduced were Lord Jackson and Professors Neal, Ford and Owen from the College and Messieurs Millard and Foster from the Old Centralians, the latter making the best speech of the evening after Mr Duke had finished.

The dance—to Paul London—

The dance—to Paul London—was enjoyed by everyone and the cabaret, Tony Gould, though not appealing to everyone was well

The dance continued until 2.30 when this year's D and D came to an end.

### -Precedent set -

This was the first time the D and D, or indeed any function of this kind, had been held in Southside and from this success this could be a precedent to other events such as ICWA formal, Mines Ball etc. being held there.

F.J. Morris

### GO with JET

The Jerusalem Education Trust (JET) arranges a tour to Israel each summer for students with no religious or traditional ties with that country. The holiday consists of a ten day tour of Israel, a stay at a Kibbutz and a seminar at the Hebrew University Jerusalem. The party will be flying from London on 28nd of August. The Trust will award senolarships of £65 to all applicants selected for this trip to help them meet the total cost of £115.

Several students from IC went

Several students from IC went last summer. Further details and application forms may be obtained from Gordon Weingarten (Union

### SMALL ADS

FELIX will accept SMALL ADS from 8d. per line. For details apply to adman Robin Hall c/o FELIX

Anyone wishing to order a specially printed R.C.S. "Tee shirt please contact D. Gratten, Chem 2, via the union rack. The shirts are being "Silk screen printed" and will have a purple crown on the front.

### Phillips on facts & fictions

"A fact is a fiction that works."
This was the closing comment from Prebendary Gordon Phillips in his opening speech at the Wellsoc symposium on 'What is a

This introductory lecture consisted of fifty minutes of talking during which the speaker used a large number of terms in a sense different to their everyday use without explaining their meaning.

The digressea widely from the main subject to comment on self', the need of scientists to bring systems to consistency, and the accusation that scientists take part in Hegerian metaphysics, in which everything props the rest of the everything props the rest of the system up, and there is no real fundation for any of the theory: such as the flatness of the earth such as the flatness of the earth which may no longer be held to be true, and so we may now have a peno of time during which we recognise two opposing facts as being exqually true.

The reaction of the durity or so students who attended ranged from complete beredom to deep interest. In wife of the constant

interest. In spite of the constant attempts of the speakers to side step the main issues, the discussion was lively, and owes much of its success to the good work of the Chairman, Dilsher Singh Virk.

### Science- the lock or the key?

From chaos to order? From the disorder of the Maths and Physics Society Committee evolved the concept of a weekend conference. They propose to tackle the problem of "Science—the lock or the key to the future?" A multitude of questions arise: "Are we morally right to study science, when all it produces is the H-bomb? Hasn't television destroyed the individual's right to think? We're handing everything out to the people irrespective of whether they are ready and mature enough

people irrespective of whether they are ready and mature enough to handle and appreciate our precious inventions."

But this rabble, the mcb, who are they? Are scientists any better? Does knowing how the atom ticks make us wiser and more fit to live?

Many eminent professional men have been invited to the conferonce and some have been willing to give up a weekend to discuss their ideas, their ethics—which they are quite prepared to have dissected. In IC this is a subject that should affect us all, from the most exalted professor to the indolent student.

Helen Lewis

Helen Lewis

# graduates natural gas

The Gas industry is entering an exciting period of expansion. Within recent years its scientists and technologists have discovered new ways of making gas from oil and have carried through the project which brings liquefied natural gas to Britain from the Sahara Desert. It is now known that beneath the North Sea are rich reserves of natural gas which will not only transform the gas industry but will be of great importance to the nation's economy.

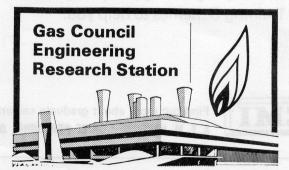
The Engineering Research Station needs science graduates in the fields of physics, mathematics and metallurgy, and mechanical, electrical and electronic engineers to ensure that the nation obtains the full advantage of this development. They are offered

obtains the full advantage of this development. They are offered rewarding careers with exceptional opportunities for advancement. Starting salaries are negotiated individually and depend on qualifications and experience, the initial value and the rate of increase being well up to the levels which apply in the chemical industry. There are opportunities for transfer to production, engineering or administrative sides of the industry.

LOCATION: Newcastle upon Tyne

APPLICATIONS TO: The Secretary, Gas Council Engineering Research Station, Benton Park Road, Newcastle upon Tyne 7.

Please quote reference 0803/



FELIX



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WEDNESDAY 15

Radio Soc. Visit to Marcon Holy Com-

munion 8.30 Committee room A.
Radio Soc. Visit to Marconi
Company Chelmsford. Meet
13.10 Mech. Eng.
Underwater Club. Baths session,
Marshall St. baths, 19.30. Transport leaves Union 19.00.
Buddhist Culture Soc. Joint meeting with UL Quaker Soc.
Guest speaker Mr O'C Walshe,
President of Sangha Association, 20.00 Friends International
Centre, Byng Place, WC1.
THURSDAY 16
FELIX staff meeting, 12.45. Press

FELIX staff meeting. 12.45. Press Room.

Room.
Rover Crew. "Gliding" by Mr P
Minton. 12.35 303 Mines.
General Studies. Political Problems of the Common Market.
The Moral Justification of Punishment:—6 The State and

Punishment:—6 The State and the Individual.

Gliding Club 17.45 254 Aero.

Dancing Club Beginners Ballroom 19.30 Beginners Latin American 20.45, Upper Refectory.

International Relations Club. Rhodesia. A talk by Dr. Claire Palley, formerly of University College Rhodesia and wife of the only white Opposition member of the Rhodesian Parliament. 19.30 201 Civ. Eng Southside Stomp featuring The New City Jazzmen' with bar and supporting group. 20.00. Jazz Club members 2/-, non members 3/-.

FRIDAY 17

Christian Societies Meeting 13.10 303 Mines.

Folk and Square Dancing. 19.30

Folk and Square Dancing. 19.30 Snack bar. SUNDAY 19

Folk and Jazz in the Union lower lounge. From 20.00.

MONDAY 20

MONDAY 20
ICCU. Prayer, led by Mr. R. Chamings. 13.10 266 Aero.
Dancing Club. Beginners Ballroom.
19.30, Beginners Latin American 20.45 Concert Hall.
Wells Soc. "The English Meccanophobes" by Prof. W H. Armytage. 19.30 408 Elec. Eng.
FELIX staff meeting. 12.45. Press Room. Room

Room.

IC UNION MEETING: 13.15
Concert Hall.
General Studies. English History
Between Two World Wars:—
2 Home Affairs. Points of Reference:—The Concept of Abstraction. Men Behind the
Music:—4 Chopin as pianist,
teacher matriot and "poet".

Music:—4 Chopin as pianist, teacher, patriot and "poet".

Dancing Club Intermediate Ballroom 19.30 Intermediate Latin American 20.45 Concert Hall.

WEDNESDAY 22

Anglican Chaplainey H-1

MEDNESDAY 22
Anglican Chaplainey. Holy Communion 8.30 Committee room A.
Underwater Club. Baths session,
Marshall St. baths 19.30, transport leaves Union 19.00.
Folk Club. Guests are Martin
Carthy and Dave Swarbrick. 5/and 3/-. 19.30 Upper Refectory.
THURSDAY 23
FELIX Staff meeting. 12.45. Press

FELIX Staff meeting. 12.45. Press

Room.

Room.
Rover Crew. "Rotary Clubs in Britain" 12.35 303 Mines.
General Studies. Kemal Ataturk:
Maker of Modern Turkey. Industrial Problems of the Com-

dustrial Problems of the Common Market.

Gliding Club. 17.45 254 Aero.

Dancing Club. Beginners Ballroom
19.30 Beginners Latin American
20.45 concert hall.

FRIDAY 24

Christian Societies meeting 13.10
303 Mines.

Folk and Square Dancing 19.30

Snack bar.

Snack bar.

Jewish Soc. Party in Weeks Hall, 20.00

SUNDAY 26
Folk and Jazz in the Union lower lounge from 20.00.
MONDAY 27

MCNDAY 27
ICCU "The Missionary Today" by
Mr R. Code. 13.10 266 Aero.
Dancing Club. Beginners Ballroom
19.30 Beginners Latin American

20.45.
"The Possibility of Farming the Sea". Prof. Sir Alister Hardv FRS speaks at Wells Soc. 19.30 408 Elec. Eng. TUESDAY 28
FELIX Staff Meeting 12.45 Press

Room.

General Studies. English History
Between Two World Wars:—
3 Home Affairs. Points of Reference:—7 The Pattern. The

World of Mozart

Jewish Soc. "Refugees in North
Africa" by Rabbi Gryn. Also a
film. 13.15 Zoology.

Railway Soc. "North American
Railroads in Colour" by V.
Goldberg Esq. 17.45 664 Mech.
Eng

Eng.

Dancing Club. Intermediate Ballroom 19.30. Intermediate Latin American 20.45, concert hall.

Huxley Soc. Annual Sherry Party.
20.00 Weeks Hall. Tickets 3/6 from Committee Members.

Con. Soc. "The Philosophy of Modern Toryism" by Stephen Hastings M.P. followed by Party/Discotheque/Bar Joint with Bedford and Westfield. Union Upper Refectory Upper Refectory
WEDNESDAY 1

WEDNESDAY 1
Anglican Chaplaincy. Holy Communion 8.30 Committee room A.
Underwater Club. Baths Session,
Marshall St. baths 19.30, Transport leaves Union 19.00.
Con. Soc. Annual Theatre visit to see "There's & Girl in My Soup" Contact D. Darbyshire 59 Beit for deta.s.
THURSDAY 2
FELIX Staff Meeting, 12, 45 Press

FELIX Staff Meeting. 12. 45 Press

Room.

General Studies. Agricultural Problems of the Common Market.
Traditions of Judaism.
Gliding Club. 17.45 254 Aero.
Rover Crew. Investiture. 17. 45
Baden Powell House (Corner Queens Gate, Cromwell Rd.).
AGM and Dinner 20.00 Southside Senior Common Room.
Dancing Club. Beginners Ballroom 19.30, Beginners Latin American 20.45 Concert Hall.

WEDNESDAY 15 Folk Dancing Society School of Pharmacy, English 19.30

Humanist Soc. "The Eternal Forensic Problem—Time of Death". Prof. Camps Head of Dept. of Fosensic Medicane. London Hospital Medical College. 19.30 ULU room 2F.

Tape Recording Society. General business meeting. 19.30 ULU room 2G.

THURSDAY 16

THURSDAY 16

Christian Science Organization.
Testimony meeting 20.00 Room
3A ULU.
Folk Song Club, Diz Dizley. Members 2/- non members 3/6. 20.00
Middlesex Hospital Medical
School, Cleveland St. W1.

SUNDAY 19
Catholic Soc. "Teilhard de Chardin" by the Rev. Michael Marshall. 20.00 111, Gower St.

WC1.
TUESDAY 26
Liberal Federation. Gwynfor
Evans, Welsh Nat. M.P. for
Carmarthen. 19.30 ULU.
North America Club. Films of:—
Kennedy, Johnson and Khrushchev's visit to the USA: 19.30
ULU.
WEDNESDAY 22

WEDNESDAY 22
English Folk Dancing Society
19.30 School of Pharmacy

Brunswick Sq.
THURSDAY 23
LUCA. AGM. 19.30 ULU.
Christian Science Organization.
Testimony meeting 20.00 Room
3A ULU.

FRIDAY 24
Film Soc. "The Apartment" and "Neighbours" ULU.

SATURDAY 25

Jazz Hop with the Monty Sunshine
Band and Justus 5. At QEC.
TUESDAY 28

North America Club. Film of the
1964/65 Worlds Fair in New
York, and an introduction to the

York, and an introduction to the next one in Montreal this summer. 19.36 ULU.

WEDNESDAY 1

English Folk Dancing Society.
19.30 School of Pharmacy Brunswick Sq.
THURSDAY 2

Folk Song Club. AGM followed by Alex Campbell. Members 3/-non members 4/-. 19.30 Middlesex Hospital Medical School, Cleveland St. W1.

### SERVICES

Baptist 11.00 and 18.30 bury Central Baptist Shaftesbury Ave. WC2. C. of E. St. Augustine's, Gate 9.00 Eucharist, Church.

Gate 9.00 Eucharist, 19.30
Evensong.

Methodist. Services 11.00 and
18.30 Hinde St. Methodist
Church, Manchester Sq., W1.
Roman Catholic. Little Oratory,
Brompton Rd. 19.30 Students'
Mass.

They are in The Observer every Sunday, yet

# Are these the eyes of a madman?



These are the eyes of Michael Frayn. For seven years now, week in, week out (apart from 4 weeks' paid holiday a year), first in The Guardian, then in The Observer, Frayn has had to write an article. 700 words 3 times a week for The Guardian; 900 words once a week in The Observer.

He has also written two novels, The Tin Men and The Russian Interpreter. Appeared regularly on Granada TV. Wrote for TW3. Contributed to The Age of Austerity. He is also married, with two daughters.

Yet there is still virtually no evidence that Frayn has been affected by this. However a growing number of people read The Observer every Sunday for this reason alone. To be actually there, on hand, when he does finally - well -snap.

Read The Observer every Sunday



### NEW BORN KRAKEN

THE EARTH IS BASICALLY A WATER PLANET, with seven tenths of its surface covered by sea. Little is known of this vast area, as only a minute portion has been charted. The most productive areas are the continental shelves, lying no deeper than 1,000 ft and representing ten percent of the ocean floor. Today, this region is just within reach and it is thought that in five years time work will be comfortably continuing at these depths.

There is an estimated oil potential of 100,000 million tons, and the majority of this could be recovered by under-water drilling operations, immune to surface storms. Other mineral wealth abounds, and sea farming is, at present, in its infancy. Fresh water, becoming increasingly more difficult to find on land, could be extracted and pumped ashore. These represent a few of the benefits which could be derived from the ability to work under the sea.

These represent a few of the -benefability to work under the sea.

At present the problem is to survive, for extended periods, under the oceans. Work on this goes on in America, France and Russia, and names such as 'Sealab' or 'Coushelf' are now well known. In this country little is happening, or so it may appear. The Royal Navy has stated that such work is outside its terms of reference. It is difficult to imagine any one industrial concern putting up at least £100,000, in an enterprise that would be beneficial to the whole industry, and not just itself. As a university college, IC is in a unique position to undertake such a project and stands an excellent chance of obtaining service co-operation. The designers would have the whole College to draw upon for information, There is a supply of eager and voluntary labour—sections of the design could become official projects for third year undergraduates. There is also a considerable wealth of knowledge in the Sub-Aqua field, and thus the capacity to man the project, both above and below water.

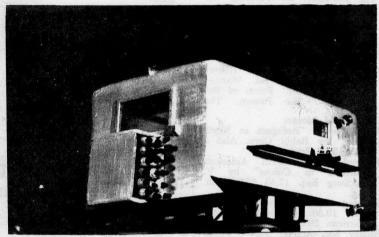
With this in mind the Under-

and thus the capacity to man the project, both above and below water.

With this in mind the Underwater club have embarked on project Kraken. This involves the establishing and manning of an underwater house and evaluation of its use for work on the British Continental Shelf. Additional to this are the medical aspects of living in this hostile environment, the testing of new ideas in underwater technology and general scientific studies.

Previous houses have been spherical or cylindrical in shape, but IC intend to use a rectangular structure, (25'x15'x13' high). Such a structure will be easier to ercct, and since the internal and external pressure will be the same, carries little load. The anticipated displacement is about 110 tons of water, so that something in the region of 60 tons of ballast will

Two persons will live in the house for a full fortnight, while others will stay for shorter periods; long enough to carry out particular research work. The British Sub-Aqua Club are keenly interested and are willing to give their support to the project. Although the aquanauts are in control below the water, a large surface team the water, a large surface team will be required. Their job is to maintain the only links with the surface—electricity and telephone cables and maintaining a system tor safety checks.



A model of Kraken, the house in which two people will live for two eeks, below the waters of the British coastline. The levelling legs, oxygen supplies and external lighting systems can be seen in the photograph.

be required. The whole house must be mounted on "levelling legs" to ensure that the floor is horizontal,

horizontal,

The interior is divided into two large living areas; one damp for the diving equipment, workbench etc., and the other dry for sleeping, laboratory work, control and decompression areas. The air supply to be used is still under investigation and will possibly be 93% Nitrogen, 7% Oxygen. This will be circulated continuously throughout the two week venture, and thus must be cleaned and dried. dried.

at this depth, (25-90 ft), pressure approaches to 4 atmospheres, so direct ascent to the surface will not be possible, without camperous benos. The danger or a diver losing the house cannot be overlooked and several novel schemes are being planned. These schemes are being planned. These include the use of a grid system and a working cage.

The big question is, as always, finance—but this doesn't appear to be too difficult to arrange. Also to be too difficult to arrange. Also help from the services is expected, and there will be a meeting with the Navy in two weeks time. Then a suitable site has to be chosen. Three are now under consideration: Plymouth, West Scotland, and the N.E. coast. In fact a dive has been arranged at Penlee Point, near Plymouth, to check on the sea bed and other conditions.

Now it appears that IC's name.

conditions.

Now it appears that IC's name will be added to the brief list of underwater living concerns, and by the summer of 1968 all should be working and the experiments beginning—quite an exciting prospect for all concerned. Let us hope that the life of Wyndham's Kraken doesn't coincide with that of ours. of ours.

A. Robins Information:—B. Ray

### JUDO

FOUR COLLEGE TEAMS fought in the U.L. Intercollegiate Judo Leagues on the first of February. The first, second and sixth teams won.—the latter two fights were walkovers— and the fifth team drew.

The first beat Kings College by 17 points to nil. P Crossley drew with his opponent, who was rated two belts higher.—the college man being an orange belt. M. Reilly once again demonstrated that skil more than makes up for physical smallness, and won his fight with a clever throw. However, M. Matthews could only obtain a half-point, against a much heavier and stronger, but lower graded, fighter. The fifth team game was notable for a remarkable display of gymnastics by D. Herbstritt, who drew his fight after escaping from several attempted held-downs. This was a very good performance as his opponent was much the bigger of the two. S. Hyde also drew, and as both teams were one man short, the contest ended level.

### Hugh Ford 7-a-side Rugby Cup

Despite rumours of apathy in Imperial College, eleven of Guild's fifteen years managed to field at least one team in the Hugh Ford cup games on Sunday. Although Civil Eng 1st year took the trophy and seven gallons of beer Mech Eng 3, the other finalists, were compensated for their efforts by three gallons and Mech Eng 2's first team got another three for being winners of the losers.

ers.

The competition was organised extremely efficiently by Pete Cox and run as a knockout with all the first round losers taking part in the loser's competition so that each team got at least two games. After the games and presentation of the trophy by Professor Ford himself—stiffness and disappointment were forgotten as an alcoholic haze descended over players. ers.

Frank J. Morris

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If computers appeal to you try operational research or another management service.

See us when we visit you this term on.

TUESDAY 7th and TUESDAY 14th MARCH

Contact your University Appointments Board for an appoint-ment and more details.

### JUDO AGAIN

THE IC JUDO Club came top in all three divisions of the London Col-

leges League Championships.

The first team met little real opposition from Kings, LSE, and City University, and defeated West Ham so conclusively that they scratched from the first division and entered the second division. The second team had narrow victories against Chelsea and West Ham(!), but easily beat the

In the third division the College beat U.C. and Q.E.C. and at the final venued drew with Sir John Cass. This left I.C. and S.J.C. equal top, and so a deciding contest was arranged. R. Butler battled heroically for I.C. against a strong opponent, but after six minutes there was still no

I.C. against a strong opponent, but after six minutes there was still no decision.

After a discussion between the officials, it was agreed to have one more contest, to continue until a full point was achieved. Keyte, a beginner last term, was sent out to fight the S.J.C. man. After six minutes Keyte stored a half point with a ko-soto-gan counter to a hip attack. The S.J.C. man now attacked furiously but eventually they went to ground, and Keyte held his man down for a full point.

Thank S.

TEAMS :-

First team: K. Glover, R. Jackson, M. Mathews, M. Reilly, D. Shaw. Also J. Gwyther and P. Crossley.

Second team: R. Butler, J. Gwyther, B. Connong, M. Hincher, P. Crossley.

## FINAL GAME

AT SHENLEY on Saturday the third eeven, IC's last remaining team in the ULU football cup competition, went down in the semi-final to a strong UC second eleven.

The match opened with IC doing most of the attacking and several opportunist shots from the forwards went just wide of goal. As the game progressed UC came more into it but the IC half backs held control of the midfield and UC never lookde dangerous. Meanwhile IC kept attacking and after a good run through the middle, Horlock was obstructed in the penalty area when it looked as if he would score. Soon afterwards the hest chance of the match was wasted, when the UC defence was caught on the wrong foot. Perry jumped over a centre from Ebbutt, but Wellfair shot wide of the open goal.

Two minutes before half-time IC scored when Ebbutt took advantage of a bad back pass, and ran through to score. However, the jubilation was short-lived as UC scored straight from the restart, and half-time appeared with the scores equal.

with the scores equal.

UC attacked strongly in the second half, but Hayes in goal looked unbeatable. Then some slack marking in the IC defence allowed the opposing centre forward to put in an unstoppable shot, to give UC the lead.

The match ended with IC still attaacking but, unfortunately, time ran out before they could force an equaliser.

R.D. Holmes

R.D. Holmes

### IMPROVING HOCKEY TEAM MARCH ON

Hockey: IC3, UC1

IN THE SEMI-FINAL of the U.L. cup competition, a balanced IC eleven gave U.C. a lesson in hockey. After the club missed many chances, Goddard twice found the goal. The first followed a clever free hit by Phillips and the second came from good work between Mayes and Anketell.

In the second half a coasting IC were energised by a deserved goal, and the game hung in balance. A fine save robbed Goddard of his hat trick, but Phillips made sure from a short corner shot, which no-one saw.

TEAM: Green, Grice, Peters, Ramsel, Hill, Phillips, Barlow, Cotton, Goddard, Mayes, Anketell.

IC 1st, 1- High Wycombe 1st, 0.

AFTER A POOR first half of the season the hockey club has been showing more promise, and after a 7-2 wm over a weak Royal Vets, they were prepared to meet a stronger challenge when High Wycombe visited Harlington, on Saturday.

The game negan rather scrappily with the visitors well on top while IC struggled to settle down. There was little or no co-ordination in attack and the defence, several times, only just managed to keep out the opposing torwards. After the interval, however, the College defence stood firm and, building on this, the attack began to show some hint of thrust. A fine goal, mid-way through the second half, by Pete Cotton was the only score—leaving the College side feeling a trifle lucky to win. However, if the defence remains as solid, they are unlikely to concede many goals, so it only requires the forwards to find some shooting power, to finish the season in a blaze of glory. As they are now in the cup finel the season cannot end as a failure.

### Saturday Next Hyde Park Road Relay

Jaturday next is the day of the Hyde Park Road Relay, starting at 3 p.m.

The Hyde Park Road Relay was inaugurated by the Cross Country Club of the Imperial College of Science and Technology in 1949, when there were 9 entries. The entry has grown steadily each year to this year's agree of over 100 teams, representing universities and colleges from all over the country, and this year, for the first time, several from the Continent. This fixture is now the most representative of all university athletics fixtures and the largest relay race in Europe, if not the world.

Each meriber of the 6-man teams will run the 3-mile course; which encircles the Serpentine, on roads and pathways passing through Hyde Paik and Kensington Gardens. The start, change-over, and finish will be near the west end of Rotten Row.

Many famous athletic personalities have taken part — Bruce Tulloh, Ron Hill, Herb Elliot, to name a few.

Last year saw Mike Turner and Fergus Murray racing, Mike breaking the course record for the third fear running. Now with the almost certain the most representative of university athletic fixtures.

and in the course record for the third fear running. Now with the almost certain the most representative of university athletic fixtures.

and in the Hyde Park Road Race we have the honour of staging This year the relay again breakes new ground—we have our first Continuation of the London-Brighton Road Race we have the honour of staging This year the relay again breakes new ground—we have our first Continuation of the London-Brighton Road Race we have the honour of staging This year the relay again breakes new ground—we have our first Continuation of the London-Brighton Road Race we have the honour of staging This year the relay again breakes new ground—we have our first Continuation of the London-Brighton Road Race we have the honour of staging This year the relay again breakes new ground—we have our first Continuation of the London-Brighton Road Race we have the honour of staging This year the relay again breakes

This year the relay again breakes new ground—we have our first Continental etries but although only 5 teams are actually competing we are limited by financial reasons rather than by lack of enthusiasm.

Also this year we intend to calculate the results by computer and so eliminate the sight of 6 people bent deep over a table in Hyde Park, hours after the relay has finished, checking and double-checking lap times.

Last year IC finished 23rd, but is is expected that the college should finished in the first ten this year, as the team contains several first class tunners. The IC team is:

N. Barton, T. Mason, H. Smith, I. Jones, D. Dallman, D. Holmes.

### NASTY NIGHT BELOW

Five members of IC Caving Club spent an uncomfortable night down a pothole near Ingleton, in Yorkshire, last weekend. The trouble arose when the party became separated from their leader and all the lights failed.

This occured as the group was making its way out of Disappointment Pot, on the Saturday night, and had only twenty yards to go when the carbide lamps failed. The leader, Dave Sweeting, had gone ahead to reconoitre the passage and had taken a wrong turning when his light also failed.

All concerned, not knowing how close to the entrance they were, decided to wait there rather than risk getting hopelessly lost.

Meanwhile at about 2.00 a.m. search parties from the remainder of the caving Club set out. Unfortunately a very thick mist prevented them finding the entrance, and they spent most of the night stumbling across the moors. At about 8.00 a.m. the cave rescue organization was called, but they arrived to find everyone safe, though cold, wet and hungry,— an IC party having found the entrance just before.

The event was rounded off by an interview with BBC TV in which various members, who had not spent the night down the pot, and two, who had, were filmed. This appeared on the BBC news that night.

Chris Palmer

CITY OF LEEDS EDUCATION COMMITTEE

### CARNEGIE COLLEGE OF PHYSICAL EDUCATION

A one year Post-Graduate Course for Men

APPLICATIONS are invited from graduates who wish to qualify as teachers and specialise in Physical Education as well as their degree subject. The course is grant-aided, recognised by the Department of Education and Science, and leads to a graduate certificate in education and a diploma in physical education.

For prospectus and application form apply to The Principal, Carnegie College, Beckett Park, Leeds 6

### CRITICAL PATH

for finalists—whether you plot it out and calculate your plan, or just leave it to sort itself out, there are going to be a lot of events you will have to programme between now and July.

Amongst the events you should certainly plan for is a contact with STC. We are a large, diverse, lively outfit covering the whole range of electronics, radio, and telecommunications and we have attractive openings for engineers and scientists,

we have attractive openings for engineers and scientists, and for graduates in other disciplines.

Find out about us—our booklet "Information for Graduates 1967" is available from Appointments Boards, and our interviewers will be at Imperial College on Thursday 23 February

If you miss us then, drop a line to:—

Central Personnel
Department (Graduates),
STC House,
190 Strand,
London W C 2 W.C.2. London,

STC

# Progress on Student Houses

### Report to Council

The Union has taken a second step towards the formation of Student Houses. In a detailed report presented by Pete Finch to Union Council, the sources of finance, an estimate of typical furnishing and running expenses and suitable currently available leases are given. The report, which had been given only a brief reading by the members, has been accepted with few reservations.

Most discussion centres on the fundamental problem of finance. The report suggests that the best source would probably be industry and that the old students associations could be of great help with this. Chris Molam noted that the Old Centralians had been keen a number of years ago to build a hall for Guildsmen. This brought the objection that a single-College hall might be unpopular, though any increase in accomodation would be useful. The essential is that any money obtained should be without strings, the proposal to have the College run the appeal was changed to one in which it was merely sponsored by the College.

The old students' representatives showed their value in their concern over the legal aspects and offered to assist.

over the legal aspects and offered to assist.

The estimates are based on an initial plan for fifteen bedrooms with two common rooms, and vary from £2300 to £3000 p.a. This covers heat, lighting, water, laundry, repairs and maintenance, insurance and cleaners wages but no rates (the Union does not pay rates). The cost is then between £2-7-0 and £2-17-6 per person per week. It is hoped to economise on redecoration by getting students to do the unskilled parts.

students to do the unskilled parts.

Rents would be charged over the Christmas and Footnamers. the Christmas and Easter vacations, but it might be possible to sub-let rooms during the summer. However, this type of house would come under the laws which can give compulsory extensions of

'multi-sexual' house would be possible.

Six suitable properties are listed in the report ranging from £27.000 to £82,000 with a large variation in the amount and type of accomposition available. They are all in the borough of Kensington and lie between a quarter and one mile fom the College.

Council set up a committee to work on the problem which had two Council members—Pete Finch and Rex Lowin.



ANDREW SIMPSON (21), a ANDREW SIMPSON (21), a qualified teacher from Loughborough College of Education, now teaching at a Secondary Technical School in Freetown, Sierra Leone, where he is in charge of the technical drawing death technical drawing dept., teaches woodwork and helps with games and the Drama Club.

# Who will replace him?

VSO is looking now for 1000 graduates and professionally qualified volunteers for service from next September

VOLUNTARY SERVICE OVERSEAS 3 HANOVER STREET LONDON W1



John Renhourn Photo: D. Cooper

### Folk Club Success

The last Folk Song Club concert, entitled "Bert and John", was a sell-out with at least three hundred eagerly straining for a view, and certainly lived up to expectations. Renbourne came on alone, after the "New Lost City Ramblers" had opened the programme, and with a cigarette semipermanently between his lips, played for half an hour. His style was similar to that of Jansch, equallly intricate and involved, with a wide range, from gentle folk melody to a jazz tinged instrumental. Jansch was even better. As an entertainer his presentation was not perfect. He tended to wander from song to song, cut numbers short, sing too quietly, and had to play into a microphone that went dead twice. None of this had any effect on his performance—Jansch seems to play for himself, only noticing the audience between numberi; this is probably the reason for his tremendous stage presence.

### MIKE due to return from UC

By the time this letter appears in FELIX, the College mascot-MIKE-which was removed from the Union by U.C. on December 8th. last, will almost certainly be back in our possession—see Late News sheet. Some of your readers will probably know that the Wooden Horse Organisation were set a trail of clues which, when solved, would lead to MIKE's safe return. This trail has now been successfully followed.

A letter arrived during the second week of term telling us that, if we wanted to see our beloved mascot again, one—and only one—of us was to go to the next U.C. Union General Meeting where Ashley Hill, their president, would present us with the first clue.

The first clue read:—
"Mr Norton is hanging by his nails at Dirty Dicks," and was remarkably easy to solve since a visiting-card bearing the magic name "Norton" was pinned to the wall just inside the door at Dirty Dicks pub in Bishopsgate.

On the back of this card were the words:—

the words:—
"Look for my colleague Mr.
Dutton—he also hangs about in here."

This proved to be another visiting card located among man, others just over the bar.

The reverse side of this one

The reverse side of this one bore:—

"S.W 385252, Ask for Brian."

The letter and digit combination is the Ordnance Survey map reference for Bosfranken Farm in Cornwall—just a stone's throw from Land's End. Luckily we managed to persuade a resident of Cornwall, a Mr Bolton, to popacross and collect the clue for us. It appears that "Brian', a brother of one of the U.C. Executive, demanded half a gallon of beer in return for the clue. Mr Bolton has since refused to even consider allowing W.H.O. to reimburse him. reimburse him.

The clue Mr Bolton collected

was:—
"RM 731 is the custodian of your next clue."

This is a bus based at Edmont-on L.T. garage and after one fruitless search through it and re-assurances from Pook that the

clue was still there we tound it stuck on a flange beneath the driver's seat.

"Go flat-hunting in Tufnell Parn" was the next clue. The next message was found in a newsagent'se window near Tufnell Park Tube Station and read:—

"To all flat-hunters, Hae you a plinth vacant?—If so, contact D.A.St.J.P. (Dennis Pook, chairman of the U.C. Mascot Committee) at EUS 3611, quote ref. 0903 and state experiences to date."

After 'phoning him we found

After 'phoning him we found that the last clue would arrive on the morning of Saturday the 11th.

This consisted of a letter to Wooden Horse and an envelope containing ten pieces of magnetic recording tape—each roughly one inch length.

recording tape—each roughly one inch long.

After ascertaining that the tape had been recorded at a slower speed than 3 3/4 i.p.s. and on all four tracks we set off to borrow a 4-track, multi-speed tape recorder for the afternoon.

However, none was forthcoming in IC so we had to go to Eearl's Court where four of us spent a pleasant, if tedious, four hours working out the sequence until we arrived at the final message which told us the time and place where MIKE would be handed over.\*

Anyway, we met Pook on Sunday night and also the person who used the oxy-acetylene. Apparently the heat conduction along along MIKE was so efficient that there is not even a mark on the micrometer—but we shall know this for certain very soon.

As a final note for those intent on revenge—the compliment cannot yet be returned since Phineas will not be in residence until their

will not be in residence until their new Union building is finished in at least six month's time.

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Wednesday, 15 February 1967 No. 242 Editor: Stewart Barnes

### MIKE! MIKE! MIKE!

At 7.37 a slightly worried-looking member of I.C. informed George Hulme in the Union lounge that Mike was in a block of concrete in U.C. bar. Hurried arrangements were made and a party of fearless students left from Southside at 8.30 for U.C. Union.

Valentine's Rave Valentine's Rave

Ents Committee's latest Innovation takes place today. If Operation Match lets you down try today's hop.

Strike for R.C.S.?

Despite rejection by I.C. it seems that R.C.S. may go it alone with regards to the Radical Student Allianc's "national day of action" on Feb. 22nd. At I.C.'s last council meeting Frank Fuchs suggested that I.C. would take action

next Wednesday. This was very coolly received.

However, at the R.C.S. general committee Frank Fuchs again suggested the same move. He said he felt confident that Professor Butler, Dean of R.C.S., would be sympathetic and had arranged an interview for R.C.S. President Cavanagh.

There was no dissent fortherwise from the confident and There was no dissent forthcoming from the committee and

Cavanagh said he would see Butler as arranged.

Mr Cavanagh informs Late News that he has not seen Professor Butler yet, and that R.C.S. would wish joint action with the staff, which would not necessarily be a strike.

Welfare Committee?

At the Union meeting next week the Union Welfare Officer, Pete Finch, who is responsible for work on the means test and on the possibility of Union students' houses, will propose the necessary constitutional amendments to set up a permanent Union Welfare Committee to deal with the rapidly increasing work in this field.

Black Rhodesian leader at I.C.

Last Thursday the ZANU representative in London, Frank Ziyambi, spoke to the Political Societies and to the International Relations Club. This man who lives in enforced exile from his native Rhodesia spoke of the future of his country as he saw it. He clearly expected his predominately white audience to be shocked by his statements that the only hope for black Rhodesians lay in revolution. But they weren't. They could only be carried along by his patent honesty as he spoke of his disillusionment with Wilson and of the political impractibility of action by the U.N. "There are men of goodwill in the world," he said. One hopes he is right. Andrew Jordan.

Academic Sub-Committee for R.C.S?

Most of last Thursday's R.C.S. general committee meeting was spent on a discussion of Academic involvement. Details were given of an Academic Sub-Committee to be set up in Physics. R.E. Maclman (Physics Rep.) said that the committee would consist of 4 staff and 5 students. He then asked for permission to nominate representatives but it was suggested that it would be better to elect them. Mr Mackman agreed. Representatives from the Maths Department said they wished to conduct a survey in Maths and would try and contact their staff for advise.

S.E.B.

Union Parking Spaces
There are 3 Union Parking Spaces available; if anyone thinks he has a good case for having one he should contact Brendan Parker. "A good case," Brendan said, "would perhaps be that of a club official who is active in the Union and uses a car a lot, or someone who has to commute every day." The parking spaces are behind R.C.M.

O.S.S. hold A.G.M.

The O.S.S. held its first A.C.M. in 348 minutes during Monday lunchtime. Reports on the activities of O.S.S. including working parties, taping text books and reading for the blind, mental after-care and assisting Youth Clubs were given by the organisers. Barry Bradshaw was elected chairman and D. Jones secretary for the next year. In his closing address the retiring chairman, Arthur Francis, thanked all those who had helped during the first 18 months and called for an effort to interest freshers in the activities of O.S.S.

Babs is coming!
The Minister of Transport, Mrs. Barbara Castle, has accepted an invitation from the political societies to speak at the College on the evening of March 2nd. Pol.Coun.chairman Pete Ruhemann emphasises that this will be an open meeting, and the Minister will be available for answering questions ranging from parking in London to the future of British Rail.

Budget: Will Students Get Less Money?
Speculation in political circles regarding the likelihood of cuts in tax allowances for children seems to be now agreed that no overall decrease of the tax allowance will occur.

that no overall decrease of the tax allowance will occur.

However, some commentators, notably in the Sunday Times, strongly suggest that income tax allowances for children will end at age 19, irrespective of whether the child is receiving full-time education after this age, or not. This measure would ebviously hit parents with children at university and particularly those parents who are responsible for paying for their children any portion of their maintenance grant. The most probable reaction is that fewer parents will pay their share of maintenance grants - and the ultimate sufferer will be the student who will have to exist on less money.

Sir.

We would like to register a protest about the CND sponsored exhibition which turns out to be a poisonous attack on American Policy, whilst having nothing but praise for the "gallant" efforts of the "National Liberation Front" (Viet Cong). We are told that: "American commits Atrocities against Humanity", whilst the Viet Cong, in planting a bomb in a crowded Saigon restaurant are "striking a blow for freedom"

As propaganda this exhibition has few equals, save the pathetic voice of Radio Peking, runting away hysterically on 41 metres.

R.W. Moore & 30 others (Ed. Due to lack of space this letter has been cut. Original is available.)

Small Ads.

Removed from Car. Sat. Jan.7. South Side car park. Blue canvas bag: clothes, books, lecture notes, folders, etc. V.I. - must be found. Remover believed to be from College.

Please return. No questions. box 242.

Latest Bulletin

Frank Fuchs is as well as can be expected.

Correction:
From "Academic sub .... R.C.S." delete "He then asked for ..... Mr. Mackman agreed."

10.30pm. MIKE has returned from U.C. When the IC party arrived with pick-axes in the UC bar Pook, retreated. In the Block of concrete was dragged across the carpet out of the bar. The pick-axes were then applied and some of the concrete chipped off before loading it into a van.