



FELIX

Founded in 1949

The Newspaper of Imperial College Union

Lamps Stolen From Bo

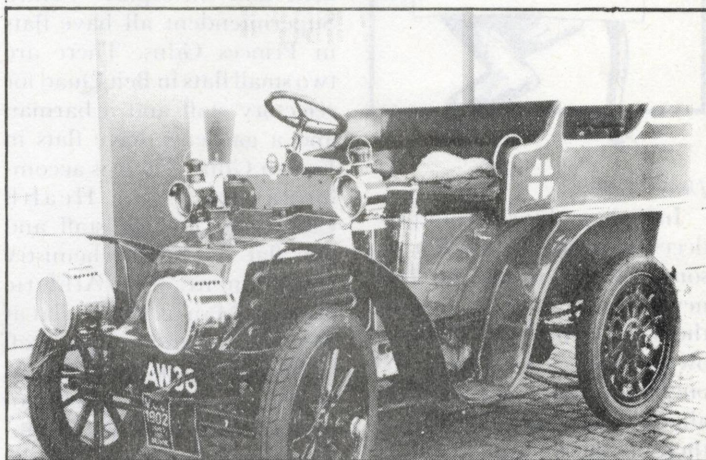
Four brass lamps worth in the region of £500 were stolen from Boanerges, the City and Guilds Union motorised mascot, at some time between 5:00pm last Tuesday evening and 9:00am on Wednesday morning.

The Bo driver, Chris Rolphs of Mech Eng 3, arrived at the Bo garage at 9:15am Wednesday morning to discover that the door was open. He had locked it the previous evening at about 5:00pm, following Freshers' Fair, and soon discovered that the two rear lamps and two of the four front lamps were missing. Subsequently he noticed that the acetylene generator which fuelled the lamps had also been stolen.

He phoned City and Guilds Union President, Andy Rushton, who informed the police after checking that the other CCUs were not responsible.

The lights are of the same vintage as Bo, a 1902 James and Browne, and their value was the subject of a discussion Mr Rolphs had with a friend at Tuesday's Freshers' Fair. It is suspected that this conversation may have been overheard.

The police have informed local antique shops about the items and placed a notice in a trade magazine. The lock on the



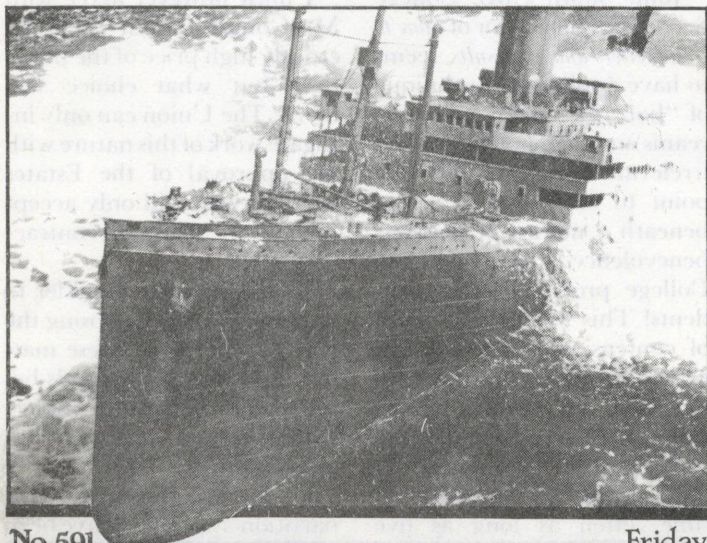
Bo, pictured before the theft. The 2 front lamps are shown on the rear of the wheel arches, with the cylinder-like acetylene generator. Two more lamps were positioned at the rear.

Bo garage (which was not in a very satisfactory condition before being "jimmied") has been replaced with a padlock of much greater strength and the garage is to be connected to the College alarm system.

If you have any information or saw anything suspicious then please contact Andy Rushton at the Guilds Union Office (589-5111 ext 1044 or internal 2378).

Raise "The Titanic"!

FELIX has received several complaints about the state of the new Hall in Montpelier Street. We sent a reporter along to give an impression of the current situation in the building, and to assess whether it deserves the newly acquired nickname "The Titanic". Report on page 3.



UGM Report

An interesting, controversial UGM, thrilled by the cut and thrust of debate, moved by our leaders' oratory, and quorate to the end, was too much to hope for.

In fact, the meeting opened quorate, but late with Mr Goulder tediously describing the standing orders for the benefit of anybody present unable to read.

He was followed by Mr Morton, wielding a plastic cutlass, who had the meeting stand up or sit down according to departments, shoe size, and place of birth in an attempt to bring home to the meeting the severity of the education cuts facing this, and other, universities.

Mr McCabe had a rougher time, vainly attempting to justify the substitution of a metal cupboard for the Union's mascot, Mike; and trying to convince us that the partition recently erected in the Lower Lounge was worth the money.

Following very similar CCU

reports, and a couple of commendably short reports from Mr Ledwold, the ULU President, Martin Young, was introduced.

Eventually we reached the motions: Discussion on the first (on education cuts) proposed by Martin Taylor was cut short, not, as was rumoured because his speech was in danger of being boring, but because everybody agreed with it. Mr Morton then reminded us of the expedition to Salford on October 17 to march against the cuts.

The second, and final, motion was on Iranian students, and the troubles in Iran, which, with the exception of 3 clauses alleging police harassment, was quickly passed.

The meeting adjourned as all the keen first years sped off to lectures, leaving the Chairman's nose for discussion at the next UGM, when "Winnie the Pooh" Aaronovitch, President of NUS, will be present.

STOP PRESS: There are still places in Hall. See Student Services to put name on waiting list.



Dear Mark

In his last editorial your predecessor called attention to some of the things he had never got around to, among them an article on College-owned flats: "you know, the ones they don't tell students about, leave vacant for ages, then move in some College person for a few weeks, on a need basis." If there is any doubt I welcome the opportunity to dispel it.

There are several categories of College-owned accommodation. Most of it is allocated to students. There are a few flats set aside for postgraduate married students, a number for academic visitors and College staff and some, because of statutory provisions, are currently occupied by protected tenants. The College will, however, repossess the flats in this category when the leases end. The total stock and its use is subject to change as the College does its best to acquire more accommodation for students. This session there are additional permanent places available both at Silwood Park and at South Kensington and I am grateful to all concerned for accepting the concept of loan finance and the hardships it imposes.

In Halls and Houses, wardens, sub-wardens and hall bursars are provided with accommodation. The merging of Southside Halls has made two more flats available for students. Beit, Garden and Weeks Halls each have guest rooms available for short stay visitors. There are also two

guest rooms in 8 Princes Gdns and one in 170 Queens Gate. The guest rooms in Halls are booked through wardens and the others through the Bookings Office.

Some College staff have flats on the premises because the nature of their work requires that they live in: the Rector has a flat in 170 Queens Gate, the Refectory Manager, the Domestic Manager, the Domestic Superintendent, the Assistant Domestic Superintendent and the Sports Centre Superintendent all have flats in Princes Gdns. There are two small flats in Beit Quad for refectory staff and a barman and a gardener have flats in Evelyn Gdns. There is accommodation in the Health Centre for nursing staff and one flat in the Biochemistry Department. The Athletic Ground Manager has a flat at Harlington, and certain staff at Silwood Park are expected to live in College accommodation. Each time a staff tenant vacates a College flat the future use of the flat is reconsidered. Recent decisions have usually been against allocating such accommodation to staff members again.

There are currently ten flats for Academic Visitors: in 52-53 Princes Gate, 170 Queens Gate, Princes Gate Mews and elsewhere. They are let up to a maximum of one year. Economic rents, which are regularly reviewed, are paid and everything is done to prevent voids, although the turnover of tenants is deliberately high. These flats are an important asset. Without them many visitors who contribute to the academic life of the College would be unable to come. The flats are also occasionally let on a temporary basis to new members of staff who are coming to London for the first time.

Apart from the student flats in Robert Pryor House, 9 Princes Gdns and next to the Boathouse at Putney, there are five College-owned flats set aside for married postgraduate students. Four are in Evelyn Gdns, and one is in Princes Gdns. There are also four Head Tenancy flats set aside for this purpose. Three are adjacent to the Fulham Palace Road (Lambrook Terrace and Woodlawn Rd) and

one is at Shepherd's Bush. These are all allocated by the Student Services Office. There are plans to increase the number of flats for married postgraduate students as funds become available to convert College-owned houses in Princes Gdns and as protected tenants depart.

The administration of accommodation has certainly had its shortcomings, but during last session changes were made in order to try to increase the stock, to improve allocation, to ensure a steady turnover of tenants and to achieve rent income at a level which permits improvements. There are, of course, still difficulties but not all of these are of the College's making. Tenants (staff, students and visitors) may leave flats in a mess, fail to pay rent or even refuse to go; where the flat is an isolated unit it is all the more difficult to maintain effective control. The biggest difficulty is one none of us can do anything about. The College is in one of the most expensive residential areas in London, as a glance in any estate agents window will confirm. We can never hope to satisfy the demand to house everyone both nearby and at a low cost. But I promise you that we will do our best both to increase the stock and to manage it effectively.

Yours sincerely

John Smith, College Secretary

Sir

As an ex-IC student, may I thank you for informing me of John Smith's bemusing letter and allowing me the opportunity to reply.

John Smith CBE, College Secretary and author of *How to write letters and get results*, seems to have applied the technique of "bore the enemy stiff with reams and reams of useless and irrelevant facts such that the point to be answered is lost beneath a morass of ceaseless benevolence." My, how the College provides for its students! This was never a point of contention in my original article. Quite simply, there are flats that are owned by the College, reserved for College staff, not students, that are left unoccupied for long periods of time, often as long as five

years.

As John Smith must surely realise, a list of College accommodation and occupants is of no interest whatsoever. And substantial space devoted to such drivel in FELIX is unlikely to "dispel any doubt".

Without reiterating my original article, I would merely ask Mr Smith how he intends to combat, for instance, the awfully embarrassing 'refectory flat' in the Union Building that has been empty and unadvertised to the homeless, not to mention those currently in the Crash Pad, for the past five years.

Cut the crap, Mr Smith.

Yours faithfully

Steve Marshall

FELIX Editor 1980/1

Dear Sir

I write by way of reply to Mr Goulder's outrageous letter printed in FELIX 590.

Late in the year 1588, Sir Francis Drake, after finishing his game of bowls, set sail on his historic conquest of the Spanish Armada. Sir Francis knew before his excursion that he had the time to finish his bowls, as history has proven. Mr Goulder seems to doubt my ability to plan things this carefully. I feel he must be unaware that the order for construction work on the Lower Lounge partition was withheld until the last possible moment in order that the maximum time for consideration was available. Indeed, I first started discussing ideas for the lounge in early July, with the College Estates section as well as with the Union Executive and as many interested persons as I could.

I must however agree with Mr Goulder about the ludicrously high price of the partition, but what choice was there? The Union can only instigate work of this nature with the approval of the Estates Section, who will only accept "reliable", "trusted" contractors.

I call upon Mr Goulder to write with me in opposing the Estates' control of these matters, and working towards being able to spend our money with a certain degree of cost effectiveness. After all, the price for the aforementioned partition appears to have been

the first number to spring to the intrepid "conquerors"—1588 pounds!

As to Mr Goulder's comparison of the rather unimposing room divider to the Berlin Wall I must emphasise that, unlike the latter, the lounge partition (or should I say "Goulder's impotunity"?) was not built overnight, but took seven days of careful craftsmanship to emerge, solid, yet sympathetic to its surroundings, a monument to his year serving on the Union House Committee.

Yours, in loyalty to yourself and to your readers,

Barney McCabe

Small Ads

●**AR25 speakers**, 3 yr guarantee, £85. Contact Nick Last, Physics.

●**Two rucksacks** for sale. Contact Graham King via Physics letter-racks or phone 731-6066.

●**Reel-to-reel tape deck**, 3 heads, Sony TC377, excellent sound, must sell. £120ono. Contact G Forves, Civ Eng 3, 48 Lexham Gdns (Flat 8).

●**Fender Vibro Champ** guitar amplifier for sale, immaculate, £55. George 228-5630.

●**If anyone has a cupboard**, chest, filing cabinet or similar they could sell (or preferably donate) to SF Soc (for books) contact Elise P in Physics letter-racks.

●**Wanted urgently**: old, brown, leather briefcase. Reasonable price paid for adequately worn item. Please contact Gary Smith, Civ Eng 2.

●**Stolen**: Green Triumph motorbike from Lexham Gdns between 12:30am and 9:00am Tues, Oct 6. Any info to Karen Lippiatt, Elec Eng 2.

●**Lost**: 1glossy white mitre rugby ball last academic year. Reward for finder. Contact Andy Fyfe, Mines letter-racks.

●**£10 reward** offered for information leading to the recovery of a light green Puch Prince bike removed from the bike park outside the Physics Building. Information to S W Neild, Aero 2.

●**Single room** for student available. Share kitchen and bathroom. Rent £15 per week. Nr East Dulwich railway station. Contact Dave Rouse, Furniture School, Royal College of Art or ring 584-5020 ext 386.

●**Shared accommodation** available in Hamlet Gdns flat for a female preferably 2nd/3rd year or PG. Apply to Lesley Horrocks, Mech Eng 3 or phone 748-3655.

●**Flatshare**: Girl wanted to share room in Bayswater flat, 20 min walk from College, £22.50pw. Contact Susan Griffiths, Bot/Zoo letter-racks (Beit).

●**Don't believe the Handbook!** IC Choir rehearses each *Thursday*.

●**Ski Club**: New year skiing in the Alps. Beginners especially welcome. Interested? There will be a meeting in the Bot/Zoo Common Room (Beit Archway) at 12:45pm on Mon, Oct 12 or contact Bill Sheen, Mech Eng 2 or 736-5526. Hurry! Spaces are limited!

●**Imperial College Social Democratic Soc** invites you to listen to David Owen on "The SDP" at 1:00pm on Tues, Oct 13 in the Great Hall.

●**You've seen the posters** now join the club. Tories have more fun. Come and join at our FREE wine and cheese party with Peter Brooke MP on Mon, Oct 12 at 6:30pm in ME702.

●**Beware of the secret of the black bag**. T Raynam.

●**Chem 2** would like to wish Andy and Caroline a happy 1st anniversary. Lots of love (they have) Chem 2.

Rent Reduction for Residents?

Continued from front page

The origins of this article stem from the disappointment of a considerable number of Montpelier residents at the state of their "home" and "place of study" for at least the coming academic year. However it is considered that the condition of this Hall of Residence affords mention if only to bring to the attention of non-Montpelier residents the condition which the occupants are having to endure.

As reported in the previous edition of FELIX the Hall is designed to house 84 postgraduate students, mostly in single rooms, although accommodation for married couples is also provided. The Hall is very convenient for College and also for various shopping needs.

The single rooms in the Halls are, on the whole, very small. In a number of cases desks have, as yet, not been provided and no specific date has been given as to when they can be expected. Indeed, in certain instances it seems very difficult to imagine how desks will be accommodated within the rooms as space is extremely limited. In fact the space limitation has prompted a number of the residents to start referring to their rooms as "pigeonholes".

Although the lights work in all the rooms none of them have any electricity sockets so that equipment such as hifis, lamps, etc., cannot be used.

The heating in the rooms is also of a defunct nature, in that although various reports of the feed pipes warming slightly have been received, no actual cases of warm radiators have been known.

Since Montpelier Street is a self-catering hall, kitchens are provided so that residents may prepare their own food. However, this seemingly simple operation had been hindered by a few minor setbacks such as the absence of a gas supply for the cookers. However, when the supply is restored the idea of twenty people having to share two cookers does not seem very inviting. Electric kettles have as yet not materialised so that the preparation of hot drinks has become exceedingly difficult.

Residents were informed that there would be laundry facilities in the basement, but these have not yet been provided. A common room was also anticipated, but this has not been completed either. Until recently some of the toilets and bathrooms were devoid of doors causing an understandable degree of "discomfort" to users of these facilities. These have now been provided.

The geographical location of the Hall (just off Brompton Rd) and about a minutes walk from Harrods adds to the prestige of the Hall and presumably the rent. This £23pw, in other words (for all its deficiencies) is £1.50 more expensive than the Southside Halls.

The residents of the Hall are a very friendly group of people and in all fairness it must be said that when the renovation of the Hall is finally completed it will be a most enjoyable place to reside. However, this stage of completion is not anticipated in the immediate future.

The Hall, although as yet nameless, has attracted a varied selection of nicknames of which the most popular is "The Titanic". Although it surely gives the residents no pleasure to use this name, it does seem to sum up the feeling of discontent about the state of this Hall of Residence.

It is realised that the Hall has just recently been acquired by Imperial College and so teething problems were inevitable and indeed anticipated. However, there is a strong feeling among certain residents that the rent of £23pw is too high for the services being provided at present. Many feel that a reduction in the rent until at least the time when the Hall is fully renovated would be appropriate.

●**Thanks to everyone who helped me at Freshers' Fair**—Barney.

●**Light removals**: (no bulbs or tubes) moving in or out or just want something moved. Phone Richard on 2801 or 328/8937/4529 any time. Cheap rates (I know I am).

●**Ski Austria and Switzerland** over the New Year in a major continental winter sports centre. All standards of skiers are welcome, good accommodation starts at around £5 per night. Full details and prices of the proposed trip from John F. Haddon, Physics 3 or phone 542-0315 NOW.

●**Temporary staff required** on Commemoration Day, Oct 22. Camera 7, the official photographers to the College, require 4 staff to assist with mainly clerical duties at the Royal Albert Hall, Thurs, Oct 22. Previous experience not necessary. Working hours will be between 10:15am-2:00pm and 3:00-5:00 approx. The rate payable will be £2.50 per hour. Those interested should contact Nigel Thomas, (0625) 527877 as soon as possible.

●**Motor cycle fetishists** are reminded that Bike Club meets at 1:00pm in Stan's Bar Lounge.

●**Lost at Freshers' Fair**: Black Parker ballpoint with silver 'T45' motif of great sentimental value. Liquid reward. Contact K Vanning, Life Sci 2.

●**All club and society chairmen**: please contact Joanna in the Union Office to complete details for Directory.

●**Greetings to a slipper friend** starting yet another year here. You have been here since Dickensian times, have you not? Your West Country cousins.

●**All Club and Society Chairmen**: please note that phone calls from the Union Office can only be made from 1:00pm onwards.

●**University Challenge**: Are you a budding intellectual ready to make a complete fool of yourself on TV? If so contact Jen in the Union Office by October 16 to enter yourself for selection for the great Imperial College University Challenge team. The team will be selected by a written test using University Challenge type questions.

Fair's Fair

IC's annual Freshers' Fair on Tuesday once again attracted vast numbers of students. They came in hordes to seek out the stalls which particularly interested them or just to sample the real ale in the Union Bar.

This year marked the foundation of a number of new societies. The SDP stall aroused a lot of interest and the recent craze for windsurfing was reflected by the large number of signatures collected by the Board Sailing Club (which at £2 membership fee must be a bargain).

Since ICWA was disbanded last term, WIST (Women in Science and Technology) was the only purely feminist society represented. They must be awarded the prize for the most badly typed handout at the fair.

Jezebel, Bo and Derek (the RCS and Guilds motorised mascots) were in fine form on the Queens Lawn, but the limelight was stolen by a third degree wizard from New Zealand, who was recruiting cannon fodder for Alf's Imperial Army. He claims that this will oblige any revolutionary forces which want to be oppressed. His strange contraption was built to catch the wizard of Christchurch (a first degree wizard mind you) on his flight through the universe. He was also offering maps of an upside-down, inside-out world for a mere 50p.

The male orthodox forces were also well represented. Members of the Territorial Army were showing off an impressive 25lb cannon and nearby the Royal Navy and London University Air Squadron members were also eager to gain the interest of some "brainy bods" from IC.

Rain finally stopped play at about 4:30pm. The main results of the day were the mint made out of the freshers at the sweat-shirt stalls and the RSM winning the race to gain the most players for their rugby team.

Student Voice

On Sunday, October 11, at 4:30pm, the first of a weekly series of student programmes will be broadcast by Radio London (94.9MHz, 200m mediumwave). The show (called *Student Voice*) will be written and presented by students and include news and views of student life.

Secrets of the S.S.

Most people will probably be aware by now of the newly established Student Services Office at 15 Princes Gardens. For those who have somehow passed us by or haven't yet realised the full range of facilities available, here is a breakdown of what we cover:

College Accommodation

Application and billing for all the College accommodation allocated to students begins with us, including a limited number of flats for families.

Private Sector Accommodation

We have details of many types of accommodation currently available. Most of these are in West London, some are close to College, while we occasionally get oddities like an attic on the Isle of Dogs or a yacht in St. Catherine's Dock. If you feel in need of a change of abode during the year, come along often enough and just what you are looking for may turn up. If not our Accommodation Guide lists some agencies that have proved helpful in the past. It also contains information on some of the legal aspects of being a tenant. Which brings me on to.....

Legal Advice

This includes all kinds of legal problems from traffic offences to making claims under the small claims procedure in the county court.

In certain cases where you may have to have a solicitor, as for example, you would if you wanted someone to represent you in

a magistrates court, we have lists of solicitors who do legal aid work—which is free if your income is low enough—together with the areas of the law that they specialise in. These lists also note solicitors who speak languages other than English.

Landlord Problems

These can be many and varied. One of the problems is knowing just what your rights are. Other problems, such as an imminent breakdown in the relationship between tenant and landlord, may be helped through an intermediary such as ourselves.

Consumer Rights

Legislation over the last few years has given the consumer considerable protection. However, it is still up to the individual to find out how he stands in any transaction that appears to have gone wrong, and summon up enough energy to commence battle! This is where we can provide reinforcements with advice and sometimes direct intervention when appropriate.

Immigration/Home Office Problems

This is an area which may require the skills of specialist organisations or solicitors which we can put you in touch with, although for routine enquiries we should be able to provide most of the answers.

Insurance

We have quite a selection of leaflets on many types of insurance, including

A guide to Student Services

bicycles, personal, possessions and holidays.

Covenants

Here is a useful way of supplementing your income by reclaiming tax paid by your parents on their contribution to your grant. Forms explaining the procedure are available from Student Services.

Benefits

We have most of the relevant Department of Health and Social Security leaflets, such as those on all aspects of the NHS (including medical treatment abroad), National Insurance contributions, unemployment benefit and rent allowance schemes.

Grants

Help with chasing up recalcitrant LEAs, advice on eligibility for grants, details of certain discretionary allowances and lists of educational charities can be provided

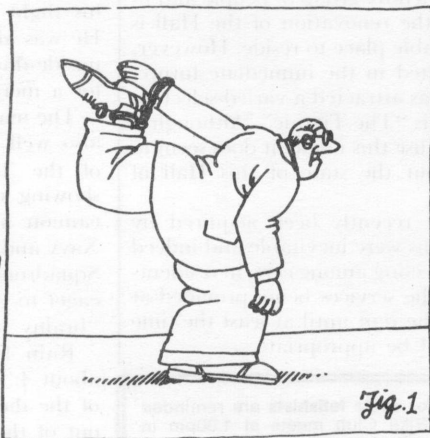
Miscellaneous

This includes such things as reference books on holiday jobs and working holidays, while we also aim to act as intermediaries between those looking for tutoring work and those in need of tutoring.

If there's anything else you need, information on topics not mentioned here, come and see us in the Student Services Office. If we can't help, there's always our book of useful phone numbers

Sue Teding

*Futile
Hurling*



Live in Southside
Bar

Wednesday Oct 14
9.00 pm

Free!

EXEC VIEWS

I am sure that the first years amongst you were a little overawed by the Freshers' Reception on Monday. You probably also found Freshers' Fair really hectic and how about those first lectures? Because of all that goes on in the first week of term and as a reminder for second and third years I shall go over the impression we were trying to create at the Reception.

The people in this Union Office are really quite human and very keen to help you. The three sabbatical officers are all students who went through the same processing and settling in when they first came to College. The three permanent staff in the office, Jen, Jo and Pat, are charming and knowledgeable. Please feel at home in this office and come up here if you have any problems or queries.

We should be able to advise on any College related problem (and a few outside College). If you are having difficulties with your course and want help come and see us. If you want to complain about a member of staff or warden or any College employee come and see us. Similarly if you want to complain about a service offered by College come and see us. If you want to complain about a Union Officer come and see me. And if you want to complain about me, go and see Barney. Of course if you have anything pleasant to tell us we want to hear that too.

The Union has officers to help with academic affairs, welfare, Rag and all the clubs and societies. Make use of them, they all promised so much when they stood for election.

As far as Barney, Marco and myself are concerned, grab us in the office, in our rooms (we all live in College residence) or in the street. I suppose I had better add what all Presidents say, you can sometimes catch us in the bar.

So have a good year at IC. Work hard but enjoy yourselves.

Nick

Duplicating Demo

If you would like to learn how to use the gestetner duplicating machine and be put on the duplicating list then come to the Union Office at 12:30pm on Tuesday, October 13 for a demonstration. All publicity officers should make a special effort to attend.

"Experiment is always right, the theory never!"

FELIX talked to Professor Eric Laithwaite, who will give the first H.G. Wells Society lecture of the year on Monday evening.

I'd like to start off by asking you a little about your background, Professor. Was there any particular event which got you interested in science and engineering in particular?

It's not so much an 'event', it's the people you come across on your journey that influence you. I was blessed with a very good physics master at school. I think I can place it back to then. Plus I had parents who were interested in things of that nature; my father was a farmer you see, but he retired early. He should have been an engineer, he would have made a very good one.

Did you live in an industrial area?

Yes, but not one directly connected with what I do now. I was brought up in a small cotton weaving town, it was an industrial village if you like, but I wasn't involved in the cotton industry.

Did you have any hobbies as a child?

I had all sorts of hobbies as a child. I went to secondary school in the ordinary way so I played cricket and rugby football and things that one does at school. Plus I played guitar, I had a pop group in the 1930s, which was ahead of its time! I've collected butterflies and moths ever since I could walk. I finished up writing a book on it. You've got to get your money back somehow, you see!

Did you go straight to university to study engineering?

No. I left school to join the airforce in 1939 when I was 18. It was during the airforce years, I suppose, I really decided that it was engineering I wanted to do, because at school they never told me about engineering. In those days they never had careers masters like they do now. I would have been in the civil service if it wasn't for the war, pushing a pen.

What did you do during the war?

I started as an instrument basher, of which there is nothing lower, and graduated to get a commission in 1943 and ended up at the experimental station at R.A. Farnborough which is where the interest *really* began and all sorts of exciting things went on there, especially during wartime. I got a class five release in 1946 to go and become an undergraduate at the age of 25 in Manchester, and did a masters degree and then got a staff appointment and was assistant lecturer for four years. I was then senior lecturer and after that got the appointment here.

I'm sure things will have changed since your freshman days, but is there any advice that you might give to freshers?

It hasn't changed as you might think. The purpose of university is to have your mind trained. It's never been any different since

Socrates and it doesn't much matter *what* you get it trained in. Some of our graduates are managers of Marks and Spencers, on the other hand, you've got people doing good engineering with Arts degrees. If you get your mind trained it doesn't really matter what it's trained in so long as it's versatile. You've got to come to university with an open mind. It isn't like what it was at school. Ohm's Law isn't true. You've got to keep an open mind; you've got to discover a new way of thinking of things every day. I'd advise people to broaden their horizons and, of course, discuss things amongst themselves; this is what a group of people is all about anyway. You will get quite a lot from each other, quite apart from the formal lectures.

On to your position, which is Professor of Heavy Electrical Engineering. Could you explain that a little?

Well heavy simply means the generation of electrical energy in quantity, in thousands of megawatts at a time. A Professor of Heavy Electrical Engineering is conscious of heat engines and thermodynamics and engineering in its broadest and heaviest sense.

You're famous for your work on the linear induction motor, but has it developed as quickly as you expected?

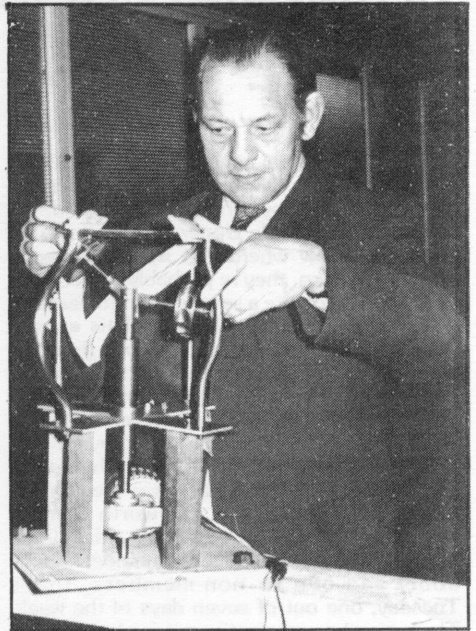
It might have developed more rapidly than you thought. The thing is that people identify linear motors with high speed transport. Well, there's a lot more to linear motors than high speed transport. We've sold millions of pounds worth of linear motors a year for several years and listed 1,000 different applications to industry, none of which are high speed transport. The big money spinner now is a scrap sorter, sorting aluminium scrap from copper, brass and iron scrap from stone, metal and crushed up motor cars in general. That's a very big money spinner. We haven't really begun—just scratched the surface that's all. Every generation thinks it's got there but it hasn't.

I remember you saying once, on Multi-Coloured Swap Shop in fact, "Never mind if you don't understand the theory, just have a go at using it."

Making it useful is what engineering is all about.

What do you think of pure science?

Pure science is a luxury and always has been, full stop. There's those who think about the origin of the Universe and may be so misguided—because it may never have had one! It pre-supposes it had one. Extrapolation is not valid. You can see that the earth had a beginning and how it might have an end, we know all of us might have a beginning and an end. You can't extrapolate and say the universe had a beginning and an end, it might not have.



Eric Laithwaite is Professor of Heavy Electrical Engineering at Imperial College. He is undoubtedly the father of the linear induction motor in its modern form and is well-known for demonstrating the unusual properties of gyroscopes.

Is this your personal philosophy?

I'd call it commonsense!

When you are dealing with your engineering, is it the application and experiment.....

Experiment is always right, the theory never! Experiment rules.

On Monday you will be giving the inaugural lecture for the H.G. Wells Society, of which you are President. Have you any surprises in store for us?

Oh yes. Things that I hope people will say "Why didn't you teach us that at school?" I've lectured the society before on four or five occasions. In its greater days the first time I gave one I was told how *fortunate* I was to be asked to lecture to the society! There are those today who kindly say how fortunate they are for me to do their lectures—neither is correct I hasten to add. We are fellow students in a common cause. I never want to be any different.

I understand that the point of the society is to celebrate the life and works of H.G. Wells and to pursue matters that Wells might have been interested in. Is there anything that you particularly would like done by the society?

Yes, I think they ought not to be afraid of dabbling in such things as ESP. A friend and colleague of mine who is my counterpart at City University is Arthur Ellison and he is President for the society of psychic research. The society must get Arthur along to do a talk on ESP. (Ed's note: Arthur Ellison will be lecturing a week, on Monday (unknown at the time of the interview).)

And finally, what about Professor Laithwaite? Will you ever retire?

I never want to retire. Anyone who is a true academic will never retire—he stops thinking. I want to do a Barnes Wallace designing continental airliners into my nineties.

Thank you very much Professor Laithwaite.

SF Soc

Greetings! The semi-impossible has happened. A new academic year and the soc of socs still exists and will, by unpopular demand, be meeting in Southside Upper Lounge today. If you don't know where that is, ask someone arrogant-looking, they're probably a second or third year. If you are a second or third year and don't know, congratulations. This epoch-something event starts oneish. If you don't go, worry not, this column will contain all the important news (hah!); the column known last year as one of the least controversial bits of anything anywhere, recommended by Dr H.J. Pain as the only part of FELIX worth reading, and by Steve Marshall (last year's editor) as the only part of FELIX not worth reading. Don't forget *Alien* on Tuesday (ME220) at 6:30pm, FREE to members (membership on door) and 50p to non-members, that's Tuesday, one out of seven days of the week. There may be organisations giving better value for money, but our showing of this film is not their signature. Showing films is one of the things they didn't do in the library of Alexandria, which contained that great lost scroll, the constitution of SF Soc, which was lost when the library was burnt to the ground by Nigel Calder in a fit of envy. A reconstruction of this document will be featured in a mammoth thirteen-part social science popularisation series on the fourth channel in 1983, to be fronted by Francoise Sagan and entitled 'New York Cosmos', completed with tie-in book, tie-in tie, and tie-in football team. Also coming soon, a variety of ICSF productions, including 'Escape from South Kensington', 'Scholars', and 'Day of the Triffids'. Well, once again we're coming to the end of an SF Soc bulletin, and my goodness we've had a good time bringing it to you haven't we Mike? Yes Mike we certainly have and now to wish all our readers a fond farewell, I hand you over to Mike. Thanks Mike, well we're about to close down so I'll say goodbye, tune in next week, and declare myself yours till the BBC produce a decent SF radio serial. Be seeing you.

The Unteleported Man and the Hand that takes

Red Cross

We start our First Aid and Nursing courses next week. These courses are open to staff and students alike who are interested in obtaining certificates in First Aid and Nursing. Once qualified there are a number of interesting opportunities for you to use your skills.

Details of the courses are set out below:

Monday, October 12

Start of a 6-week, 2-hourly Nursing course leading to Red Cross Nursing Certificate.
Place: Health Centre, 14 Princes Gardens.
Time: 6:00pm

Thursday, October 15

Start of a 6-week, 2 1/2 hourly First Aid course leading to Red Cross First Aid certificate.
Place: Bot/Zoo Common Room
Time: 6:00pm

These courses are usually very popular—so don't delay, join us now!!

For further information please contact Roger Serpell, Commandant, Imperial College Detachment, Aero Dept (int 3707).

PG Tips

Have you ever thought about earning cash by tutoring an O/A Level student? Well, it's not as frightening as it sounds, and can be very rewarding. The Postgraduate Group has advertised in a newspaper on your behalf to attract replies from people who wish to be tutored. So, if you are interested in using this scheme to be put in touch with a tutee, and you have not already replied to the previous advertisement in FELIX, please leave details of your requirements with the Student Services at 15 Princes Gdns.

Industrial

Greetings from Honourable Industrial Society. We exist to organise visits to, and talks about, all forms of commerce and industry. This term these include trips to such establishments as British Airways, British Steel and even Mars.

Our first soirée is a discussion with two notables from national HQ, Julia Cleverdon and Peter Nesbitt. The venue is Chem Eng LT1 at 6:00pm on Tuesday, October 13.

At this function you can become a member, collect some cheese and wine and get your free gifts.

The more members we have, the more things we can arrange, so please come along and get involved.

ICYHA

If you didn't find us at the Freshers' Fair don't worry just read on. The slideshow will be on Monday, October 12, in Elec Eng 606 at 6:30pm. This is highly recommended for prospective members as they can see the highlights of last year's activities.

This terms activities are as follows: Oct 16-18 Peak District; Oct 30-Nov 1 Brecon Beacons; Nov 13-15 Cotswolds; Nov 27-29 Snowdon; Dec 12-13 Yorkshire Dales.

If you are interested in any of these weekend trips come along to our weekly 'butties' meeting on Thursday lunchtimes in Southside Upper Lounge, i.e. food and coffee at 12:30pm.

SDP

The response to the formation of the Social Democratic Party in March has been staggering. Despite the jeers from the tired old hacks of the fac...(sorry Conservative) and Mar...(sorry Labour) parties, in six months the SDP has achieved a position which ensures that it will form the government after the next election. Who would have thought in March that Roy Jenkins would gain over forty percent of the vote in Labour's fiftieth safest seat?

Under successive governments since the end of the war we have suffered an economic collapse which makes Ireland and Italy look positively flourishing. We have had governments that have stifled individual initiative either by excessive centralisation (Labour) or by helping big business to the exclusion of small businessmen (Conservative). (cf S. Williams 'Politics is for People'). But there is no point in crying over spilt milk.

A measure of a country's stagnation may be taken as what event in the past do people refer to as a watershed in their lives. In France it is the events of 1968, in the United States it is the Vietnam War, and so on. We are one of the very few countries whose people refer, as I did earlier, to the end of the second world war from which modern dates are taken. An event over a generation ago is still very much with us. This strikes me as the most compelling evidence that this country has stagnated.

We must break out of the straightjacket of the two party system which has ruled us. They have failed utterly and completely. We need reform like that which we had in the 1830s: of the constitution, of the voting system, of the economic and industrial structure. Only the SDP can carry this out because all the other parties have vested interests which cannot permit them to carry out policies of reform.

David Owen is coming on Tuesday, October 13 to speak in the Great Hall on the SDP. To all of you, especially freshers, I appeal to you to come and listen to him; to discover whether or not you are satisfied with the present system, and, if you are not, to help change it to build a better country.

Frank James

H.G. Wells Society

Don't miss Eric Laithwaite's lecture to the H.G. Wells Society on Monday, October 12, at 6:15pm in Mech Eng 220 on *Facts and Fallacies in Science*.

Sub-wardens for Bernard Sunley House and Holbein House

Applications are invited for the post of Sub-warden for either of the above two student houses in Evelyn Gdns. Applicants must be male postgraduate students.

Duties are to assist the Warden in the running of the house on a day-to-day basis from a domestic and social point of view. Single rent-free accommodation is provided. Applications in writing to the Student Services Office, 15 Princes Gdns, London SW7. Please address envelope "Bernard Sunley/Holbein Sub-Wardens".

All applications will be considered for both houses unless specific preference is indicated.

Closing date: Wednesday, October 14, 1981.

Assistant Sub-Warden Tizard Hall

Applications are invited for a post of assistant sub-warden in Tizard Hall for the academic year 1981/2. Rent free accommodation in a single room will be provided. Tizard Hall will have approximately 94 men and 24 women residents and the duties of the assistant sub-wardens are to help the warden and sub-warden with the day-to-day organisation of the Hall and to contribute to its social life.

Both female and male students of Imperial College are invited to apply and although the successful applicant would normally be a postgraduate, applications from others will be considered on their merits.

Applications with a curriculum vitae and names of College referees if possible should be sent to Dr M.H.R. Hutchinson, Warden, Tizard Hall, by October 17, 1981.

Consoc

At present Britain is suffering at the hands of an unfortunate world recession. We are not the only country to be affected and the Government is insisting on stern measures in order to try and halt the decay of British industry, and to force the country to become economically viable again.

The Conservative Party now has several political opponents, however none of these offer a feasible solution to the recession. They are, without exception, a very poor alternative to conservatism.

At Imperial, we try to forward the conservative viewpoint, to individuals and at Union meetings. If you are interested in joining the Conservative Society please come to our Wine and Cheese Party on Monday October 12 at 6:30pm in Mech Eng 702. Peter Brooke, MP will be there to speak and he is always willing to answer any questions.

CND

On Thursday, October 15, at 1:00pm Tony Allan from the national CND office will be in the Upper Lounge to lead a discussion. This will be an opportunity for all of those people in College interested in disarmament to come together and find out more about some of the issues and arguments involved. This is not just an introductory meeting for those new to College—everyone is welcome to come along, however unconvinced you may be.

What we also need is people who are willing to spend a little time each week helping to run the group and promote CND. Those who were active last year are especially asked to be there—the campaign can only succeed if more and more people take a hand.

Chaplaincy

You may well have come across a Chaplaincy member visiting you in your Hall or House, or have seen the Chaplaincy Newsletter *Chi-Rho*, the purpose of which is to welcome you to Imperial College and to invite you to come along to our Hall, House or department groups.

The aim of these groups is to enable students to meet socially and to discuss topics which they might otherwise be unable to do in College. Information about where and when these meetings are held will be displayed on posters in the relevant Hall, House or department.

The West London Chaplaincy also holds services every Sunday; this takes place in the Sheffield Refectory's Ante-Room, at 10:00am. This is a communion service with an informal atmosphere and people from all church backgrounds are welcome.

In addition to these regular activities there will be a party on Saturday, October 17 to welcome freshers. Food, games and a slideshow of previous year's activities will be on offer. This will be held in the Union Senior Common Room at 7:30pm. Everybody is most welcome to come.

OSC

Thank you very much for attending the Freshers' Fair, we were very pleased with the turnout and hope you will participate fully in our functions. **Our next function is a Cheese and Wine Party and a free filmshow, Wild Geese, in ME220 on Wednesday, October 14, at 6:00pm.** All overseas students are welcome. Come and meet people from your country and other countries. Note that members of any one of the national societies are automatically members of the Overseas Students Committee (OSC) and thus are entitled to all the facilities offered by the OSC, which include discos, film shows, talks, cultural evenings etc. In addition there will be a reception by every individual national society.

October 9: **Chinese Society**, 12:30-2:30pm in Union Concert Hall.

9 October: **Afro-Caribbean**, 6:00pm, Mech Eng 220 (reception and filmshow *A Warm December*)

October 10: **Sri Lanka Soc**

October 12: **India Soc**, 5:30pm, Upper Lounge

October 12: **Pakistan Soc**, 6:30pm, Lower Refectory.

October 14: **OSC**, 6:00pm, ME220

October 15: **Latin American Soc**, 6:00pm, Upper Dining Hall.

October 30: **Hellenic Soc.**

Security

During the next few months a number of you will call at room 150 Sheffield to report items stolen, in particular cycles, wallets and purses.

The university is the target of a number of persons who live by stealing and who will roam the buildings seeking the opportunity to do so. They are very plausible and know their way 'around'.

If you leave your coats on the backs of chairs with wallets in them your wallets **WILL** be stolen, if you ladies leave purses and handbags on chairs or in drawers they **WILL** be stolen.

Never carry more cash than you need. Keep cheque books and cards separate and in a safe place.

Cycle thieves are expert (two caught last term admitted over 100 thefts) and stolen cycles are big business.

No chain is good enough but if you do use one get a stout padlock. Only the metal loop lock has so far been successful.

There is a thief about—you can bet on it.

G.R.R. Reeves
Chief Security Officer

(Possibly the best lock is called 'the Citadel', a loop-type lock in three sizes (£17, £23 and £27) which includes £100 insurance if your bike should be stolen—this has never been claimed, the manufacturers say—Ed.)

SPORTS RESULTS SERVICE

To maintain an efficient results service, all results (and articles) should reach the FELIX Office not later than 1:30pm Monday.



Sailing

On Friday, June 26, a team from the sailing club travelled to Coleraine, N. Ireland, to compete in the twelfth 'Old Bushmills' twenty-four hour race. This takes place annually, under the burgee of the Coleraine Yacht Club, on the river Bann, round a triangular course.

The race started at 2:00pm on Saturday, June 27, in a near perfect, south easterly breeze, and the first hourly bulletin showed IC to be in the lead on handicap, in a borrowed GP14 'Has Beans'. However 'wreckers' Lewis and Baxter broke the centre plate and while this was later to prove a slight handicap, it did not stop them completing the fastest lap time of the race.

Towards dusk the wind began to drop, not favourable to GPs on PYS and the lead was gradually lost, until the first bulletin of the morning (6:00am) showed the team in third place, in close competition with Queen's College, Dublin.

Queen's eventually overtook IC and the final result was IC fourth with a prize for first GP and fastest lap.

Team: *Baxter, Curling, Lewis, Mills, Murray, Redman, Younghusband.*

A number of club members also attended the Firefly National Championships, held at Hayling Island. Some notable achievements were: Chris Lewis, Colin Murray, Graham Kennedy (second overall, fifth overall and Marlow Trophy winner respectively).

==CONSTITUENT COLLEGE UNIONS==



Well, I hope you are all surviving the first week of term—mind you it's not over yet!

Assuming you are not too battered and bruised (or even if you are) after our ice-skating trip on Tuesday, we'll see you tonight at the Rugby Club Party in the JCR.

However, don't get too drunk 'cause you're coming TIDDLYWINKING down Oxford Street tomorrow. We are meeting at RSM at 9:30am on Saturday morning.

In order to lubricate your exhausted body in the evening, the RSM Pub Crawl—the highlight week!—is taking place—meeting in the Union Bar between 6:00 and 6:15pm.



City & Guilds

Just a short note: We've a barnight tonight in the Union Bar starting at 6:00pm. Saturday is Tiddlywinks Day, meet at 9:30am in the Guilds Office. Freshers' Dinners start on Monday: if you're in Aero and haven't got your ticket yet, then get them this morning or it'll be too late.

Other dinners follow in rapid succession, so get your tickets from the Guilds Office or Dep Reps.

Don't forget the elections: Pub Crawl organised by VP candidates on Wednesday and the election UGM in ME220 the following Tuesday.

All the details in Guildsheet.



I hope you all had a good first week at College, especially the freshers. Life will soon return to normal, so don't worry.

Boanerges

The theft of four brass lamps from Bo, the motorised mascot of City and Guilds Union, is a sad and extremely tragic loss. If anyone does know anything about the incident then please come forward and contact Andy Rushton, Guilds President, on 589-5111 ext 1044 or internal 2378. These items are not replaceable and Guilds are only concerned for their safe return.

The Name Game continues

Although I've been living in Southside since July I'm still not quite sure what to call the Hall I live in. Being under the impression that Tizard and Selkirk Halls were combined at the end of the last session, I toyed with "Tizkirk"

or "Selard" for a while. However, Warden Henry Hutchinson informs me that the two Halls will be deliberately kept separate and have individual social lives and Hall committees, etc. This, of course, means that we Selkirk residents may continue to sneer at those awful Tizard people through the locked inter-connecting door (surely a fire-risk!).

Looking down, on the other hand, (as we Selkirkians often do) to the lower half of Southside, I see that the Warden has completely integrated the two Halls, and will hence re-name it "Faleogh" and "Kenmouth" very shortly. How confusing!

Halls of Hall Hall

I received a few interesting names for the new residence in Montpelier Street. It was suggested that *Hall Hall* would only be appropriate if Beit Warden, Chris Halls, was appointed as numero uno in the Knightsbridge domicile. *Horticultural Hall* was a tribute to our own dear Rector, as (presumably) was *Toad Hall*. Full marks for confusion value goest to *Albert Hall* and the only serious suggestion was *Wells Hall* (an excellent choice in my opinion).

Mind you, considering the current state of the building (with a definite lack of electrical power causing annoyance) perhaps we should call it *Bugger 'all*!

My Thanks to.....

Martin, Eddie (the new boy!), Dave, Steve, S.J., Mike, Alan, Maz and Ian.



Those of you who managed to get hold of a copy of the last FELIX of the summer term may remember that, as usual, I set four prize puzzles together with a handful of 'quickies'. Now although (or possibly because) the summer break is so long, I received NOT A SINGLE ENTRY to any of the prize puzzles. Since the response to the Christmas and Easter competitions was so good, I feel sure that the main reason for the absence of entries was that many regular solvers didn't get a copy of the summer FELIX. (You may recall we had certain distribution problems when four thousand copies of FELIX were stolen.)

Anyway, whatever it was, I had put a hell of a lot of work into setting those puzzles, and I don't see why I should give the answers away without somebody doing some work on them; so unless I receive any strong complaints from would-be solvers who have suffered an agonising summer of frustration waiting for the solutions, I shall reset the four prize puzzles as ordinary weekly puzzles throughout the term.

Quickie Solutions

Here are the solutions to the non-prize puzzles from the summer FELIX, and also last week's quickie.

5	5	2	2	3	3	1	1
5	5	2	2	3	3	1	1
4	4	0	0	5	5		
4	4	0	0	5	5		
6	6	0	0	6	6		
6	6	0	0	6	6		
2	2	1	1	4	4	3	3
2	2	1	1	4	4	3	3

A solution to the domino problem is shown in the diagram.

9 and 9 have the property that their sum is the same as their product, but with the digits reversed.

The words liquefy, rarefy, putrefy, stupefy, liquefaction, rarefaction, putrefaction, stupefaction, iridescent, inoculation, mars (=disfigures), consensus, loth (=unwilling) and supersede are all spelt correctly. To his credit and surprise, Mark Smith was the only member of the FELIX staff who knew (guessed) this.

Of the poker hands, hand (d) is the best, hand (a) the worst, and hands (b) and (e) are equal in strength. If the hands could occur during the same deal, then of course (a) would be best. But as the hands cannot occur on the same deal, their values must be based on their probabilities of winning. Each of the full houses can be beaten by the same number of fours of a kind, but by different numbers of straight flushes. (a) can be beaten by 32 straight flushes, (d) can only be beaten by 24, and the others by various numbers in between. This accounts for the paradox.

At face value, $(x-a)(x-b)...(x-z)$, when expanded as a polynomial has 2^6 terms. But a moment's reflection shows that the twenty-fourth factor is $(x-x)$, and so the expression is identically zero.

This Week's Offering

No prize puzzle this week, but if anyone sends me a set of solutions to the following few quickies, I'll buy them a pint if I see them in the bar. All the solutions are well-known English words. 'Y' is to be regarded as a consonant.

1. What single-syllable word has eight letters?
2. What six letter word contains no vowels?
3. What word contains five consecutive vowels?
4. What word begins with seven consecutive consonants and ends with nine?

Finally, may I remind you that there's still time to enter both Monday's puzzle, and the competition puzzle in the handbook. Good luck!

What's On

Friday, October 9

- Christian Union 'Overseas Supper', 6:30-7:00pm, Union Lower Refectory, Free.
- International Reception, 7:00pm, Union Lower Refectory. Refreshments provided free! Overseas students most welcome.

Saturday, October 10

- Tiddlywinks! Meet 9:30am at CCU Offices.

Sunday, October 11

- Scout and Guide Club Freshers' Hike and Barbecue, ALL DAY from 9:30am. Meet Beit Quad.
- Wargames Club Meeting, 1:00pm, Union SCR.

Monday, October 12

- Red Cross Nursing Course begins at 6:00pm in the Health Centre, 14 Princes Gdns.
- Dancing Club First Advanced Class, 7:30pm, JCR.
- Chess Club Freshers' Tournament, 6:30pm, Brown Committee Room.
- Conso Wine and Cheese Party with Peter Brook MP, 6:30pm, ME702.
- H.G. Wells Society: Eric Laithwaite on *Facts and Fallacies of Science*, 6:15pm, ME220. Instant membership.
- ACC Meeting, 6:30pm, Union Lower Refectory. All club captains to attend.

Tuesday, October 13

- MOPSOC Lecture *Is a doughnut a coffee cup?*, 1:15, Physics LT2. Free to members, others 10p.
- Department of Humanities presents:
1. Seventy Years of Chinese Revolution, 1911-1981 Part 1: *The Flowering of Nationalism*, with Prof Richard Harris, visiting professor in Far Eastern Affairs, Imperial College; lately Deputy Foreign Editor of *The Times*. 1:30pm, Read Theatre, Sheffield.
2. Problems of the British Economy Part 1: *Problems and Progress, 1949-79* with Prof W.B. Reddaway, lately professor of Political Economy, Cambridge. 1:30pm, Pippard Theatre, Sheffield.
- Astrosoc Meeting, 6:30pm, Physics LT2. Members only (anyone can join at the door).
- Film: *Alien*, 6:30pm, ME220. 50p to non-members, free to ENTS members (membership available on door).
- Cathso Cheese and Wine Party, 5:30pm, Chem 231. Free.
- STOIC Training Session, 5:45pm, TV Studios.
- Indus Soc Presentation, 6:00pm, Chem Eng LT1.
- Judo Club First Session of Term, 6:30pm, Gym, second level, Union Building.
- Dancing Club First Tuesday Evening Beginners Class, 7:30pm, JCR.

Wednesday, October 14

- Wargames Club Meeting, 1:00pm, Union SCR.
- Dancing Club First Wednesday Evening Beginners Class, 7:30pm, JCR.
- ICU ENTS present WEAPONS OF PEACE, The Flying Padovanis and Everest the Hardway, 8:00pm, Great Hall. Tickets £2.00 in advance.

Thursday, October 15

- Scout and Guide Club Talk by Richard Turnbull of Alpine Sports on Hiking Equipment, 12:30pm, Mines 303.
- Hang Gliding Club First Meeting, 12:30pm, ME342.
- Balloon Club First Meeting, 1:00pm, Biochem 302.
- CND: Tony Allan from National CND on *Why CND now?*, 1:00pm, Union Upper Lounge.
- Red Cross First Aid Course commences at 6:00pm in Bot. Zoo Common Room.
- Jewish Society Freshers' Party, 6:00pm, Chem 231. Free.
- Department of Humanities presents:
1 Film: *The World at War* (Thames TV)
Part 1: *A New Germany*
1:15pm, Great Hall, Sheffield
2 Lunch-hour Concert with Takashi Shimizu (violin)
1:30pm, Music Room, 53 Princes Gate.
- Gliding Club Meeting, 5:30pm, Aero 254.
- Astrosoc Meeting *Astronomical Observations from Manned Balloons and Aeroplanes*, 6:30pm, Physics LT2. Members only (can join at door).