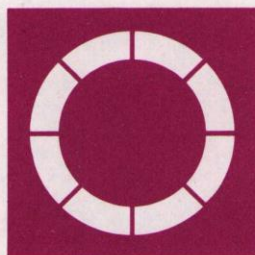


No 43/69  
1 Dec 69



# Rutherford Laboratory Bulletin

## General News

**THE COSENER'S HOUSE.** It has been decided to close The Cosener's House for the two weeks commencing Monday, 8 December 1969, to repair the major fault which has developed in the central heating and hot water boiler. Accommodation Section will endeavour to find other accommodation for residents and visitors during this period.

**MISSING EQUIPMENT.** The following item of equipment has been reported missing:-

Wee Meggor, Serial number 1518643

Will anyone with knowledge of the present whereabouts of this item please contact Mr E G Sandels, Building R25, Ext 458/6133.

**FILM NOTICE.** Period 13 commences Monday 1 December. Colour Strip - YELLOW for  $\beta\gamma$  films.

Please note - there is no issue of fast neutron films due to the NIMROD shutdown. Please return all fast neutron films and holders.

**OVERSEAS VACANCIES.** ESRO (details on Notice Boards). Head of Machine Operations Section at Neuilly-sur-Seine, France.  
CERN (details in Room 68, R20). Physicists, Grade 9; Programmers Grade 7, 8, 9, 10; Engineer or Physicist (Administration) Grade 10; Engineers (Electrical and Mechanical) Grade 9; Laboratory Technicians Grades 5, 6 and 7; Mechanic Grade 6; Technical Assistant to Management, Grade 9; Proof Reader/Copy Editor Grade 8; Secretary Grade 5/6; Clerk Typist in General Administration, Personnel and Finance, Grade 4/5.

**VISITORS.** Nine Graduates from Sussex University will visit the Laboratory on Tuesday, 2 December.

About fifty students and members of staff from Bristol University will visit the Laboratory on Wednesday, 3 December.

**OVERSEAS VISITS.** Dr. G Manning, to CERN, 28 November - 3 December, for discussions and to attend NPRC Meeting. Mr B R Diplock, to Holland, 1 - 2 December, for technical discussions with Phillips Research Laboratories, Eindhoven. Mr J H Swain and Mr R C Carter, to CERN 2 - 3 December, to discuss expansion system for HFBC, and full scale testing on chamber simulator. Dr R J N Phillips, to the USA, 2 - 11 December, to attend conference on Regge poles at University of California and to visit other Laboratories.

## Internal Events

Mon, 1 Dec, 11.30 am, Lecture Theatre	Nimrod Lecture Series	Dr G Giacomelli (Bologna and CERN)	Production and Total Cross-Section Measurements of Negative Particles at 70 GeV
Mon, 1 Dec, 2.15 pm, Lecture Theatre	Informal Talk	Dr G Bronca (Saclay)	The Superconducting Magnet and Accelerator Programme at Saclay
Wed, 3 Dec, 11 am, Lecture Theatre	HEP Disc Group	Dr E Eisenhandler (RHEL)	Current Status of p-p Elastic Scattering Experiment (1.5-4.0 GeV/e).
Wed, 3 Dec, 12.40 pm, (approx) Thurs, 4 Dec, 1.15 pm, Lecture Theatre		Film Show	"Hazard", a 36 minute, colour film from British Steel Corporation

A tensely dramatic story of a mountain climbing holiday in the Dolomites, is the vehicle used to point the moral of industrial accident prevention.

Mon, 8 Dec, 11.30 am, Lecture Theatre	Nimrod Lecture Series	Prof J Polkinghorne (DAMTP, Cambridge)	The Veneziano Model
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(This is the last Nimrod Lecture before the new year)

## External Events

Mon, 1 Dec, 4.15 pm, Clarendon Lab, Oxford	High Energy Theory Seminar	Dr R Arnowitt (North eastern and IC)	Current Algebra and Veneziano
Mon, 1 Dec, 5 pm, University of Bristol	Phys. and Geo- phys Colloq.	Prof P H Fowler (Bristol)	Transuramic Elements in Cosmic Ray Primaries?
Tues, 2 Dec 2.30 pm, 21 Banbury Rd, Oxford	Nuclear Phys Seminar	D M Brink (Oxford)	What's the Use of Hartree-Fock?
Thurs, 4 Dec, 4.15 pm, Clarendon Lab, Oxford	Theor Phys Seminar	Prof R E Peierls	Low Temperature Anharmonicity and Mössbauer Effect.
Thurs, 4 Dec, 8.30 pm, 21 Banbury Rd, Oxford	Seminar in Ele- mentary Particle Phys.	Dr S Berman (SLAC & Imp Coll)	Large Mass Time-like Muon Pairs in Hadronic Interactions



#### EVENTS AT AERE

Tues, 2 Dec, 2.0 pm,  
Conf Rm, Bldg 8.9

Theor Phys Div  
Seminar

Dr G Barton  
(Sussex)

Neutron Deuteron Scattering near Threshold.

Thurs, 3 Dec, 3.30 pm,  
Room H8

Nuclear Phys  
Colloq

Dr B W Hooton  
(AERE)

The Measurement of Static Quadrupole Moments in Nuclei

#### Social News

RECORD SOCIETY. Tues, 2 Dec, 12.30 pm, Lecture Theatre

Johnny Cash entertains the prisoners at St Quentin Jail with Country Style Music.

CHESS TOURNAMENT. Apologies to Noel Stewart, as he has  $2\frac{1}{2}$  points, half point behind the Leaders.

CHRISTIAN FELLOWSHIP. Fri, 5 Dec, 12.30 pm Lecture Theatre -

Fact and Faith film produced by the Moody Institute of Science entitled "Hidden Treasures" lasting 28 minutes, in colour. The film produced by this Institute make good use of techniques such as high speed and time lapse photograph to demonstrate the miracles of the created universe.

TAIL PIECE. A recently received "address", suitable for a young Laboratory?

Sacunir Research Council, Rutherford Lad, R20, Chiltern.

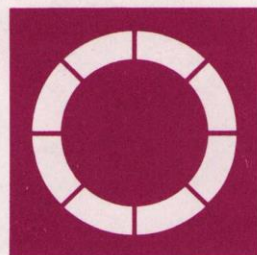
Rutherford Laboratory  
5.12.69.

H F Norris, Ext 484  
Scientific Administration Group  
Building R20

LDB.



No 44/69  
8 Dec 69



# Rutherford Laboratory Bulletin

## General News

**FRENCH PHYSICS EXHIBITION 8 - 13 DECEMBER 1969.** The theme of the Rutherford Laboratory's exhibit at the 1969 French Physics Exhibition is "Superconducting Magnet Technology in High Energy Physics". On display will be a cut-away model of the proposed High Field Bubble Chamber, models showing the comparison between conventional and superconducting magnets, a RACON Double Pancake Coil and new stable filamentary composites. Photographs, sketches and descriptive matter will provide a backcloth to these exhibits. It is hoped to print a photograph of the exhibit in the Bulletin in due course.

**VISITORS.** Thirty members of staff and students from the Oxford School of Radiography will visit the Laboratory on Wednesday, 10 December.

**NIMROD SHUT-DOWN.** During the Nimrod shut-down period, Dec 69/Jan 70 the following programme of work is being undertaken:

1. Installation of XM9 ) Testing and commissioning of new
2. Installation of XHQ2 ) X3 Extraction System.
3. Maintenance of heat exchangers on Experimental Halls 1 & 2 cooling water supplies.
4. Installation of blast wall for 1.5 m. hydrogen bubble chamber (including modifications on K9 for Hyperon experiment).
5. Modification of K12  $\rightarrow$  K12A.
6. Installation of  $H_2$  target and M5 Magnets for K15.
7. Completing installation of  $\pi$  8 and K13A experimental apparatus.

**ELECTRICITY TARIFF.** The cost of electricity is particularly high during the months of December and January. Compared with a daytime cost in other months of 0.63 and 1.68 pence per unit, the December/January weekday rates are:

17.00 - 12.00 and 16.30 - 18.30	3.38 pence per unit
12.00 - 16.30	2.98 pence per unit
18.30 - 23.00	2.46 pence per unit

Everyone is expected to exercise reasonable economy in the use of electricity at all times but these figures show that care is particularly necessary in December and January. Copies of the coloured chart showing the costs for a unit of electricity at different times of the year may be seen in local administration offices.

**THE COSENER'S HOUSE.** It has been decided to close The Cosener's House for the two weeks commencing Monday, 8 December, 1969, to repair the major fault which has developed in the central heating and hot water boiler. Accommodation section will endeavour to find other accommodation for residents and visitors during this period.

**OVERSEAS VACANCIES.** **ESRO** (details on Notice Boards) Translator in Paris. **CERN** (details in Room 68, R20) Lab. Technician (Photographic Film Processing) Grade 6/7; Computer Operator, Grade 4/5; Mechanical Designer - Draughtsman, Grade 6/7; Assistant Surveyor Grade 6/7; Locksmith/Ironsmith, Grade 5; **CERN** Fellowships and Research Associateships - Applications for 1970 should be made by 23 January.

**LECTURE THEATRE FACILITIES** - In particular the Use of the Overhead Projector. A leaflet is now available giving advice on preparing originals, making infra-red transparencies, adding to existing transparencies, and other materials for use on this projector. It is available on request from H F Norris, Rm. 42 Ext 484 with further advice if necessary. Amendments will be issued as and when necessary.

**FILM NOTICE** Period 13 commenced Monday 1 December Colour Strip - YELLOW for  $\beta$  films. Please return all fast neutron films and holders

**OVERSEAS VISITS** Mr C R Walters and Mr P Gottfeldt, to Paris 6 - 17 Dec. and 7 - 15 Dec. respectively, to officiate at the French Physics Exhibition and to visit Saclay.

Mr N M King, to CERN, 7-9 Dec., to attend meeting of the 300 GeV Working Group on Closed Orbit Control.

Dr G R Stevenson, Mr G S Levine and Mr G Stapleton, to CERN, 7-9 Dec., to attend Group Meeting on Radiation Problems on the 300 GeV Machine.

Dr A S L Parsons and Dr A Astbury, to CERN, 8-9 Dec., for discussions on various aspects of the  $\bar{p}$  - p experiment.

Mr J A Fox, to CERN, 8-10 Dec, to attend 300 GeV Machine Committee Meeting and associated discussions.

Mr E W G Wallis, Mr P S Trowbridge and Mr N J Beadle, to CERN, 8-10 Dec., for technical discussions related to the  $\bar{p}$  - p experiment.

Dr L C W Hobbs, to CERN, 9-10 Dec., to attend meeting of the 300 GeV Machine Committee.

## Internal Events

Mon. 8 Dec., 11.30 a.m.,  
Lecture Theatre

Nimrod Lecture  
Series

Prof. J Polkinghorne  
(DAMTP, Cambridge)

The Veneziano Model

Wed. 10 Dec., 11 a.m.,  
Lecture Theatre

HEP Disc Grp

"Theorists Suggest Experiments" (The Second of a series of three meetings in which members of the theory group suggest areas where future experiments may be of most value).

No further meetings in this series until 7 Jan 1970.

Wed., 10 Dec.,

1.15 p.m.

Film Show

"The Dawn of an Industry", a 26 min., colour  
film from British Petroleum.

Thurs., 11 Dec.,  
Lecture Theatre

12.40 p.m.

The story of Hovercraft from the early work of Christopher Cookerell with his famous coffee tin experiment, through research and development including the important breakthrough with the use of flexible extensions or skirts. Full scale trials in different parts of the world are shown moving on to commercial operations. The film concludes with a look into the future, which should be interesting, as this particular film was released in October 1966. PLEASE NOTE CHANGE OF SHOWING TIMES.



R20

Fri., 12 & Sat 13 Dec., Lecture Theatre DNPL - RHEL JOINT PHYSICS MEETING

High Energy Physicists of the two laboratories, both staff and University visitors, have been invited to a meeting at the Rutherford Laboratory for two days (Friday, Saturday 12-13 December). The main emphasis is the detailed discussion of four experiments; some matters of experimental technique will be treated more briefly, according to the following timetable.

#### FRIDAY

9.45 am	Outline of the RHEL Experimental Programme	Dr G Manning
11.15 am	Measurement of C-violating asymmetry in $\eta$ decay	Dr T G Walker
2.15 pm	Outline of the DHPL Experimental Programme	Dr E Gabathuler
4.15 pm	Wide Angle Pair Production Experiments	Dr D W Braben

#### SATURDAY

9.30 am	Experimental Study of $K^0$ Decays at DNPL	Prof P G Murphy
12.00	The Use of a Hydrogen Target surrounded by Neon in the British National Hydrogen Bubble Chamber	Dr C Fisher
12.30 pm	The High Field Bubble Chamber	Dr I Butterworth
2.00 pm	An Experiment to search for possible charge asymmetries in the decays $K^+ \rightarrow \pi^+ \pi^0 \gamma$ and $K^+ \rightarrow \pi^+ \pi^0 \pi^0$	Dr J J Thresher
4.00 pm	Tagged Photon Beams	Dr J Thompson

It is probable that there will be some seats available in the main lecture theatre. To ensure that our guests are not crowded out, staff wishing to attend isolated sessions are invited to apply for tickets to Mr A G Taylor, Building R1.

Mon. - Wed 15 - 17 Dec., Lecture Theatre. Theoretical Physics Seminar.  
Full details of the programme will be given in the next Bulletin.

### External Events

Mon., 8 Dec., 4.15 pm Clarendon Lab, Oxford	High Energy Theory Seminar	Dr L Copley	Photoproduction with the Quark Model with and without Relativistic Corrections.
Tues., 9 Dec., 2.0 pm Daresbury Laboratory	Lecture Series	Dr P Kabir	High Energy Inelastic Lepton Scattering
Tues., 9 Dec., 5.45 pm Bristol	Inst. of Maths Lecture	Prof M S Bartlett (Oxford)	Stochastic Processes
Tues., 9 Dec., 7.30 pm Oxford Coll. of Tech	British Computer Society Branch Meeting	Dr J Howlett	The Atlas Laboratory Story
Wed., 10 Dec., 2.30 pm Univ. of Manchester	Theor Phys Seminar	Prof H McManus (Michigan State & Oxford)	Realistic Force and the Inelastic Scattering of Nucleons from Nuclei
Thurs., 11 Dec., 8.30 pm 21 Banbury Rd., Oxford	Seminar in Elementary Particle Physics	Dr J Dowell (Birmingham)	The Current Situation on $K^+ p$ Elastic Scattering Data and the $I = 1$ KN Phase Shifts

#### EVENTS AT AERE

Tues., 9 Dec., 2.0 pm Conf. Rm Eldg 8.9	Theor. Phys Div Seminar	Dr R B Stinchcombe (Oxford)	Correlation Functions in Magnetism
Thurs., 11 Dec., 3.30 pm, Conf. Rm., H.8	Nuclear Phys Colloq	Dr H J Sherman (QMC) and Dr I M Blair (AERE)	Nuclear Physics Techniques Shed Light on the Solid State.

### Social News

CHRISTIAN FELLOWSHIP Friday 12 December. What's in a Name? The Christian Fellowship invite you to a discussion led by Frank Smith concerning the significance and power in the Name of God. The meeting commences at 12.30 pm in the P.L.A. Conf. Rm., R12.

RECORD SOCIETY 12.30 pm Tues., 9 Dec., Lecture Theatre

Bach = Brandenburg Concertos Nos 5 in D and 6 in B $\flat$   
Played by the Hamburg Chamber Orchestra conducted by Harry Newstone (Stereo)

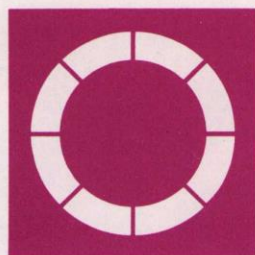
The six concertos in this set were written in 1721 as a commission from the Margrave of Brandenburg, who had his own orchestra. Bach only received the equivalent of pin-money for them, and it is likely that they were never even performed during his lifetime. They are really concerti grossi for different combinations of instruments, and each is a masterpiece in its own right. No. 5 is for solo clavier (harpsichord) flute and violin, with string accompaniment, and No 6 is for violas, cellos and basses only, no violins being employed.

Rutherford Laboratory  
5.12.69

H F Morris Ext 424  
Scientific Admin Group  
Building R20



No 45/69  
15 Dec 69



# Rutherford Laboratory Bulletin

## General News

**SCIENTIFIC ADMIN. NOTICE.** The next issue of the Bulletin will be published on Friday, 19 December and will cover two weeks. Copy for this issue should be sent to H.F. Norris, Building R 20 not later than 12 noon on Wednesday 17 December.

**USED STAMPS FOR THE CHESHIRE HOME IN BERKSHIRE.** Dr Orr of Medical Division, Building 364 AERE, has again appealed for used postage stamps for the above worthy cause. Tudor Evans, Building R 20 has agreed to act as a Rutherford Laboratory collector for this purpose, so as to minimise the number of small individual packets going over to AERE.

**MISSING EQUIPMENT.** The following item of equipment has been reported missing:-

Avometer Model 8 Ser. No 800-C-163 D

Anyone with information on the present whereabouts of this instrument is asked to contact Mr H Walford Building R 50 Ext.242.

**FILM NOTICE.** Period 13 commenced Monday, 1 December Colour Strip - YELLOW for  $\beta\gamma$  films. All fast neutron films and holders should be returned.

**UNIV. OF SALFORD.** Information to hand on an International Conference on Liquid Scintillation Counting at the University of Salford, 21-22 Sept., 1970 Abstracts (200 words) of submitted papers must be received by 31 January 1970. Further information from Mr T F Gubbins R 20 Ext 266/555.

**OVERHEAD PROJECTORS: MAKING INFRA-RED TRANSPARENCIES.** A leaflet is now available giving advice on preparing originals, making infra-red transparencies etc, from H. F. Norris R 20 Ext 484. Users of this facility are advised to obtain a copy of the leaflet BEFORE starting to prepare originals.

**SLIDE PROJECTION IN THE LECTURE THEATRE.** Lecturers and organisers of lectures are asked to ensure, that if slides are to be shown, they are made available, 30 minutes before the start of a lecture. Slides should be sent to H. F. Norris, Room 42, R 20.

**OVERSEAS VISITS.** Dr N Lipman, Dr T G Walker, Dr P Grannis and Prof. E Bellamy, to CERN, 14-17 December, for discussions with Dr French. Mr J E Boon, Mr R J Stanhope and Mr P H Sharp, to CERN, 14-17 December for discussions on the design and installation of the projected Muon experiment on the I.S.R. Mr P J Barker, to the USA., 14-18 December to visit Kollsman, Long Island and the Goddard Space Flight Centre, Maryland for discussions on the T.D.1. Satellite.

## Internal Events

Mon., 15 Dec - Wed., 17 Dec. Lecture Theatre. Informal Theoretical Physics Meeting, (primarily intended for Theoreticians). The programme is as follows:

### Mon 15 December

14.00 - 15.30 Dr G H Stafford Prospects of Superconducting Accelerators  
Dr G Manning The I.S.R. Programme

16.00 - 17.30 Prof L O'Raifeartaigh Symmetry Survey:  $O(4)$  - Symmetry, Saturation of  
(Dublin) Current Algebra and Chiral Lagrangians.

### Tues 16 December

9.45 - 11.15 Prof M Jacob (CERN) Duality

11.45 - 13.15 Dr P V Landshoff (Cambridge) Regge Cuts: A Review of the Theory

14.15 - 15.45 Prof A M Wetherell (CERN) The Experimental Programme at I.H.E.P. (Serpukhov) - Past, Present and Future

16.15 - 17.45 Prof L Van Hove (CERN) Asymptotic Problems in Hadron Physics

### Wed 17 December

9.45 - 11.15 Prof H J Lipkin (Weizmann Institute) Quarks, Peripheralism and Duality

11.45 - 1.15 Dr Hong Mo Chan (CERN) Phenomenology with the Generalised Veneziano Model

14.15 - 15.45 Prof D Perkins (RHEL) Scale Invariance and Partons

16.15 - 17.45 Dr P K Kabir (RHEL) High Energy Lepton Scattering

Wed 17 December 1.15 pm Film Show. Japan - Season by Season a 29 min colour film

Thurs 18 December 12.40 pm  
Lecture Theatre

Absolutely guaranteed to be non-scientific; however, as the festive season is approaching rapidly, here is a film which it is hoped will appeal to everyone. It can be described as a panorama of the Japanese way of life with its festivals, music, gardens, fishing, industry, handicrafts etc etc. As this is the end of the 1969 season the Editor would like to thank all those people who have expressed their pleasure with the selection of films shown so far. The 1970 season opens, on 7 & 8 Jan, with the Solar Eclipse Expedition 1966, followed by three special showings on 9, 16 and 23 Jan of the new SRC film - INSIGHT.

Thurs 18 December. Staff Meeting The Director will preside and the Agenda will include the Presentation of the  
3.0 pm Lecture (Invitation only) John Wilkins Awards for 1969  
Theatre (See circular 35/69 for full details)

## External Events

Thurs., 18 Dec., 5.30 pm  
London School of Hygiene

Inst of  
Maths Meeting

Prof. C A Coulson  
(Oxford)

A Variation Method - A Chapter in  
Applied Mathematics

### EVENTS AT AERE

Tues., 16 Dec., 2 pm  
Conf. Rm., Bldg. 8.9

Theor Phys  
Div Seminar

Prof. P G Burke  
(Queen's Univ Belfast)

New Methods in Electron  
Atom Scattering

Thurs., 18 Dec., 3.30 pm  
Conf. Rm. H.8

Nucl Phys.  
Colloq.

Prof. A Ashmore  
(Q.M.C.)

A Review of Physics  
Research at Q.M.C.



## Social News

RECORD SOCIETY 1.15 pm Tues., 16 Dec., Lecture Theatre (Please note time of starting)

Net King Cole - "In Person"

A stereo recording of this famous artist, singing such well known favourites as "If I give my heart to you" and "Because you're mine".

CHRISTMAS CAROLS 12.30 pm., Fri., 19 Dec., Lecture Theatre

The Christian Fellowship invites you to come along and raise your voice at the Carol Service, led by Roy Chilvers of the Counties Evangelistic Association.

ABINGDON CHRISTIAN FESTIVAL. Once again you are invited to the Market Square, Abingdon on Thursday, 18 December, 6.30 - 7.30 pm to sing your favourite carols and see the whole Christmas story enacted by local school children, in a colourful series of torchlight processions and tableaux. The singing will be led by the Abingdon Borough Band. Come and join the throng. (If wet, in the Abbey Hall).

TAIL PIECE. Another address, based on the diversification theory?

N.I.R.N.S. Harwell, Rutherford and Hydr. Energy Laboratory, Safety Section, Didcot, Berkshire.

Rutherford Laboratory  
12.12.69

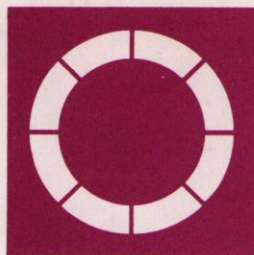
H F Norris Ext 484  
Scientific Admin Group  
Building R20

STOP PRESS: NATIONAL SAVINGS - MONTHLY PAID STAFF

National Savings Cycle No 78 ended on 30.11.69. Staff who have not already collected their certificates can do so from the Cash Office, Building R 20 during Cash Office hours.



No.46/69  
22 Dec 69



# Rutherford Laboratory Bulletin

## General News

**JOHN WILKINS AWARDS 1969.** At the Staff Meeting on Thursday, 18 December, the Director, Dr G H Stafford, presented the John Wilkins Awards for 1969.

Mr P Bowles, the Chief Engineer gave a brief history of the Award Scheme which perpetuates the memory of John Wilkins who died in a car accident at Zurich on the 17 October 1962.

John Wilkins was one of the principal architects of Nimrod and carried responsibility for the magnets from the beginning, as well as the beam handling programme and research on high magnetic fields.

The Scientific Assistants Award went to Jeffrey Penfold who joined the Rutherford Laboratory in December 1965 after a three months course at the AERE Scientific Assistants Training School. He obtained the O.N.C. in Science in 1967 with sufficiently high marks to be awarded a place on the B Tech sandwich course in Applied Physics at Brunel University and has twice returned to the Laboratory for his industrial training periods.

Kevin James Wain received the Craft Apprentice Award for 1969. He joined the Laboratory in September 1966 under the Joint RHEL/AERE Apprenticeship Scheme as an apprentice instrument mechanic. After initial training at AEE Winfrith, he has been attached to various workshops at AERE and the Rutherford Laboratory and is now in his last year of apprentice training.

He continued his studies after leaving school by day release and in 1969 was awarded the ONC in Engineering with credits in all subjects. He is now studying for the HNC in Engineering.

**SCIENTIFIC ADMIN NOTICE.** This issue of the Bulletin covers two weeks. Copy for the next issue dated 5 January 1970 should be sent to Room 42, R20., not later than 12 noon on Wednesday 31 December, in writing please. If it is necessary to make any enquiries about the Bulletin during the week after Christmas, please ring Mr F Harden, Ext 6114/484.

**METRICATION DISPLAY:** The Laboratory has secured the loan of a small display on metrication prepared by the British Standards Institution. It will be on view during the period 22 December - 2 January, initially in the foyer of R1 and subsequently in other buildings.

**ANGLO-AUSTRALIAN TELESCOPE EXHIBITION:** Shortly after Christmas a small exhibition will be set up in the foyer of R1 showing a model of the Anglo-Australian telescope together with various display panels.

**FILM NOTICE:** It is Period 13. Colour Strip - YELLOW. Period 1 commences, 29 December. Colour Strip - BLUE  
Six month TLD change for surnames commencing A,B,C,D.

**MISSING EQUIPMENT:** The following item of equipment has been reported missing:

Stanley Electric Saw, AERE No 20779, 14/3948 and engraved with the name G. Arnison

Anyone with information on the whereabouts of this item is asked to contact G Arnison, Ext 291.

**THANK YOU DONORS:** A letter of thanks has been received from Mrs Beryl Phipps, Assistant Regional Donor Organiser, on the successful two day clinic held at the Laboratory on 29 and 30 October this year. "The number reporting for both days was 149 and included in this were 32 new donors, which was a very high percentage. The blood collected has long since been grouped, labelled and distributed to the various hospitals in need and will have by now largely contributed in the recovery of many hospital patients."

**OVERSEAS VACANCIES - CERN** (details available in Room 68 R20) - Laboratory Technicians Grades (6) 7 (Electronic) in Data Handling Division, Synchrotron Injector Division and Proton Synchrotron Machine Division, Paper Preparation Machine Operator Grade (2) 3 in Data Handling Division, Document Reproduction Section, Administrative Clerk Grade (5) 6 in Personnel Division, Health Insurance.

## Social News

**CHRISTIAN FELLOWSHIP** Friday 2 January, 12.30 p.m., P.L.A. Conference Room. Prayer Meeting - led by Ernie Newbold

\* \* \* \* \*

This is the last issue for the year 1969 and once again the Editor would like to thank all these who have helped in the production of the Bulletin during the past twelve months. In particular thanks are due to the Typists, Reproduction Section and the Post Ladies. Eight hundred and thirty are sent to eighteen Universities, AERE, Culham, State House, Daresbury and to a number of individuals.

A Happy Christmas and a Prosperous New Year to all our readers.

Rutherford Laboratory  
19.12.69

H F NORMIS Ext 484  
Scientific Admin Group  
Building R20