



COMMON/CSCAL/IBM ,NERR,NCH,NGAP,ISCAN,NBR,NGR,NSCAN1,NRO
1IYSEL,IYSEL,IYMAX,NTRACK,NSCAN,NES,NFAIL,MAXTH
2NBEGIN,NTK,NTRY,NMISS,NSSR,NFIC,MAXMIN,NFIRST
COMMON/CFID/MFX(20,3),MFY(20,3),NFOX(10,3),NFX(10,3)
UTAB(2,20,3),NX(100,4),NY(100,4),XN(2),YN(2),IB,DU,IC
R IDY(100,2),JDX(4),JDY(4),IHS(4),IC bulletin 25
S NCF(16),IFS,NFS,FX,FY,JK,PIC,KPIC,NCOUNT,NBIN,MAXOV,MAX
T MAXN,CTA,CTB,MX,MY,JA,JD,JE,JC,CTE,CTF,CTG,CTH,CTI,CTJ,CTK
DIMENSION NCTR(144),NC(144),NCT(144),CTE,CTF,CTG,CTH,CTI,CTJ,CTK

A black and white photograph of two men. On the left, a man with glasses and a patterned tie sits in a chair, holding a book. On the right, a man with glasses and a dark suit stands, holding a book and looking at the seated man.

The Conference programme is displayed on the notice board.

INTERNAL EVENTS

NIMROD LECTURE SERIES

Monday 8 December at 11.30
Lecture Theatre

A Study of Double Pomeron Exchange Processes at the ISR

Dr B Shen/CERN

NIMROD USERS MEETING

Monday 15 December 13.30 - 17.00
Lecture Theatre

Seminar on Polarised Targets for High Energy Physics and Neutron Research.

R W Newport, A S L Parsons, S F J Read and S F J Cox.

ATLAS COMPUTING DIVISION LECTURE

Tuesday 9 December at 0900
In the Colloquium

The Administration of SRC Grants on the ICL 1906A Computer

Dr R M Payne/London Office

HEP SEMINAR

Wednesday 10 December at 11.00
R61 Conference Room

Some Models of Quark Confinement

H Osborn/DAMPT

HEP DATA HANDLING SECTION SEMINAR

Wednesday 10 December at 13.30
R61 Conference Room

System Software Aspects of SWEEPNIK - *P Elcombe/Cambridge*
SWEEPNIK is a film measuring machine developed by the Cambridge bubble chamber group, incorporating a computer - controlled laser beam to follow & digitise particle tracks.

SEMINAR IN COMPUTING

Friday 12 December at 11.00
R61 Conference Room

The Acquisition & Processing of Data from an Experiment on Omega.

K C T O Sumorok

NIMROD LECTURE SERIES

Monday 15 December at 11.30
Lecture Theatre

There are Two Q Meson Resonances. Spin-Parity Analysis of the $(K\pi\pi)$ System in $K_p \rightarrow (K\pi\pi)p$ at 13 GeV/c at SLAC.
Dr R Cashmore/Oxford.

TRADE EXHIBITION/SEMINAR

Tuesday 16 December
All day, with seminar at 11.00
R12 Conference Room.

Datron Electronics Ltd will have on display a wide range of DVM's of extreme accuracy, resolution and reliability. In addition a seminar will be presented at 11.00 hours on "Latest Technical Innovations in Signal Measurements".

HEP SEMINAR

Wednesday 17 December at 11.00
R61 Conference Room

Continuum Ambiguities in π^+p Phase Shift Analysis

D Atkinson/Groningen

LASER MEETING

17 - 19 December
Lecture Theatre

The European Study Conference on High Power Lasers and their Scientific Applications. Morning sessions commence at 0930 and afternoon sessions at 14.30. The Conference Programme is displayed on the Library notice board.

EXTERNAL EVENTS

PHYSICS DEPT.COLLOQUIUM/JJT PHYS.LAB.READING U. - 1700 hrs

8 Dec: P J Anderson - Current-Voltage Characteristics of Gold-doped Silicon p-n Junctions.

HEP SEMINAR/4th FLOOR SEMINAR ROOM MANCHESTER U - 1600 hrs

11 Dec: J Bailey/Daresbury - The Muon Anomalous Magnetic Movement.

THEOR.PHYS.SEMINAR/MANCHESTER U. - 1430 hrs

10 Dec: Prof L Castillejo/UCL - Some Aspects of Condensed Nuclear Matter.

THEORETICAL PHYSICS SEMINAR AT QUM - 1615 hrs

8 Dec: Prof L Castillejo/UCL - A Field Theoretical View of Dense Nuclear Matter.

NP GROUP MEETING/ROOM 129.KING'S COLLEGE - 1400 hrs

10 Dec: Dr N Rowley/Liverpool - Heavy Ion Elastic Scattering & Complex Angular Momentum.

PHYS.& GEOPHYS.COLLEQUIUM/ROYAL FORT.BRISTOL U.-1700 hrs

8 Dec: Dr J Malos - Some Recent Developments in H.E.P.

THEOR. & HEP SEMINAR/SOUTHAMPTON U. - 1430 hrs

12 Dec: Prof R H Dalitz/Oxf - A New Baryon Spectroscopy

THEORETICAL PHYSICS SEMINAR/SUSSEX U - 1615 hrs

11 Dec: Dr D Bailin/Sx - Review of ψ - chology

THEORY SEMINARS/DARESBUURY LABORATORY - 1400 hrs

8 Dec: Sidney Coon/U. of Arizona - Topic to be announced
15 Dec: D L Moores/UCL - Electron Molecule Scattering.

N P DIV COLLOQUIA/CONF.RM.HANGAR 8,AERE - 1530 hrs

11 Dec: Dr H McKerrill/Nat.Museum of Antiquities,Scotland - The Impact of the Physical Sciences on the Study of Pre-History.

18 Dec: Dr J Grnbin/Sx - The "Jupiter Effect" and other Topics.

NIMROD SCHEDULE

Bulletin No 24 gave full details of Cycle 9 which ends on 22.12.75.

OBITUARIES

Dr. J.A.V. Willis

It is with deep regret that we announce the death of Dr J A V Willis, the Rutherford Laboratory's first Secretary, on Friday 28 November. He was aged 63.

John Arthur Valiant Willis was educated at Repton and Bristol University where he read chemistry.

He worked as a chemist in the War Department and the M.O.S. (Ministry of Supply) from 1936 to 1945 moving to Tube Alloys Directorate for one year before joining the Department of Atomic Energy of the M.O.S. in 1946. He came to AERE Harwell in June 1948 and worked in the Extra-Mural Research Division until 1954 when he left for the USA to spend the next three years as the Atomic Energy Authority Representative on the UK Scientific Mission at the British Embassy Washington.

Shortly after his return to England he was appointed Secretary to the National Institute for Research in Nuclear Science (NIRNS) and Secretary of the Rutherford Laboratory. He retained the position as Secretary to NIRNS until the formation of the SRC in April 1965. He then moved to London as Secretary of the Nuclear Physics Board and later became head of the Council Secretariat. In 1970 he moved (on Secondment) to the British Association for the Advancement of Science as its Secretary, a position he held until his retirement in 1972.

Perhaps the most fitting epitaph to this most gentle of men was spoken by an old colleague who on hearing the sad news referred to John Willis as 'a scholar and a gentleman'.

We extend our deepest sympathy to his wife and family.

Mr. D. Kent

We deeply regret to report the sudden death of Mr D Kent on Sunday, 23 November at the early age of 54.

Des, a member of the Electrical Engineering and Ancillary Plant Group came over to the Rutherford Laboratory from the Reactor Division at AERE in 1959.

During the last war Des served as an armourer in REME and landed in France on 'D' Day with the Allied Forces.

He joined AERE in 1948 working on reactor maintenance although he had arrived at the establishment 2 years earlier working for a contractor on installation projects.

At the Rutherford Laboratory he was employed firstly on Site Services and then in the management of the Experimental Halls before his last appointment and was consequently well known to many people.

We extend our deepest sympathy to his wife and family.

Mrs Kent wishes to express her thanks for the help and sympathy extended to her in her recent bereavement and for the many floral tributes received from her husband's friends and colleagues at the Laboratory.

PERIODIC SAFETY TEST OF PORTABLE ELECTRICAL EQUIPMENT

The test carried out during October/November has now been completed.

The current marker colour

is BLUE and is marked "Do not use after March 1976".

Portable electrical equipment marked otherwise or has no marker, should be considered unsafe, and MUST NOT BE USED. All such items should be returned if possible to Electrical Services Section, Building R18. Alternatively ring A Hipwell, on Ext. 573.

GUIDE TO AUTHORS

A new format has been devised for Rutherford Laboratory Reports.

The 3rd edition of Guide to Authors, RL-75-127, giving all details is now available, from the Library.

MISSING EQUIPMENT

The following item of equipment has been reported missing:-

Hewlett Packard 35 Pocket Calculator, Ser. No. 13025 11297. Anyone with information on the present whereabouts of this item is asked to contact Inventory Section, Room 48, R20, Ext. 570.

SALES TO EMPLOYEES

Sales of scrap metal/plastics as set out in RLN12/73 will

be made on 12 December and 2 January.

BULLETIN NOTICE

The next Bulletin No. 26/75 will cover a period of three weeks, from 22 December 1975 to 12 January 1976. Copy for inclusion in this edition should be with the Editor not later than 1000 hours on Tuesday, 16 December.

OVERSEAS VISITS

Dr A R Gillman, to CERN, 7 - 12 December, to attend WA3 collabor-

ation meeting, and discussions with CERN/Munich group concerning trigger logic.

Dr F J Wickens, to CERN, 8 - 12 December, to work on S120 & WA3 experiments and attend WA3 meeting.

Dr C J Hardwick will also attend WA3 meeting and work on WA3 experiment.

Messrs H O Normington, R W Morgan & L S Coulter, to CERN, 10 - 19 Dec. to dismantle and pack neutron counter experiment.

Dr C J Batty, to Saclay, 11 - 12 December, to give a seminar at the Centre d'Etudes Nucleaires de Saclay.

FILM BADGE NOTICE

Period 13 commenced Monday, 1 December. Colour strip -

GREEN for Bγ films and neutron packs.

Please make sure you are wearing the correct dosimeter and that all old ones are returned.

Six monthly TLD change for people with surnames commencing W, X, Y and Z.

NATIONAL SAVINGS CERTIFICATES

Weekly cycle ending 5.12.75 certificates can now be collected from the Cash Office R20 from Monday.

New members wishing to join the scheme can obtain enrolment forms from the Cash Office.

RUTHERFORD LABORATORY BULLETIN

Published by the Scientific Administration Group

Editor: H F NORRIS

Deadline for Insertions

1000 hours Tuesday 16 December

Room 42 Building R20
Rutherford Laboratory
Chilton Didcot Oxon
Abingdon 21900 Ext 484

GOOD WORKS Whether it's designing boilers for the Royal Observatory Edinburgh, converting old railway workshops in Swindon, advising on a new observatory in Hawaii or trying to obviate the need to nail sheets of asbestos on hard carved antique doors in Herstmonceux Castle to comply with current fire regulations - it's all everyday work for the Council Works Unit.

Roy Tolcher in the following article explains the scope of this 'everyday work' which is in his own words, - 'varied, demanding and always interesting'.

In April 1972 the Council Works Unit was set up at the Rutherford Laboratory with the following terms of reference:- "To provide to all Council establishments and other nominated participants a consulting engineering service; to undertake new works of a specified magnitude and the maintenance of plant and buildings; and to provide advice as required by Operating Divisions on construction work financed from Research grants".

Initially the establishments included in the arrangement were the Rutherford Laboratory, Atlas Computer Laboratory, Appleton Laboratory and its Field Stations, the Royal Greenwich Observatory and London Office. More recently the Royal Observatory Edinburgh has joined the scheme so all SRC establishments are now included with the exception of the Daresbury Laboratory.

During the still short history of the Unit, a wide range of work has been continually in progress. The developments at the Rutherford Laboratory - in particular the new Library, the 70 MeV Injector and the A4 extensions at Atlas are probably the best known of the Unit's projects to the readers of this article. I think the new Library stands out as an example of creative thinking both from the striking architectural features and also from the application of the Integrated Environmental Design (EID) concept with the very closest co-operation of the various disciplines involved at the design stage.

Current Rutherford Laboratory work for the Unit includes the provision of a temporary Laser facility and a permanent Laser Laboratory, and these projects are both interesting and demanding - high powered lasers requiring special 'clean room' conditions to a high standard for successful operation.

A great deal of work has been carried out at the Appleton Laboratory and quite a large project - the New Computer Building - is nearing completion there now. This project again has utilised the IED concept and has

gone a further stage forward in utilising heat-recovery techniques. With the computer in operation, sufficient heat is recovered to provide all requirements for re-heat on the air conditioning and office heating under weather conditions. Special consideration was given to the design to the good thermal performance of the building envelope and particularly to the particular noise problem at Appleton Lab. with the flight path from Heathrow overhead.

Many other projects have been worked on at Appleton including new boilers and controls, UK5 and now UK6 Satellite Control Centres, Balloon Payload Facility, new 11Kv and 415V electrical supplies including power factor correction, diesel generators (including one at Winkfield, a NASA tracking station), a new Gate Lodge, a new fire alarm system, new extensions at Chilbolton and the project design for a major site expansion of Offices and Labs.

Work for London Office started with the conversion of offices in Holborn before the CWU was even formally set up. After the conversion of additional London office in Oxford Street, attention then switched to Swindon with the conversion of Suite 1 temporary office accommodation at British Rail Swindon Works and more recently the conversion of an ex GWR workshop building (good stuff this built out of stone from Box tunnel in the days of Isambard Kingdom Brunel!) into further offices for SRC Headquarters staff. In the meantime design work for the new Swindon Office is going well.

At the Royal Greenwich Observatory the Unit has been involved in various schemes and installations - more new boilers, new building proposals and more recently modifications to Herstmonceux Castle itself to meet the latest Fire Prevention requirements.

At the Royal Observatory Edinburgh we have installed a new gas main, yet more new boilers, another diesel generator and we are actively working on other schemes including a new Workshop and Office extension.

As part of the advisory service we have assisted with foundation problems in the Falkland Isles, observatories in Australia and Italy and a new observatory being built at Mauna Kea in Hawaii. CWU are also working with Leeds University where a scientist has problems with regard to setting off explosives in holes in the ground for research into implosive welding techniques! The Unit has to provide suitable holes - not as simple as it may seem.

The work of the Council Works Unit is therefore truly varied, demanding and always interesting. Indeed, I would say that in my experience it is quite unique.

IPCS General Meeting, Tuesday 16 December, at 1300 hours, Lecture Theatre. Subject - "The Attack on Inflation". Speaker - L J White/NEC.

CHRISTIAN FELLOWSHIP All are welcome to prayer meeting at 12.30 in the R12 Conference Room on Friday 12 December.

On Friday 19 December, our annual Carol Service, led by members of the Abingdon Salvation Army Band, will commence at 12.45 in the Lecture Theatre and all are warmly invited to attend.

RECORD SOCIETY Tuesday 9 December, at 13.10, Lecture Theatre, Choruses from Handel's 'Messiah' Vienna Academy Chorus and State Opera Orchestra, conductor Hermann Scherchen.

Tuesday 16 December at 12.20, Lecture Theatre, Christmas Carols - details to be announced.

'HELLO' RL & ATLAS Peggy Thomson wishes to thank friends at the RL & Atlas for cards & best wishes during her recent illness.

1975 DARTS CHAMPIONSHIP This years championship was played on Friday 21 November. Eleven teams took part, playing for a Team (4 players), Doubles and Singles Cups.

The 'Singles' was won by Chris Davies, R25, who beat Bill Oliver, R1, in a very fine final.

The 'Likes Pot' pair of Ron Pike, R25 and Bill Oliver, R1 won the 'Doubles' by beating the pair from 'The Sweeney', Chas Smith and Brian Wheeler.

The 'Team Cup' went to 'The Sweeney', Chas Smith, Brian Wheeler, Alan Slater and Steve Stoneham who beat R9 'A', Frank Cooke, Malcome Arnold, Ian Foster and Keith Sinclair.

Ian Foster won the highest score of the evening with the magical 180.

Thirteen players had scores of 140.

1975/76 CHESS CHAMPIONSHIP After three rounds the leading players are Peter Hemmings and Peter Craske with 3 points, followed by Mike James, Vic Saunders, Peter Kent, Barry Whittaker and Bob Hambleton on the 2 point mark.

It looks as if it is going to be a close run tournament especially with Jim Riddle, last years winner, and Mike Elder waiting to move up if there is any slip by the leaders.