

# PRUTHERFORD 3

14 April 1980 No.7

# **Ron Russell Retires**

"The Laboratory has one of its toughest and most rewarding jobs ever - to build and operate the Spallation Neutron Source (a fine machine of world class). the Project and all those working on it well."

This passage from Ron Russell's speech of thanks, made on the occasion of his retirement, epitomises the man for whom a difficult task was an exciting challenge to be worked at with dedication, yet who never forgot the welfare of the men who had to accomplish it.

The "House Full" sign was up outside the door of R12 Conference Room where many friends and colleagues gathered on Thursday 25 March to wish Ron a happy retirement.

"On this occasion I think my speech will turn out to be longer than usual", said Dr Stafford as he opened the ceremony. Ron had had an interesting career, he continued, much of which, because of Ron's modesty, would be new to both 'old lags' and 'new boys' alike.

#### **Early Days**

Educated at Royal Liberty School, Romford, Ron left at the age of 17 with Higher School Certificate and Intermedicate BSc. For a while he worked as an analytical chemist with May & Baker, but when the opportunity arose in 1941 to take a full-time engineering degree course at Woolwich Polytechnic, under a wartime Government scheme, he naturally grasped the chance. Having completed Part I, he joined the Army (REME) and trained as a Radar

By 1943 he was serving as an Officer with the Workshop Company of the 17th Indian Division in Burma, and by the grand old age of 22 had reached the rank of Major. His experiences covered the siege of Imphal in 1944 and the re-conquest of Burma in 1954. He finished his service with a tour of duty with the 7th Indian Division in Thailand and Malaya. During this period Ron formed a great respect for the ability of the Indian and Gurkha soldier.



With the assistance of Drs Stafford and Manning Ron Russell does a test run on his new garden seat. 31799

#### And then Nimrod

Back in England he completed his degree course and in 1949 joined the Eastern Electricity Board where he gained the experience which was to prove invaluable in the commissioning of Nimrod. In 1959 Ron arrived at Chilton and from 1961-63 was busy setting up and leading the Nimrod Operations Group becoming Group Leader of Electrical Engineering as well, in 1967. The team that he built up in those early days was close knit bunch of highly individual characters with enthusiasm and expertise enough to have built and operated any machine. They worked hard and with dedication, and Ron saw to it that relaxation wasn't forgotten. The "Horse & Jockey" featured prominently in the life of the group during the commissioning period. At the same time he also gained the confidence of the experimental teams, creating from the two somewhat different types of people a smooth running community. With increasing responsibilities he was made Deputy Division Head, and then Head of Nimrod Division in 1976. The following year he was promoted to Directing Grade and given the task of heading SNS Division as Chief Engineer of the Laboratory.

#### Owed a Debt

When Nimrod shut down in mid 1978, Ron was the one to organise the dismantling of the machine. More importantly he had to solve the problems the break-up posed for all Nimrod staff - by no means an easy task.

"Ron is owed a great debt of gratitude by myself, the Science Research Council, and the Rutherford Laboratory, that this has been achieved so well", said Dr Stafford.

#### Gifts Galore

Suddenly it was Christmas in R12! Ron was presented with a garden seat, a large paper weight suitably etched on copper with his name, Nimrod, and the first and final beam pulse traces, a calculator, a huge card, and the promise of a multimeter to come.

"We are deeply sad to see you go" said Dr Stafford, "All the best in your retirement, and find time to come back soon to see old friends".

(Continued on p.2.)

# **INTERNAL** Events

NIMROD LECTURES R22 LECTURE THEATRE - 1400 hrs

14 April: Prof P van Nieuwenhuizen/

Stony Brook "Supergravity"

21 April: Dr F Richard/ORSAY

"Photoproduction of Charmed Particles (WA4) HEP SEMINARS CONFERENCE ROOM R61 - 1100 hrs

16 April: Dr N Booth/Oxford

"Neutrino Electron Scattering"

17 April: Dr D Aschman/Princeton

"Radiative Decays of  $\psi$ ,  $\psi^1$  the  $\chi$  States of the

Reborn n

23 April: Dr D R T Jones/RL

"Supersymmetry and Dimensional Regularisation

for Beginners"

RUTHERFORD LABORATORY LECTURE LECTURE THEATRE - 1515 hrs

1 May Mr K Hoffman/Sussex

"Appropriate Technology in the Third World: Unexplored Potential or Unfulfilled Promise"

SPECIAL SERIES
CONFERENCE ROOM 5, R20 - 0900 hrs

15,22,29 April: Dr P A Lindgard/

Risø DK

"Phase Transition and/Critical Phenomena"

## Ron Replies (Continued from p.1.)

"Thank you for your kind words and generous gifts; I will treasure them" replied Ron. "I can assure you that my gardening style is such that sitting in the garden is of equal importance to working in it."

'I have recently been going through some of my old papers with nostalgia, remembering the triumphs - there were times when Nimrod's beam intensity was the highest in the world - and mistakes. From these I have sifted a few words of advice for SNS commissioners. You will need all the diagnostics but, make sure there is nothing in the way of the beam, get the polarities correct, and most important, aim to switch on the RF in the morning!"

"Lastly, I wish to thank all my friends in the Laboratory for their kindness and help over the years. I consider it a privilege to have been Nimrod's last Division Head, and SNS's first. It has been an honour to have served as the Rutherford Chief Engineer. A special good wish to the new generation of young people in the Laboratory, they are vital to its continued health and life. Thank you all, and good wishes."

#### Film Badge Notice

It is Period 4, Colour Strip RED. Please check that you are wearing the correct film and all old ones are returned.

Next Film Change: - Monday 21 April.

#### Trade Exhibitions

There will be an exhibition of machinable glass ceramic material by William McGeoch and Co Ltd on Tuesday 22 April in Rl2 Conference Room from 1000-1600 hrs.

Presentations by a technologist are planned at certain times.

Anyone wishing to attend a presentation should contact Mrs Sheila Davidson, Scientific Administration Group, R20 (Ext 6114) for advice on time.

There will be a continuous demonstration of the 3M Scotchcal Photolabel System on Friday 18 April in R12 Conference Room from 1000-1500 hrs.

#### Missing

From Laser Division Target Area Laboratory 1 x specialist bellows type technical plate camera, (5" x 4" NPP) in a large wooden carrying

Anyone with information on this article, please contact M H Key Ext 582.

Would anyone knowing the whereabouts of Avometer Model 8, Serial No. 21533 - 8V - 974 Rutherford Label X003075, please contact W.G. Williams, R20 Ext 599.

## Rutherford Laboratory Lecture

The next lecture in this series will be held on Thursday 1 May at 3.15 pm in the MAIN LECTURE THEATRE.

"APPROPRIATE TECHNOLOGY IN THE THIRD WORLD:
UNEXPLORED POTENTIAL OR UNFULFILLED PROMISE" by MR KURT HOFFMAN Science Policy Research Unit,

University of Sussex.

The concept of appropriate technologies has been discussed in the development literature for a number of years. Their use is now widely advocated as one of the best mechanisms to ensure real development in the Third World. However, there is little evidence to suggest that appropriate technologies now account for a measurable proportion of output in the developing countries, nor is there any sign that they are likely to play a major role in the near future. If the concepts behind the definition are relevant and valuable, then there is reason to question why there has been so little advance in introducing appropriate technologies into production in the Third World.

For your diary: - The next lecture will be on 29 May by Professor R Jennings, University College London on "Infra-Red Astronomy."

### Local MP's First Visit

Mr Tom Benyon, MP for Abingdon, paid his first visit to the Laboratories on Friday 21 March. After an introductory discussion with Dr Manning, Professor Houghton and Dr Valentine, Dr Gibson escorted the party round the Laser Facility where he was shown the 6-beam target area, the glass laser installation and the target preparation laboratory. He was interested and impressed by all he saw, particularly the target chamber and the work on target preparation. During the visit he met a number of staff and before pleaving congratulated the two girls preparing targets (Mrs Hallewell and Mrs Child) on their skill and dexterity.

After lunching with Division Heads
Mr Benyon, accompanied by Drs Manning,
Valentine and Thomas visited the
Electron Beam Lithography Facility.
Dr Thomas described how the Facility
collaborated with the four Devices
Fabrication Centres in Edinburgh,
Sheffield, Southampton and Surrey
Universities and with the Interactive
Computing Facility at the Rutherford
and Appleton Laboratories to provide
a service to SRC-supported engineers
and scientists who wished to design
new integrated circuit 'chips' and
have working prototypes produced to
their design.

Demonstrations were given of computer aided design of integrated circuits on ICF using the GAELIC suite of programs via both graphics terminals with both colour and monochrome screens. The various stages in the mask-making process carried out in the EBL Facility were described in brief and examples of completed mask plates exhibited.

Emphasis was placed in the discussions on the considerable co-operation with UK industry that is a feature of the work of the EBL Facility and the important future role, from October 1980 onwards, of the Facility in assisting in the training of future integrated circuit designers on SRC-supported MSc and MEng courses in various universities.



Trevor Hyman explains the workings of the SNS synchrotron ring to Tom Benyon, with help from Geoff Manning. 31780

The party, joined by Professor Houghton, then toured the SNS project with Dr Hyman. In the new Control Centre, the principles of design and operation of the new facility were explained, with the help of photographs, diagrams and models. The questions the new machine was designed to answer, it was pointed out, cover a wide range of science, from solid state physics to biology.

The savings to be made by building the SNS in the ex-Nimrod buildings and by re-using components from Nimrod, the PLA and NINA (DNPL) were stressed. Mr Benyon was shown the excavations for the foundations of the Target Station, the now empty magnet hall where the synchrotron will be housed, and Hall I where tests are being carried out on the prototype quadrupole magnets. The magnet measurement rig is itself a test bed for the computer system to be used for the control of SNS, it was explained.

The operational safety factors of the SNS seemed to be a topic of great interest to Mr Benyon. He was assured that from its conception safety is being designed into the project. Every component will be thoroughly tested, and monitored, and safety procedures applied rigorously. All aspects of safety are being studied in detail, from personal to environmental.

During the tour, Mr Benyon remarked that he was aware that the work of scientific and technological research centres such as the Rutherford and Appleton Laboratories must be recognised and supported, for the scientific future of the United Kingdom.

At the end of the visit Mr Benyon was entertained to tea by the Director-General.

#### Crib

The Dinner Time Crib League is well underway. We have ten teams entered and would like to welcome our new friends from Appleton who have joined the League for the first time.

Entered for the Indoor Sports, which is on 18 April, we have nine pairs, from Rutherford and Atlas. I would like to wish all players the best of luck for the competition.

#### **Darts**

If sufficient names are forwarded, it is hoped to run a darts competition. This will consist of a Singles event, a Pairs event, and a competition for Four-a-Side. The tournament would be open to all Chilton Site personnel and the entry fee 35p per head. All those interested in such an event, should contact A Forster R6, P Craske R2, or T Morgan R18 by 14 April.

#### **Thanks**

The following message has been received from Ron Russell:

"To those of my friends and colleagues who I did not see in person before leaving the Laboratory, - Thank you for your good wishes and gifts on my retirement. Good luck to you in the future."

# Atlas Centre says Goodbye to Katie



Kate Gascoigne, as we will always remember her! 31794

"We should have you back as a consultant" --- "and shall have to find someone else's shoulder to cry on" were just a couple of the appreciative remarks made by Doug House in his farewell speech made at the presentation ceremony to mark the departure from the Laboratory of Kathleen Gascoigne. The Atlas Centre common room was bulging with Katie's friends, all wishing to say, goodbye good luck, but most of all, thank you, to a much loved and respected member of our community.

Katie had started her career with us in 1964 as a messenger in R2O. After a spell of nursing, and a visit to Culham as a photoprinter, she came 'home' in 1973 to operate the Xerox 7000, and when the new Xerox 9200 arrived Katie really came into her own. She has been its (and our) mentor ever since.

As a token of our appreciation Katie was presented with a beautiful set of bone china, a box of chocolates and a bouquet of spring flowers. Katie thanked everyone for their Katie thanked everyone to say gifts, she didn't know what to say except that she really appreciated everything. "I promised not to come back for thirds", she joked. Now she is looking forward to joining her husband Gus in retirement. think he's missing my nagging," she concluded.

All those who came into contact with Katie - and there are many of us will, as Doug House said, miss her cheerful presence. The Xerox room of the Atlas Centre, where she presided, providing Xerox copies with such efficiency, was also a little oasis of calm, gentle fun, and understanding that many of us tapped from time to time.

#### Cricket

The Cricket Season is approaching and the committee has arranged a full fixture list for 1980. Members are asked to attend the AGM on April 21 at 12.15 in Conference Room 5, Building R20.

Anyone interested in joining the C.C. may come along or contact the secretary at extension 6178.

We extend a welcome to those Appleton cricketers who would like to strengthen our side, particularly those who can get their ARM over. We hope this year to win at least one fixture.

Any proposed addition or alteration to the clubs rules should be sent to the secretary (Building R58) by the

We expect the practice wicket to be ready prior to our first fixture on May 7 so come along any lunchtime for practice.

#### CSSC Snooker

Enthusiasts in this snooker desert may be interested to know that there is an Amateur Billiards and Snooker Association in the Civil Service which affords annual opportunity for competition, and a chance to meet new players, via the Civil Service Amateur Billiards and Snooker National Championships.

The Championships are sponsored by the Civil Service Sports Council and are open to all Rec. Soc. members who are Civil Servants, P.O. employees or staff of other bodies which are members of the CSSC. This includes the Rutherford Rec. Soc.

The preliminary heats are played in areas zoned according to the location of entrants. There are 10 national zones, each producing a zone winner who later enters the national final rounds.

All matches are played under Billiard and Snooker Council rules and are decided on the best of 5 frames in sncoker. Each billiards preliminary match is for 300 up or 400 for zone and national finals.

The 1979/80 Southern Area preliminaries were held recently at the Craneswater Club in Southsea, attracting 8 entrants for billiards and 16 for snooker. the case of snooker, a zone winner had to be produced in one day's play, on a knock-out basis, commencing at 14.30 hrs. This meant a possible 20 frames for the two finalists - a hard day's play, and a lot of pleasure - all for 35p entrance fee.

The Craneswater is a well equipped private club, having 16 good tables, a bar, a soft drinks and food bar, a lounge and some seating for spectators - altogether a very nice club for a day's snooker; and, if, you throw in the attractions of the seaside at Southsea, there can be a good day out for the rest of the family while dad gets on with enjoying his mis-spent youth. This club is also the chosen venue for the 1979/80 finals in April. vouth.

The standard of play in the competition is such that the average local league player can be assured of a good game and I would thoroughly recommend anyone with a reasonable ability to have a go. Regrettably the writer did not have to play 20 frames - but I shall be there for the 1980/81 contests. The closing date for entry is Oct. 31st 1980 and the next finals will probably be in Edinburgh.

For further information contact J Jones R18 Ext 571



RUTHERFORD LABORATORY BUILDING

Deadline for Insertions

1000 hrs Monday 28 April

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