

Progress with the SNS

On June 6 Nimrod was turned off for the last time.

On 7 June intense activity got underway to prepare the Nimrod Complex for the construction of the Spallation Neutron Source (SNS) - a project which will cost around £11 million, including the users' apparatus, and aims to be ready for scientific experiments in 1982.

The vast task of dismantling and clearing still continues apace and during the past four months Laboratory personnel have been removing the ancillary equipment from the main ring including vacuum pumps, water and electrical fittings in preparation for dismantling the vacuum vessels and straight section boxes and moving the magnet sectors.

In Hall 1 the pieces are neatly stacked ready for dispersal or storage. This hall will be used to assemble the new components for the SNS.

Hall 3, once crammed with high energy physics experiments is now almost bare, except for the central blockhouse. The experimental equipment, counting rooms and shielding have been removed and all that remains are a few solitary magnets to remind one of former times. These too will disappear.

The Nimrod Main Control Room is unrecognisable - most of the racks dismantled and chassis removed. A tour of the western side of the mound reveals much activity next to the 15 MeV injector building (which has had a new entrance blasted in one corner). A new building is to be put alongside, which will house the SNS Main Control Room. The 70 MeV linac building has had a new Control Room added and the machine is being upgraded to allow it to operate at the required 50Hz.

Over 4000 items from Nimrod have been listed for disposal. Further details of this operation, code-named "Nimdis", appear on page 2.

There has also been progress on the machine side, with the main focussing quadrupoles already ordered for the proton synchrotron. Tenders have been received for the trim quadrupoles and vacuum vessels. The design of the synchrotron dipole magnets is well advanced.

Next Spring should see many pieces arriving at the Laboratory and we look forward to keeping you informed on the development of this project. The Spallation Neutron Source will be a unique facility for neutron research, and will be a major activity at the Rutherford Laboratory to the end of the century.



An accelerating cavity has been removed from Nimrod's main ring of magnets to allow trucks to enter.



Serried ranks of vacuum pumps waiting for dispersal.

INTERNAL EVENTS

HEP SEMINARS

Wednesday 11 October
1100
R61 Conference Room

"Pi Balls" (Pion Condensates in Multiparticle Production
C. Michael (Liverpool Univ.)

Wednesday 18 October
1100
R61 Conference Room

Q^0 Production in $K_L^0 p$ Interactions up to 17 GeV/c.
T C Bacon (Imperial College).

SAFETY FILM SHOWS

Tuesday 17 October
1230, 1315 and 1400 hrs
R22 Lecture Theatre

A series of film shows will be presented at monthly intervals, depicting some of the hazards likely to be met and the commonsense, straightforward means of recognising them and maintaining a satisfactory, effective and safe place of work.

'SAFE SYSTEMS AT WORK'

This colour film is designed to help people to minimise danger and also deals with the role of Safety Representatives in identifying potential hazards in the work place. It will run for 20 mins.

LUNCH-TIME FILMS AND MUSIC

The programme of lunchtime Films and Music continues to be held on Wednesdays at 1230 hrs in the Lecture Theatre.

Wednesday 11 October. "THE BEST OF DAVE BRUBECK"
Wednesday 18 October 'CARPETS THROUGH THE AGES'
The design and technology of carpets since circa 500 BC.
and 'NEWHART/HOLLERITH'.
Bob Newhart plays a 19th Century 'product evaluator'; Herman Hollerith tries to explain his new invention, the punched card.
Wednesday 25 October Symphony No.3 - "The Organ Symphony" by Saint-Saens.
Birmingham Symphony Orchestra conducted by Louis Fremaux.

R22 LECTURE THEATRE BOOKINGS.

In future bookings for the Lecture Theatre should be made to Mrs Sheila Davidson on Ext 6114. Any alternations or cancellations of bookings should also be notified, to ensure smooth running of the Lecture Theatre.

Nimdis

The original list of major component parts for disposal from Nimrod totalled more than 4000. About half this number have been reserved for re-use in the Laboratory with priority given to the S.N.S. and about 400 have been bid for by outside bodies, mainly by the Universities.

Probably the most interesting bid is for the Synchrotron R.F. "Pye" amplifier, which gave each pulse of protons orbiting Nimrod about 1 million kicks of 7,000 volts. It is wanted by the University of Aberdeen Dept of Bio-Medical Physics and Bio-Engineering to supply R.F. power to a cyclotron they have acquired. The cyclotron is to be used for medical purposes, both diagnostic and treatment, and is funded by public subscription.

The spare E4 inflector magnet is now at the Dept. of Nuclear Physics of Oxford University. It is to be installed in the path of the beam from their Folded Tandem Van de Graaff in order to deflect the beam into a spectrometer magnet, currently under construction.

Considerable interest has been shown in the smaller vacuum pumps and most of these will be distributed around the Laboratory and at some Universities.

Much of the electronic equipment from Nimrod is now obsolete, and so not wanted for the S.N.S. However, local schools have taken the opportunity to acquire some of this - 25 schools so far have bought more than 2 metric tons!

OVERSEAS VISITS

Mr W M Evans to Munich from 9-12 October for tests on large streamer chamber.
Mr A Roskell to DESY from 9-12 October for discussions on accommodation.
Dr T P Shah to CERN from 9-11 October to attend UAI meeting.
Dr D R Moore and Mr M D Percival to CERN from 9-10 October to attend β -p design discussions.
Dr M Edwards to CERN from 9-13 October to work on EMC proportional and Drift Chambers.
Dr M A R Kemp to CERN from 9-16 October to work on e/ γ experiment.
Messrs P J Champ, B R Culley to CERN from 15 October - 4 November to build R.M.S. Magnet.
Dr D H Saxon to Argonne, Fermilab, SLAC and LBL from 22 October - 2 November for conference discussions and planning meetings.
Dr C J S Damerell to CERN from 23 October - 2 November to work on NALL Experiment.

LOST

from office in R26 (Atlas Lab) a D.C. Millivolt calibrator type 1200 Serial no. 13025 58537. If found please return to J Kerr Rm. 1.08 R2 Ext 6354

MISSING EQUIPMENT

AVO meter Model 8 serial no. 42202-C-1255. Anyone knowing the whereabouts of this item, contact I.H. PAYNE Ext 6352 or R2. Admin. Office Ext 6615.

NATIONAL SAVINGS CERTIFICATES

Monthly cycle 20 - certificates will be available for collection at the Cash Office Building R20 from Monday 2 October.

FILM BADGE NOTICE

Period 11 commences on Monday 9 October Colour Strip GREEN for $\beta\gamma$ films. Please change your film promptly. Anyone needing a new holder please contact Jenny Coates Ext. 430.

NOVA-SWISS

If anyone at the Rutherford has written to this firm, and is wondering why they have had no reply - they have, in three languages. Please ring Ext 484 or collect from Room 42. R20.

THANKS

Ann Curran wishes to thank all her friends who so generously made donations towards her beautiful leaving-present. At the time of writing she was sitting in her new office, gazing out to sea, and thinking of you all.

EXTERNAL EVENTS

THEOR. PHYS. SEMINAR/CONF RM BLDG. 8.9 AERE. - 1400 hrs
10 Oct: Dr M R Hayns/TPD - The effect of temperature changes on void swelling.

NUCL PHYS.DIV.COLLOQUIA/CONF.RM. H8 AERE - 1530 hrs
12 Oct: T D Sales/ERA - Science and Security
19 Oct: M Irvine/Manchester - Neutron Stars.

HEP SEMINARS/RM.B. DAMTP CAMBRIDGE - 1500 hrs
13 Oct: P V Landshoff - The LEP project

20 Oct: D W Duke/Rutherford - Deep inelastic scattering beyond leading order in asymptotically free theories.

27 Oct: A J G Hey/Southampton - Pair instabilities and quark confinement.

PHYS. AND GEOPHYS. COLLOQUIA/HH WILLS LAB BRISTOL - 1700 hrs
Oct 16: Dr D H Edwards/Aberystwyth - Shock and detonation waves.

Oct 23: Dr J C Gill/Bristol - Metals in one dimension, experimental work in Bristol and elsewhere.

THEORETICAL PHYSICS SEMINARS/QMC - 1615 hrs

Oct 9: Dr P I P Kalmus/QMC - The 19th International Conference on High Energy Physics in Tokyo.

Oct 16: Prof C H Woo/Maryland and Sussex - Why quarks are confined.

Oct 23: Prof F Janouch/Stockholm - Alpha decay calculations in the frame of nuclear field theory.

1978 Summer School for HEP Experimenters

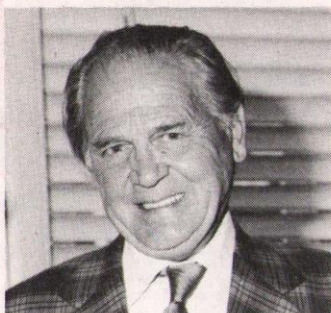


The annual Summer School for young Experimentalists in High Energy Physics was held at the Rutherford Laboratory from 12-27 September. This year, the seventh in the series, was Directed by Dr Brian Duff of University College London. Twenty-five postgraduate students from British Universities attended the gruelling/fun-packed 14 days of lectures and problem-solving sessions on many of the basic theories of elementary particle physics and to hear of the latest advances in experimental results.

The Course Lecturers included Drs Trevor Bacon, Roger Cashmore, Tony Hey, Derek Imrie and Bob Johnson. Drs Neil Craigie, Ken Peach and Dave Webber were the Course Tutors. Additional Seminars were arranged in the evenings

on topics such as the JET Project, Molecular Biology, Pulsars and Lasers, Solitons and Instantons.

Following the School Dinner, Dr Duff thanked Mrs Hunt and her staff for the excellent accommodation and service at The Cosener's House, and congratulated the School Organising Committee, Lecturers, Tutors and Laboratory Staff on the success of the School. In the after-dinner talk, Professor P T Matthews reviewed the rapid progress of particle physics since the days of 1928, when he was a young physicist, up to the present state of affairs involving ideas such as quarks and bags. He was confident that this years students would have as challenging a task in high energy physics in the years to come.



Len Appleby

Len Appleby was born into the pioneering age of Electronics. As a boy he built crystal sets in cigar boxes, and after a false start in commerce soon found his niche in radio. By 1935 he had started his career in Television with Logie Baird at Crystal Palace.

At the start of war in 1939 he was called up from Territorials into the Regular Army and became a RADAR Armaments Artificer, one of the first six RADAR mechanics trained at the Royal Military College of Science, Bury, and by the time hostilities ended he was in charge of RADAR workshops, training new mechanics and working on the development, with existing equipment, of a system to pin-point V Rockets for destruction by ground armament.

After the war he returned to T.V. this time for Rank, developing the new tele-cine process, and installing it at Alexandra Palace. In 1952 he joined what was to become AWRE first at Ford Halstead and later at Aldermaston and in 1956 found himself at Maralinga, Australia involved as Weapons Function Leader in Trials of three A-Bombs.

Len joined NIRNS in 1957 and has seen Nimrod through conception development and commissioning to final shut down. Latterly he has been busy in Instrumentation Division especially on High Resolution Cameras as used in the Omega magnetic spectrometer at CERN.

Unfortunately Len was ill when his retirement day eventually arrived, but on Friday 22 September a grand re-union and presentation was organized at which emotions ran so high, that Peter Wilde, broke into Epic Poetry, before presenting Len with a "Strimmer," a special edition of a well known electronics magazine and a portfolio of good wishes from all his friends and colleagues.

Len thanked everyone for a memorable day, and said that he would be sorry to leave, but felt that the time had come to start a new career, to think around new problems, and perhaps manage a few more 'firsts' before he finally retires.

B-SLIM CLUB. If you have unwanted pounds to shed - we will show you how! Join us in the NBRU Conference Room R20 Rutherford every Thursday at anytime between 1200 hrs and 1330 hrs. The class will be taken by a qualified and experienced teacher who will give individual attention to your weight problems. For information ring Val Goodwin SRC Ext. 6658 or Ms Rosier AERE Ext. 2051.

RUTHERFORD WIVES COFFEE MORNINGS

Once a month a coffee morning is arranged at The Cosener's House in Abingdon for all Rutherford Wives to gather together and meet some old friends and new faces. Young children can come too - and enjoy TV, orange-juice and biscuits! The coffee mornings are from 1030 until noon and have been arranged for:

Thursday 12 October
Tuesday 14 November
Wednesday 6 December

Make it a date! For further information call Suzanne Litchfield (Abingdon 21310), Gillian Litt (Abingdon 26009) or Julie McGeogh (Oxford 722781)

RUTHERFORD ANGLING CHAMPIONSHIP

The Angling Championship was fished at Clifton Hampden on Sat 30 September. This year's event was won by Charles Halliday with 2lb 4oz of fish, well clear of his nearest rivals, Peter Craske 1lb 5oz and John Thomson 1lb 2oz. As usual those fishing had to put up with bad weather conditions. Usually it's rain, but this year for a change it was gale force winds, which made the river look more like the North Sea. Congratulations to Charles on his fine win.

ANGLING NEWS.

The Southern Area Civil Service Teams of Four and Individual Championship, is to be fished at Christchurch, Hants on the River Stour on Sunday 5 November. If you wish to take part contact P CRASKE Ext 232 as soon as possible.

'CRIB TOURNAMENT'

The Crib Tournament was played for the first time on Friday September 29 in the R22 Coffee Lounge. Sixty-four players were due to take part. On the evening there were a few absentees, but it didn't make any difference to a great evening. After a long evening, and a few shocks, the results were as follows.

Singles - Semi Finals

Mrs Barbara Powell beat Mr D Hill
Bill Oliver beat Mr J Ackhirst

Final

Barbara Powell beat Bill Oliver

Doubles - Semi Finals

Tony Lubbock and David Kent beat Rob Hambleton and Dick Apsey
Graham and Marion Holt beat Tudor Morgan and Alan Wells.

Final

Tony Lubbock and David Kent beat Graham and Marion Holt.

A great many thanks are due to Tudor and Pam Morgan for all the hard work they put into organising the Tournament, and to Mr and Mrs Brooks for coming along and staying until 1 o'clock in the morning to present the prizes. Congratulations to Barbara (it doesn't look like a dozen) Powell on her victory in the Singles, and Tony Lubbock and David Kent in the doubles.

RUTHERFORD LABORATORY BULLETIN

Editor: Jean Banford

Deadline for Insertions

1000 hrs Tuesday, 17 October

Please mail or phone-in contributions to:

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