

RUTHERFORD LABORATORY BULLETIN

No. 10/64 for the week commencing Monday, 9th March, 1964

AWARD For his action in saving the life of one of his colleagues in the Magnet Hall last August, Mr. Derek Gregson received the Royal Humane Society Resuscitation Award on Wednesday, 4th March. The presentation was made by the Chairman of the Wantage Magistrate's Court, Mr. W. F. Wood of A.E.R.E.

P.L.A. The programme scheduled for the P.L.A. during the current week is as follows:-

Date	Team	Experiment
9th - 11th March	Queen's University, Belfast and Westfield College	Shell Structure Studies (p,2p)
12th March	R.H.E.L. Nuclear Chemistry	Fission Studies at 30 MeV.
13th March	R.H.E.L. & Queen Mary College	(p,n) Reactions
14th March	Oxford University	Study of (p, α) Reactions.

BURSARY AND SANDWICH COURSE AWARDS, 1964 The Institute are prepared to offer a limited number of awards to enable staff to undertake full-time or sandwich courses at Universities or Colleges of Technology. Details of these awards may be obtained from Mr. A. G. Taylor, Personnel Branch, Building R.20 (Ext. 495).

POST-GRADUATE EDUCATION CENTRE, A.E.R.E. A series of fourteen lectures on the "Properties of Materials" will be given by Mr. M. Gamed, of the Oxford College of Technology, at the Reactor School on Tuesday afternoons commencing April 7th, 1964. Applications should be made through Group Leaders, who are asked to forward approval names to Mr. H. F. Norris, Scientific Administration, Building R.32, by 20th March. Early application is advised, as accommodation is limited. Further information is available from Mr. Norris, Ext. 484.

INTERNAL EVENTS

Mon., 9th March, 11.15 a.m., Conf. Rm., Bldg. R.1	Nimrod Lecture Series	Dr. D.R.O. Morrison (C.E.R.N.)	Elastic, Inelastic Charge Exchange Scatterings and Annihilations of 3 to 4 GeV/c Anti-protons.
Wed., 11th March, 3 p.m., P.L.A. Conf. Rm., Bldg. R.12	P.L.A. Seminar	Dr. E.J. Burge & Mr. V.R.W. Edwards (King's Coll., London)	Elastic and Inelastic Proton Scattering and the Generalised Optical Model.

It is hoped that Dr. V. Perez-Mendez of U.C.R.L., Berkeley, will give a talk on "Elastic and Inelastic Pion-Nucleon Interactions" at 11.15 a.m. on Friday, 13th March, in the Main Conference Room, Building R.1. Details will be available later.

Mon., 16th March, 11.15 a.m., Conf. Rm., Bldg. R.1	Nimrod Lecture Series	Dr. W. Schmitz (Munich)	π -p Interactions at 4 and 10 GeV/c.
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EVENTS AT A.E.R.E.

Wed., 11th March, 2.15 p.m., Cockcroft Hall	Film		"A.G.R. Fuel Handling" (Duration 20 minutes)
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(Outer gate open, inner gate manned)

Thurs., 12th March, 3.45 p.m. Conf. Rm. Bldg. 338	Met. Div. Colloq.	Dr. D.H. Bowen (Gate passes required)	Superconductivity at High Pressures
Thurs., 12th March, 5.30 p.m., Reactor School	A.S.E.E. Lecture	Mr. M.J. Sherlock (A.E.I. Ltd.)	Electronics in Industrial Research Establishments

EXTERNAL EVENTS

Mon., 9th March 7.30 p.m., Great Western Hotel, Reading	I.E.E. Lecture	Mr. R.H.F. Christie	"Lasers"
Wed., 11th March, 7 p.m., 37 George St., Oxford.	I.E.E. Lecture	Dr. L.R. Blake (Brush Elect. Eng. Co. Ltd.)	Fast Nuclear Reactors.
Thurs. 12th March, 2.30 p.m., Clarendon Lab. Oxford.	Clarendon Lab. Colloq.	Dr. J.D. Livingston (General Electric Research Lab., Schenebady)	Recent work on Type II Superconductors.

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No. 11/64 for the week commencing Monday, 16th March, 1964

VISITS ABROAD Mr. D.C. Pickles of the Engineering Division, will visit C.E.R.N. on 16th March for one week to discuss modification to Hydrogen Bubble Chamber cameras.

Dr. W.A. Smith of the Nimrod Division, to Basle, 18th March-25th April where he will visit Emile Haefely and Co. to witness tests on the first pair of H.T. sets.

Mr. J.D. Lawson of the Applied Physics Division, to Eindhoven, 24th-26th March, for discussion on cyclotrons.

P.L.A. The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
19th-20th March	R.H.E.L. Nuclear Chemistry	Fission Studies at 30 MeV
21st-22nd March	Oxford University	Carbon 12 (p, p- α) Reaction Study

INTERNAL EVENTS

Mon., 16th March 11.15a.m. Conf. Rm., Bldg. R.1	Nimrod Lecture Series	Dr. W. Schmitz (Munich)	π -p Interactions at 4 and 10 GeV/c
Thurs, 19th March 5.30p.m. Lecture Theatre.	Evening Lecture Series	Mr. J.D. Lawson	A Microwave Engineer looks at Fundamental Particles
Mon, 23rd March 11.15a.m. Conf. Rm., Bldg R.1.	Nimrod Lecture Series	Dr. J.R. Wormald (Liverpool Univ)	Experimental Results on μ -meson Decay

EVENTS AT A.E.R.E.

Tues, 17th March, 2 p.m. Conf. Rm Bldg 8.9	Theo. Phys. Div. Seminar	Prof. B.H. Bransden (Univ. of Durham)	Some Difficulties in the Theory of Charge Exchange at High Energies.
Mon, 23rd March 2.15p.m. Cock- croft Hall (Outer gate open, inner gate manned).	Space Physics Lecture	Mr.D.G. King-Hele (R.A.E. Farnborough)	Upper Atmosphere Densities

EVENTS AT CULHAM LABORATORY

Fri, 20th March 2.30p.m. Lecture Theatre	Culham Lab. Lecture	Dr. A. von Engel (no tickets required)	The Flame Plasma
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EXTERNAL EVENTS

Wed, 18th March, 4.30p.m. Univ. College London	Physics Dept. Seminar	Dr. A.N. Newth	A Proposal to Study Rare Decay Modes of the ω^0 - Meson
18th-25th March: Electrical Engineers Exhibition at Earls Court, London. (Tickets are available from H.F. Norris, Bldg R.32, Ext 484).			
11a.m. Fri, 20th March to 12.30p.m. Sat, 21st March Cabot House, Bristol College of Science and Technology	Postgraduate Course		Microwave and Spectroscopy, and Electron Spin Resonance.
	(Application necessary, details from Sci. Admin, R.32)		

Watford College of Technology: The International Young Technologists' Fortnight, July 20th-30th 1964. The programme includes lectures, industrial and cultural visits. (Full details from H.F. Norris).

STOP PRESS Will the person who borrowed the Bartholemew's Reference Atlas of Greater London please return it immediately to the Library.

Building R.32
13th March, 1964.

H.F. Norris
Scientific Administration

HRD

RUTHERFORD LABORATORY BULLETIN

No. 12/64 for the fortnight commencing Monday 23rd March, 1964.

MEMBERSHIP OF THE GOVERNING BOARD Professor J.M. Cassels, who was appointed to Membership of Governing Board in 1961, resigned from the Board on 15th February, 1964. Professor D.H. Wilkinson, who was one of the original Members of the Board, has been appointed in his place. Professor Wilkinson's previous appointment expired in February, 1963.

VISITS ABROAD Dr. R.G. Moorhouse, Applied Physics Division, to Germany on 21st March - 14th April for computing at Darmstadt.

Mr. D.J. Warner, P.L.A. Divn., to C.E.R.N., on 31st March - 16th April, in connection with linear accelerators.

Mr. J.A. Fox to C.E.R.N. on 1st April, where he will be attached for 13 months, for research and development work on the behalf of the Daresbury Nuclear Physics Laboratory.

ATTACHMENT Dr. W. Kusch has arrived from the Institute of Nuclear Research, Polish Academy of Science, Poland, and will be staying at the Laboratory for 3 months. His office is in building R.12., Room 2, Extension 421.

P.L.A. The programme scheduled for the P.L.A. during the current fortnight is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
23rd - 30th March.	A.E.R.E. and King's College	Commissioning of the $N\frac{1}{2}$ Magnet and Associated Beam Transport System.
4th - 6th April	Kings College	Testing of Solid State Detectors for the $N\frac{1}{2}$ Magnet.

BLOOD DONORS A team from the National Blood Transfusion Unit will visit E.H.E.L. on Wednesday 29th April. Appointment cards will be available from the Administration Office, Room 7, Building R.12, Extension 441. Posters will be on display in various buildings on the site.

INTERNAL EVENTS

Mon., 23rd March 11.15 a.m. Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Dr. J. Wormald (Liverpool Univ.)	Electron Spectrum from Muon Decay.
Wed., 25th March 2p.m., Conf. Rm., Bldg. R. 12.	P.L.A. Group Seminar	Dr. R.C. Hanna	A Visit to Poland.
Thurs., 2nd April 5.30p.m., Lecture Theatre	Evening Lecture Series	Mr. P.D. Dunn	Flux Linking and Flux Cutting.

EXTERNAL EVENTS

23rd - 25th March: Electrical Engineers Exhibition at Earls Court, London. (Tickets are available from H.F. Norris, Building R.32, Extension 484).

Wed. 25th March
7.30.p.m. Royal
Oak, Woodstock Rd.,
Oxford

A.S.E.E.
Lecture

Lighting in the Home.

(Non-members welcome.)

31st March - 3rd April: Joint Computer Conference on the Impact of the User's Needs on the Design of Data Processing Systems, at Edinburgh. Further details from H.F. Norris, Extension 484.

Building R.32
20th March, 1964.

H.F. Norris.
Scientific Administration

ACR.

RUTHERFORD LABORATORY BULLETIN

No.13/64 for the week commencing Monday, 6th April, 1964

NIMROD EXTERNAL PROTON BEAM. The external proton beam was extracted from Nimrod for the first time on 24th March. The extraction efficiency is estimated at 7%. Scattered beams have been obtained from Nimrod since December 1963 and have been in regular use since mid-February 1964.

VISITS ABROAD. Dr. H. H. Atkinson will visit the University of California, Berkeley, on 5th April for one week, to give a paper at a meeting on "Instabilities due to Streams or Currents". His visit is under U.S. sponsorship. He will also be discussing work on the polarized target, there, and at the Lawrence Radiation Laboratory.

P.L.A. The programme scheduled for the P.L.A. during the current week is as follows :-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
6th April	King's College	Testing of Solid State Detectors for the $N_{1/2}$ Magnet.
7th-9th April	Oxford University	Carbon 12 (p, p') and Carbon 12 (p,d) Reaction Studies.
10th-13th April	R.H.E.L. and Queen Mary College	(p,n) Reaction Studies by the Time of Flight Method.

EXTERNAL COURSES. The following courses will be held at the Borough Polytechnic, London, S.E.1. :-

"Basic Transistor Measurements" (Tuesdays, beginning 28th April).

"Introduction to Transistor Theory and Applications" (Tuesdays, beginning 28th April).

"Design, Use and Maintenance of Electronic Equipment used in Nuclear Physics" (during June and July).

Further details may be obtained from Mr. A. G. Taylor, Personnel Branch, Building R.20 (Ext. 495).

INTERNAL EVENTS

Mon., 6th April 11.30 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Dr. N. Lipman	Experiments on the Capture of μ -mesons by He^3 .
Wed., 8th April: E.M.I. Limited, 11.30 a.m. onwards in Conference Room No.4., Building R.1.	Demonstration of Oscilloscopes and other Electronic Apparatus, by		
Wed., 8th April 2 p.m., Conf. Rm., Bldg. R.12	P.L.A. Seminar	Mr. V.R.W. Edwards (King's College, London)	Instrumentation for Use with $N_{1/2}$ Magnet in a Proposed Study of Elastic and Inelastic Proton Scattering.
Mon., 13th April, 11.15 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	(a) Prof. G. Valladas (Saclay) (b) Dr. J. P. Merlo (Saclay)	Polarization in π -p Elastic Scattering at 410 and 490 MeV. Inelastic Scattering between 500 and 1500 MeV.

EVENT AT A.E.R.E.

Tues., 7th April 2 p.m., Conf. Rm., Bldg. 8.9	Theor. Phys. Seminar	Prof. R. J. Blin-Stoyle (Univ. of Sussex).	The Present Status of the Conserved Vector Current Theory.
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POST GRADUATE EDUCATION CENTRE, A.E.R.E.

Mon., 13th April 2.15 p.m.	Dr. A. P. Willmore	The Composition and Temperature of the Upper Ionosphere.
Mon., 4th May 2.15 p.m.	Dr. J. W. Dungey	Physics of Plasmas in Space.

These lectures will be held in the Reactor School and not in the Cockcroft Hall as previously advertised.

EXTERNAL EVENT.
13th-17th April
Empire Hall,
Olympia, London

Exhibition
and
Conference

Fluid
Power
International

Pneumatic and Hydraulic and
Related Control Equipment.

Building R.32.
3rd April, 1964

H. F. Norris
Scientific Administration.

IAF:

RUTHERFORD LABORATORY BULLETIN

No. 14/64 for the week commencing Monday 13th April, 1964

VISITS ABROAD Mr. A.J. Egginton, to C.E.R.N. Geneva, 13th-14th April, for discussions on beam installation. Mr. R. Carr and Mr. H. Wicks to C.E.R.N. on 13th April for one week, for discussions on the above, and on power supplies to beam line components, respectively.

P.L.A. The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
13th April	R.H.E.L. and Queen Mary College	(p,n) Reaction Studies by the Time of Flight Method
14th-15th April	R.H.E.L.	Accelerator Physics

HIGH ENERGY PHYSICS CONFERENCE The Institute of Physics and the Physical Society Conference on High Energy Physics will be held in the Lecture Theatre at the Rutherford Laboratory on 15th-17th April.

POST GRADUATE EDUCATION CENTRE, A.E.R.E. A series of twelve lectures on "Feed-Back Theory" will be given by Mr. P. Murdoch of Brunel College of Advanced Technology, at the Reactor School commencing Friday, 1st May, 1964. Applications should be made through Group Leaders, who are asked to forward approved names to H.F. Norris, Scientific Administration, Building R.32, by 22nd April. Early application is advised as accommodation is limited. Further information is available from H.F. Norris, Ext 484.

INTERNAL EVENTS

Mon, 13th April, 11.15a.m. Conf. Rm., Bldg. R.1	Nimrod Lecture Series	(a) Prof. G. Valladas (Saclay) (b) Dr. J.P. Merlo (Saclay)	Polarization in π -p Elastic Scattering at 410 and 490 MeV. Inelastic Scattering between 500 and 1500 MeV.
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EVENTS AT A.E.R.E.

Wed., 15th April, 11a.m. Conf., Rm., Bldg 8.9	Theor. Phys. Colloq.	Mrs A.J. Taylor	The Ionisation of Hydrogen Atoms and Hydrogen-like Ions by Electron Impact.
Wed., 15th April:	Exhibition of Thermofit Heat Shrinkable Products, by Raychem U.K. Ltd., in the Games Room, Social Club, from 10.30 - 4.00.		
Thurs., 16th April, 3.45 p.m., Conf. Rm., Bldg 338	Met. Div. Colloq.	Prof. T.S. Hutchinson	Internal Friction in Metals at Low Temperatures.

EXTERNAL EVENTS

Tues., 14th April, 4 p.m., The Lecture Theatre, Glazebrook Hall., N.P.L.	Nat. Phys. Lab. Lecture	Prof. J.D. McGee (Imp. Coll.)	Problems and Prospects of Image Intensifiers in Scientific Observation.
Wed, 15th April, 10.30-5 p.m. Birkbeck Coll.	I.E.R.E. (Brit. I.R.E.) Symposium	The Operation of Electronic Equipment under Conditions of Severe Electrical Interference. (Further details from Sci. Admin, Building R.32).	
13th-17th April, Empire Hall Olympia, London	Exhibition and Conference	Fluid Power International	Pneumatic and Hydraulic and Related Control Equipment.
15th-24th April, Olympia London.	Exhibition	International Heating, Ventilating and Air Conditioning Exhibition.	

(A few tickets for both of the above exhibitions are available from H.F. Norris Ext 484)

H.F. Norris
Scientific Administration

Building R.32
10th April, 1964.

RUTHERFORD LABORATORY BULLETIN

No.15/64 for the week commencing Monday, 20th April, 1964.

THE WEEK OF THE OPENING CEREMONY

Monday, 20th April:- Rehearsal of Press Tour. Trial run of Exhibits and Demonstration.
Tuesday, 21st April:- Visit of the Press Photographers.
Wednesday, 22nd April:- Visit of the Press Correspondents.
Thursday, 23rd April:- Nimrod operational period, including rehearsal of inauguration.
Friday, 24th April:- Formal Opening of the Rutherford Laboratory and inauguration of Nimrod by the Rt. Hon. Quintin Hogg, Secretary of State for Education and Science.
Saturday, 23rd April:- Laboratory Open Day from 2.00 p.m. to 6.00 p.m.

VISITS ABROAD Mr.M. Snowden, to C.E.R.N., 20th - 21st April, for discussion with the British National Hydrogen Bubble Chamber team.

Mr.H. Wroe, to C.E.R.N., 27th - 29th April, for discussions of ion source and pre-injector problems with members of the C.E.R.N. P.S. Division.

S.T.C. HANDBOOKS Any holder of the Standard Telephone and Cables Ltd. Handbooks wishing to check that they are fully amended should return them to:- A. E. Deakin (Publicity), Standard Telephones and Cables Ltd. (Components Group), Footscray, Sidcup, Kent. Holders of any of the publications bearing Serial Numbers CH 6744, CH 6777, CH 6779 should contact Mr. D. E. Welch, Building 424, A.E.R.E., Ext. 72-2895.

EVENT AT THE ATLAS COMPUTER LABORATORY.

Thurs., 23rd April 2.30 p.m., Atlas Lab. Conf. Rm.	Informal Talk	Prof. D.G. Kendall (Prof. of Mathematical Statistics, Camb. Univ.)	Epidemic Waves.
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EVENT AT A.E.R.E.

Thurs., 23rd April: Exhibition of mechanical and measuring equipment, by A. Capp & Son Ltd. (Machine tool control and electronic equipment for single and differential measuring). At the Social Club, 10.00 a.m. - 4.00 p.m.

EVENT AT CULHAM LABORATORY

Fri., 24th April 10.30 a.m. Lecture Theatre, Culham	Culham Lab. Lecture.	Sir John Cockroft. How We Should Reorganise Science (No tickets required).
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EXTERNAL EVENTS

27th April - 1st May; Institute of Welding Exhibition and Conference at the Exhibition Hall, Harrogate.

4th - 9th May: Research, Development and Production Exhibition and Conference, National Hall, Olympia. (Requests for tickets should be made to H. F. Norris, Ext. 484, before the 27th April).

Building R.32.

17th April, 1964.

H. F. Norris

Scientific Administration.

RUTHERFORD LABORATORY BULLETIN

No. 16/64 for the week commencing Monday, 27th April, 1964

CHANGE OF ADDRESS The Royal Fine Arts Commission, where Lord Bridges has his office, has moved to: 2 Carlton Gardens, London S.W.1.

VISIT ABROAD Mr. H. Wroe, to C.E.R.N., 27th-29th April, for discussions of ion source and pre-injector problems, with members of the C.E.R.N. P.S. Division.

P.L.A. The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
26th-29th April.	R.H.E.L.	Accelerator Physics
30th April-4th May.	A.E.R.E.	Spark Chamber Tests

B.B.C. BROADCASTS The following talks will be given in the B.B.C. "Science Survey" series during this week:-

Saturday, 25th April: "Nimrod joins the Hunt", by Prof. C.C. Butler, (Imperial College), at 10 a.m. in the Home Service.

Tuesday, 28th April: "Electricity without the Ohm", by Mr. R. Carruthers (U.K.A.E.A. Culham Laboratory), at 7.30 p.m. in the Third Network.
(To be repeated at 10 a.m. on Saturday, 2nd May, in the Home Service).

INTERNAL EVENTS

Mon., 27th April, 11.15 a.m., Lecture Theatre.	Nimrod Lecture Series	Dr. G. Bellettini (C.E.R.N.)	The Primakoff Effect and Decay Rates of the π^0 and η^0 .
Mon., 4th May, 11.15 a.m., Lecture Theatre.	Nimrod Lecture Series	Dr. S.G.F. Frank (Liverpool)	Electron-proton Scattering

EVENTS AT THE ATLAS COMPUTER LABORATORY

Thurs., 30th April, 2.30 p.m., Atlas Lab. Conf. Rm.	Informal Talk	Andrew Colin (London University Computer Unit)	General Survey Analysis
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EVENTS AT A.E.R.E.

Tues., 28th April, 2 p.m., Conf. Rm., Bldg 8.9	Theor. Phys. Seminar	Mr. D. Morgan	Remarks on Bootstraps and the Vector Octet in SU_3 .
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Film: "At Your Request". A 20 minute film on the services of the National Lending Library for Science and Technology at Boston Spa, Yorkshire. Two showings, at 12.30 and 1 p.m. on Friday, 1st May, Cockcroft Hall. (Outer gates open, inner gates manned).

EXTERNAL EVENTS

4th-9th May: Research, Development and Production Exhibition and Conference, National Hall, Olympia. (Further information is now available, but requests for tickets should be made to H.F. Norris, Ext 484, before the 27th April).

5th-15th May: Mechanical Handling Exhibition, Earls Court, London.
(Tickets will be available shortly from H.F. Norris. Ext 484).

STOP PRESS The Scientific Administration Group wish to thank all those who helped with the arrangements for the Press Visits on 21st and 22nd April.

Rutherford Laboratory
23rd April, 1964.

H.F. Norris
Scientific Administration.

RUTHERFORD LABORATORY BULLETIN

No. 17/64 for the week commencing Monday 4th May, 1964.

INSTITUTE MEETINGS The meeting of the Governing Board, scheduled for Friday 8th May, at the Rutherford Laboratory, has been cancelled. The Personnel Committee meeting, which was arranged for the same date, has also been cancelled.

VISITORS A party of thirty members of the Associated Electrical Industries Overseas Association, will visit the Laboratory on Wednesday, 6th May.

VISITS ABROAD Mr. K.W.D. Tarry and Mr. F. H. James, both of the Daresbury Nuclear Physics Laboratory, to R.C.A., Lancaster, U.S.A., on 3rd May for two weeks, to carry out acceptance tests of R. F. Equipment for NINA.

LOST PROPERTY - OPEN DAY The following items were left in the Childrens Creche on Saturday, 25th May:- 1 white knitted bootie and 1 grey pram cover.
Dinky Toys type:- 1 Car, 1 Landrover, 1 Tipper Truck and 1 Trailer Lorry. These can be collected by the owners from Room 2.53., Bldg. R.1.

TRANSLATION SERVICE International Translators Ltd. can now offer a service by Telex.

SURPLUS EQUIPMENT The U.K.A.E.A. has the undermentioned item surplus to requirements:-

<u>Item No.</u>	<u>Ref. No.</u>	<u>Description</u>	<u>Condition</u>	<u>Quantity</u>
1	CD 92	"Watson" R.500 Surgical X-Ray Hand Tilt Table No. FV. 824	Usable	1

Enquiries and arrangements to view should be made with Mr. E. Taylor, Stores Manager, U.K.A.E.A., Capenhurst Works, Capenhurst, Chester, telephone Hooton 3021, Ext. 304.

EXTERNAL COURSE A summer School on Theoretical Physics, sponsored by the University of Paris, will be held at Cargèse, Corsica from 22nd June to 1st August 1964. For further information, please contact H. F. Norris, Bldg. R.32, Ext. 484 immediately.

P.L.A. The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
4th - 6th May.	A.E.R.E.	Spark Chamber Tests
7th & 8th May.	R.H.E.L. & Queen Mary College	(p, n) Scattering by Time of Flight Method
9th - 11th May.	R.H.E.L. Nuclear Chemistry	Fission Studies

INTERNAL EVENTS

Men., 4th May 11.15 a.m., Lecture Theatre.	Nimrod Lecture Series	Dr. S.G.F. Frank (Liverpool)	Electron- Proton Scattering.
Wed., 6th May. 2. p.m., Conf. Rm., Bldg. R.12	P.L.A. Group Seminar	Dr. L. Robertson	A proposed experiment to study the polarisation of neutrons produced in the bombardment of deuterons with 30 & 50 MeV protons.

(Continued over page)

RUTHERFORD LABORATORY BULLETIN

No. 18/64 for the week commencing Monday, 11th May, 1964

VISITORS Professor Istvan Barta, Director of the Faculty of Telecommunication, Technical University of Budapest, and Mme. S. Turi, Deputy General Secretary of the Federation of Technical and Scientific Societies of Hungary, will visit the Laboratory on Friday, 8th May.

Mr. W.W. Salsig of the Lawrence Radiation Laboratory, Berkeley, will visit the Laboratory on Friday, 8th May, for discussions with Mr. Mullett and Mr. Bowles.

Dr. G.A. Cowan of the Los Alamos Scientific Laboratory, University of California, and Dr. P.C. Stevenson of the Livermoor Radiation Laboratory, will visit the Laboratory on Tuesday, 12th May for discussions on fission process research with Mr. Cuninghame.

P.L.A. The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
11th May	R.H.E.L. Nuclear Chemistry	Fission Studies
16th-18th May	Birmingham University	Polarisation Studies

EXTERNAL COURSE Principles of Electronic Equipment Reliability, a three day course, at the Borough Polytechnic, London S.E.1., from 23rd-25th June. The fee is £6. Closing date for applications is 9th June. Details may be obtained from Mr. A.G. Taylor, Personnel Branch, Building R.20.

INTERNAL EVENTS

Mon., 11th May, 11.15 a.m., Lecture Theatre.	Nimrod Lecture Series	J. Jovanovic (Oxford)	A Measurement of the Absolute Value of the K_1^0 - K_2^0 Mass Difference; a Spark Chamber Experiment at the Brookhaven A.G.S.
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EVENT AT ATLAS COMPUTER LABORATORY

Thurs., 14th May, 2.30 p.m., Atlas Lab. Conf. Rm.	Informal Talk	Dr. G.M. Jenkins (Imp. Coll).	Adaptive Optimisation and Control.
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EXTERNAL EVENTS

25th-30th May: Exhibition, International Instruments Electronics and Automation at Olympia, 10 a.m.-6 p.m. daily. (Tickets will be available shortly from H.F. Norris, Ext 484).

26th-28th May: E.M.I. Electronics Ltd., Exhibition and Symposium, at the Rembrandt Hotel, Thurloe Place, London, S.W.7., 9.30 a.m. to 9 p.m. daily. (Further details from H.F. Norris, Ext 484).

27th and 28th May: National Physical Laboratory Open Days. (Limited number of half day and whole day tickets available from H.F. Norris, Ext 484).

Rutherford Laboratory,
8th May, 1964

H.F. Norris
Scientific Administration

RUTHERFORD LABORATORY BULLETIN

No. 19/64 for the week commencing Monday, 18th May, 1964.

VISITS ABROAD Mr. A. J. Egginton and Mr. T. Gresham will visit Oerlikon Limited, Zurich, on Friday, 15th May, for discussions on extraction magnets.

Mr. B. Southworth will visit C.E.R.N., Geneva from 18th to 20th May where he will attend the Technical and Scientific Press Day.

P.L.A. The programme scheduled for the P.L.A. next week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
18th - 24th May.	Birmingham University	Polarisation Studies.

LECTURE THEATRE BOOKINGS Sponsors of Lectures wishing to book the Lecture Theatre should contact Mr. G. R. Acaster, Room 2.52., Building R.1., Ext. 273.

INTERNAL EVENTS

Mon., 25th May, 11.15 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. H. R. Rubinstein (Brookhaven)	High Energy Proton- Proton Scattering.
Wed., 20th May, 2 p.m. Conf. Rm., Building R.12.	P.L.A. Seminar	Miss E. M. Rimmer (Oxford)	States in N^{13} and C^{13} observed by studying the $C^{12}(p,n)$, C^{12} (p,p') and $C^{12}(n,p)$ reactions.

EVENTS AT ATLAS COMPUTER LABORATORY

Fri., 22nd May, 2.15 p.m., Atlas Lab. Conf. Rm.	Informal Talk	Dr. R. M. Needham (Cambridge Mathematical Laboratory)	Information Retrieval
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EXTERNAL EVENTS

Tues., 19th May, 2.30 p.m. Banbury Road, Oxford.	Nuclear Physics Seminar	E. H. Cooke-Yarborough (A.E.R.E.)	Electronics and Nuclear Physics.
* Thurs., 21st May, 2.30 p.m., Clarendon Lab., Oxford	Clarendon Lab. Colloq.	Dr. T. P. McLean (R.R.E. Malvern)	Non-Linear Optical Effects.
Fri., 22nd May, 4.15 p.m., Clarendon Lab., Oxford.	Clarendon Lab. Colloq.	Prof. G. D. Jeffries (Univ. of California)	Dynamic Polarisation of Protons with Application to Targets.

25th - 30th May: I.E.A. Exhibition at Olympia. Catalogue will be available after Whitsun in Room 7, Building R.32.

* STOP PRESS Clarendon Lab. Colloq. postponed until 4th June.

H. F. Norris

Scientific Administration

Rutherford Laboratory

15th May, 1964.