

orbit

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Journal of the Rutherford High Energy Laboratory



Cover Photograph

"Meridian", the Barbara Hepworth Sculpture in the courtyard of State House where the SRC London Office is located.

Photograph by courtesy of the Central Office of Information.

Editorial

A large part of this issue of ORBIT is devoted to relaying such information as is known about the Science Research Council, which assumed responsibility for the Rutherford Laboratory on 1 April. At the same time the National Institute for Research in Nuclear Science was disbanded.

There has been considerable unease in the Laboratory about the change or at least about such information as we have been able to unearth about it. An important part of this is because we believe that the relationship with the Universities that the NIRNS had pioneered, was evolving in the right direction and it seemed in jeopardy. We hope that our fears prove unfounded. Like the body in Newton's first law of motion, we no doubt possess our fair share of inertia. Now that the impressed force has done its work we must hope that our new state of motion will enable us to do our research as well if not better than before.

The news from R3 is not good. A crack was discovered in one of the rotor end plates of Alternator No. 2 in the position where the fracture occurred on Alternator No. 1. The possibility of continuing the Nimrod physics programme at half speed for a few months using half the power supply has therefore had to be abandoned. The second rotor has been stripped out and returned to the manufacturer's works for rebuilding. We should be back on the air with one alternator in September, and with a full power supply the following month.

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T R Walsh, R Hecken, E G Higgins,
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On two other topics raised in last month's Editorial a happier situation has been reached: No change has been made in the assisted house purchase scheme and a mutually agreeable compromise has emerged from negotiations on the shift system issue.

THE SCIENCE RESEARCH COUNCIL

On 1 April 1965 the Science Research Council came into formal existence. The Council is established by Royal Charter following the passing of the Science and Technology Act by Parliament in March. It will cover the whole field of fundamental science except for those areas under the other Research Councils. The Council has a staff of about 2000 and an estimated annual budget of around £28,000,000.

The Royal Charter

Extracts from the Royal Charter of the Science Research Council:-

... "NOW, THEREFORE, KNOW YE that We, by virtue of Our Prerogative Royal and of all other powers enabling Us in that behalf, of Our especial grace, certain knowledge and mere motion have granted and declared and do by these Presents for Us, our Heirs and Successors, grant and declare as follows:

1. THE person now the Chairman and the other members of the Science Research Council... and all such other persons as may hereafter become the Chairman and other members of the body corporate hereby constituted, shall for ever hereafter (so long as they continue to be members of the Council) be one Body Corporate under the name of "The Science Research Council" (hereinafter referred to as "the Council"), and by the same name shall have perpetual succession and a Common Seal, with power to break, alter and make anew the said seal from time to time at their will and pleasure, and by the same name shall and may sue and be sued in all courts and in all manner of actions and suits, and shall have power to enter into contracts, to acquire hold and dispose of property of any kind, to accept trusts and generally to do all matters and things incidental or appertaining to a Body Corporate.
2. (1) THE objects for which the Council are established and incorporated are as follows:
 - (a) To carry out research and development in science and technology.
 - (b) To encourage and support by any means research and development in science and technology by any other person or body.
 - (c) Without prejudice to the foregoing paragraph, to provide and operate equipment or other facilities for common use in research and development in science and technology by universities, technical colleges or other institutions or persons engaged in research.
 - (d) To make grants for post graduate instruction in science and technology.
 - (e) To disseminate knowledge concerning science and technology.
- (2) The Council may pursue their objects in Our United Kingdom of Great Britain and Northern Ireland or elsewhere.
3. ALL moneys and property howsoever received by the Council, including any moneys voted by Parliament, shall be applied solely towards the

promotion of the objects of the Council and no portion thereof (except as otherwise provided in this Our Charter) shall be paid or transferred directly or indirectly to the members thereof.

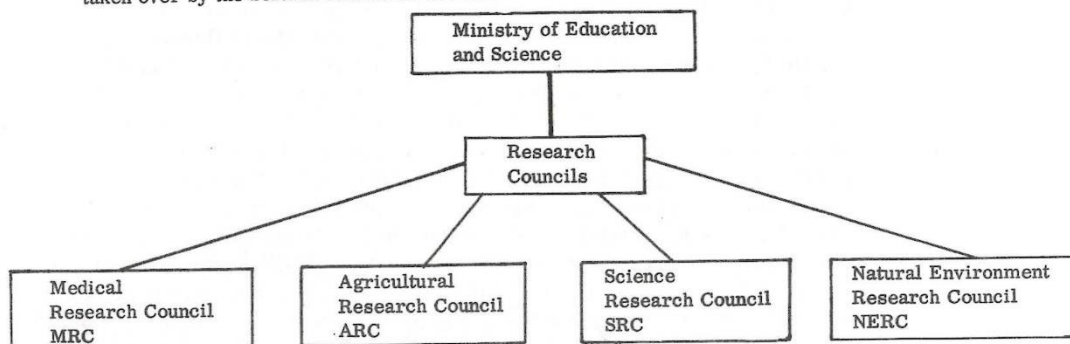
- 4 (1) THE Council shall consist of a Chairman and not more than fifteen nor less than ten other members.
 - (2) The Chairman and other members shall be appointed, and the terms of their appointment shall be determined, by Our Secretary of State, who shall appoint not less than two-thirds of the total number of members for the time being on account of their qualifications in science or technology.
 - (3) Before appointing any member on account of his qualifications in science or technology Our Secretary of State shall consult the President for the time being of the Royal Society .
 - (4) Every member shall hold and vacate his office in accordance with the terms of his appointment and shall, on ceasing to be a member, be eligible for re-appointment but -
 - (a) a member shall not be appointed for a term of more than four years;
 - (b) a member, other than the chairman, who at any time serves for eight consecutive years shall not be eligible for re-appointment before the expiration of one year from the end of that period; and
 - (c) a member may at any time by notice in writing to Our Secretary of State resign his office.
-
- 8 (1) THE Council shall, with the approval of Our Secretary of State, appoint a Secretary and may appoint such other officers and take into their employment such other persons as the Council may determine subject, as to the number of such officers and other persons, to the approval of Our Secretary of State and the Lords Commissioners of Our Treasury.
 - (2) The Council may -
 - (a) pay to their Secretary and to their other officers and to other persons employed by them such remuneration as the Council may, with the approval of Our Secretary of State and the Lords Commissioners of Our Treasury, from time to time determine; and
 - (b) as regards any officers or other persons employed in whose case it may be determined by the Council, with the approval of Our Secretary of State and the Lords Commissioners of Our Treasury, so to do, pay to or in respect of them such pensions (including gratuities), or provide and maintain for them such pension schemes (whether contributory or not), as may be so determined.
 - (3) Where the holder of an office or employment with the Council, being a participant in any pension scheme applicable to the office or employment, becomes a member of the Council, he may be treated for the purpose of the pension scheme as if his service as a member of the Council were service in an office, or employment with the Council, and his rights under the scheme shall not be affected by any provision of this Our Charter which requires that pensions, allowances or gratuities or payments towards the provision of them payable in the case of members of the Council shall be determined by Our Secretary of State with the approval of the Lords Commissioners of Our Treasury.
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- 12 IN this Our Charter "science" includes the social sciences and references to Our Secretary of State are to Our Secretary of State for Education and Science.

IN WITNESS whereof We have caused these Our Letters to be made Patent.

Position in Science Reorganisation

The reorganisation of civil science and technology has divided responsibility between two Ministries - the recently created "Ministry of Technology" under Mr. Frank Cousins, and the "Ministry of Education and Science" under Mr. Anthony Crosland. The Atomic Energy Authority (AEA) and most of the Department of Scientific and Industrial Research (DSIR) comes under the Ministry of Technology. The National Institute for Research in Nuclear Science (NIRNS) is disbanded and its work is taken over by the Science Research Council

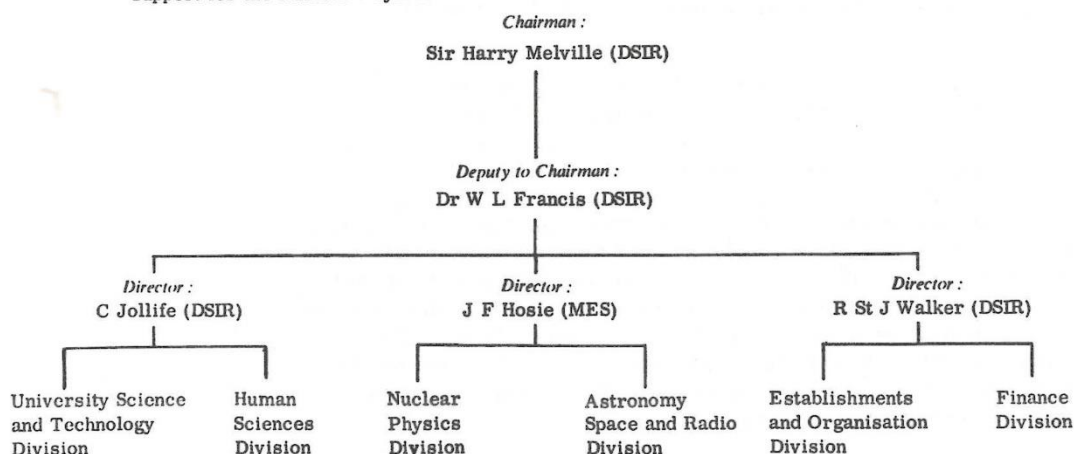
(SRC) under the Ministry of Education and Science (MES). The SRC is one of four research councils as indicated below. It will support research in the human sciences, nuclear physics, astronomy, space and radio, and also research in engineering and technology in the Universities. It will be the main U.K. agency for supporting the European Organisation for Nuclear Research (CERN) and the European Space Research Organisation (ESRO).



SRC London Office

The membership of the Science Research Council was given in the March issue of ORBIT and a photograph of the assembled Council can be seen on pages 8 and 9. The headquarters organisation is located on the top three floors of State House, High Holborn, London W.C.1 (CHAncery 1262), previously the headquarters of DSIR. Their staff is expected to increase to about 240 people in the first year. The organisation consists of a Chairman, his Deputy followed by three Directors each over two Divisions as shown below. The previous organisation of the people appointed to these positions is shown in brackets.

Dr. A.C.W.V. Clarke, who was seconded to NIRNS from the AEA in November 1964, will be the Division Head of the Nuclear Physics Division. Dr. J.A.V. Willis, who served as Secretary to the NIRNS from the time it was formed in 1957, will be Deputy to Dr. Clarke. A Nuclear Physics Board is being formed and we hope to be able to relay information on its membership and its mandate in a future issue. The Nuclear Physics Division will supply the administrative support for the Nuclear Physics Board.



Establishments of the SRC

SRC takes over responsibility for six establishments; the first three below are the ex-NIRNS Laboratories.

1. The Rutherford High Energy Laboratory
2. The Daresbury Nuclear Physics Laboratory
3. The Atlas Computer Laboratory

4. The Royal Greenwich Observatory

The Royal Greenwich Observatory was founded in 1675 and is the oldest scientific institution in the country. In 1946 they were driven from Greenwich by the London smoke and are now situated at Herstmonceux Castle in Sussex. Their work includes the very precise measurements of the positions of the sun, moon, planets and stars which are needed for research into celestial mechanics and galactic structure. Astrophysical observations on the stars are made to determine their physical and chemical constitution and to provide information for theories on their processes of evolution. A Royal Observatory situated at the Cape of Good Hope is administered with the Greenwich Observatory and makes equivalent observations in the southern skies. Continuous observations of the strength and direction of the earth's magnetic field are made at an outstation at Abinger in Surrey. The Observatory is, of course, famous as the source of the national time service. It also prepares various navigational almanacs.

The Observatory was previously under the Navy Department. It has a staff of about 200 and the Director is Sir Richard van der Riet Woolley, OBE, ScD, FRS.

5. The Royal Observatory, Blackford Hill

This Observatory was founded by the Astronomical Institution in 1818 and was originally situated at Calton Hill near the centre of Edinburgh. In 1896 it moved to the present site further from the city centre. It has a total staff of about 70 and Director is the Regius Professor of Astronomy of the University of Edinburgh, Professor H A Bruck who is also the Astronomer Royal for Scotland. The Department of Astronomy of Edinburgh University is included in the Observatory.

It is a research centre for astrophysics, astronomical instrumentation, space research and seismology. The Astrophysics Division performs similar work to Greenwich on the structure composition and evolution of the stars and also investigates the properties of interstellar dust and magnetic fields. The Astronomical Instrumentation Division designs and constructs instruments and is developing automatic methods of observation for studies where large quantities of data have to be collected. The Space Research Division is working on the design and construction of photometric and spectrophotometric equipment for studying the far ultraviolet radiation of stars by observations taken outside the earth's atmosphere. The Seismology Division is developing the use of arrays of seismometers and of magnetic recording, together with the application of computer techniques and other new methods to seismology.

6. The Radio Research Station

The Radio Research Station was established in 1928 in Ditton Park, Slough. In 1956 a new building was erected to accommodate an expanding programme of research. The basic work of the Station is concerned with fundamental investigations into the propagation of radio waves, but it was decided in 1959 that half the total effort of the Station should be devoted to space research. Much important work has been done in this field over the past few years.

In addition to the main centre at Slough, the Station is responsible for the operation of the Minitrack installation at Winkfield in Berkshire, which is used for tracking and receiving telemetry from satellites. It also operates small research stations at Singapore, at Port Stanley in the Falkland Islands and at Lerwick in the Shetland Islands. A radio telescope is under construction at Chilbolton in Hampshire which will be used as part of the general programme of research.

The Station was previously under DSIR. It has a staff of about 270 people and the Director is Mr J A Ratcliffe, CBE ; FRS.

THE Accelerator WORLD

News and views
from the world of
high energy physics,
accelerators,
and computers.

Fortran on Atlas

A red letter day for the Atlas Laboratory, was reached on 1 March, 1965 when the full HARTRAN system was officially launched on the Atlas computer. This system enables Atlas users (physicists, engineers, mathematicians, chemists and other professions) who write programs in the almost universal language, Fortran, to have their programs compiled and executed in a single access to the machine. Previously such work had entailed two accesses to achieve the same effect, the first to compile the Fortran program to obtain binary card output and the second to execute the program loaded from the binary cards.

This event marked the partial culmination of a period of work covering four to five years by a small group, varying in number from two to five people. These were drawn originally from AERE and latterly from Atlas Laboratory, with assistance from ICT Ltd. For a long time work on the compiler entailed using an IBM 7090 at Risley and the Atlas Computer at Manchester. Development was switched to our own machine around August last year. A great deal of the credit for seeing the project through, must go to Bart Fossey and Barbara Stokoe who have put in a long sustained effort, often under very trying conditions.

The need for a Fortran compiler for Atlas was recognised in 1959. The language had gained, and still has, wide acceptance in the USA for computer programming and the UKAEA had, even then, a fair investment in Fortran programs. The Rutherford Laboratory has developed a set of programs in Fortran to analyse the experimental data from bubble chamber tracks and has used them very successfully for long periods on the IBM 7090. It is hoped to get these programs working on Atlas where it is expected they may run for many hours. Quite apart from this specific application, most day to day programming in AERE and the Rutherford Laboratory is done in Fortran, so that a Fortran compiler is an essential part of the equipment of the Atlas Computer.

Photographs by
courtesy of the
Science Research Council



The Science F

Left to right - Professor K Mather CBE, FRS ; Professor M R Gar
Dr A Caress ; Professor Sir Ewart Jones FRS ; Sir Harry Melville
FRS ; Dr S C Curran FRS, FRSE ; Professor (

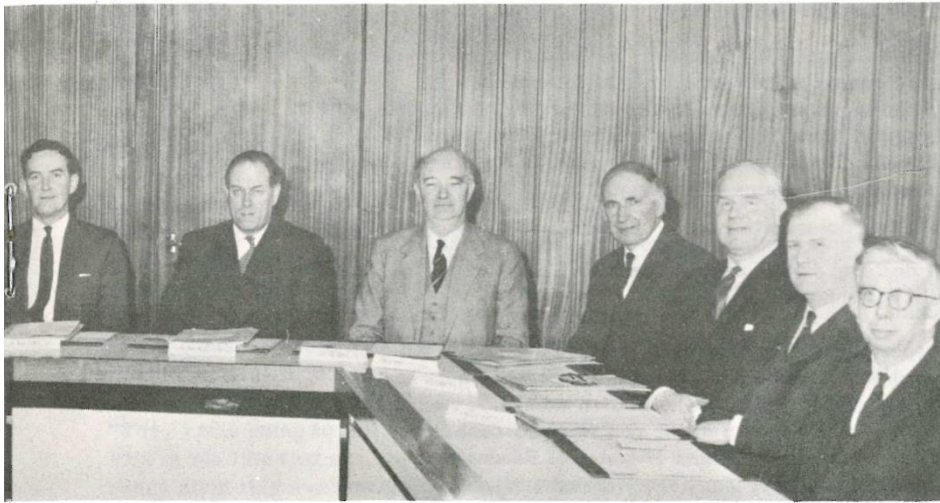


Dr WL Francis CBE

(Deputy to the Chairman)

Dr Francis was an Exhibitioner at King's College, Cambridge and in 1933-34 held a Foundation Fellowship in Experimental Zoology at the Rockefeller Institute, New York. From 1935-40 he was Science Master at Repton School and was engaged on radar research and administration during the war. In 1945 he joined the headquarters staff of DSIR and was appointed Director of the Grants and Information Divisions in 1958.

Dr Francis is aged 58. He is married, has two sons and three daughters and lives at Sheen in Surrey.



Research Council

avin MBE ; Professor C F Powell FRS ; Professor J E Smith FRS ;
 le KCB, FRS ; Lord Halsbury ; Professor Sir Bernard Lovell OBE,
 r G C Drew ; Dr D G Christopherson OBE, FRS

Sir Harry Melville KCB FRS

(Chairman of the Science Research Council)

Sir Harry Melville was educated at Edinburgh University and Trinity College Cambridge. He was a Fellow of Trinity from 1933-44. In 1936, he was awarded the Medola Medal of the Institute of Chemistry and in 1958 the Davy Medal of the Royal Society. From 1940-48 he was Professor of Chemistry at Aberdeen University, acting as Scientific Adviser to the Chief Superintendent of the Radar Research Station from 1943-45. In 1948 he moved to Birmingham University as Mason Professor of Chemistry until 1956 when he was appointed Secretary of the Council for Scientific and Industrial Research. He was knighted in 1958 and was made a member of the Research Council of DSIR in 1961.

Sir Harry is aged 56. He is married, has two daughters and lives at Chalfont St Giles in Buckinghamshire.



Future European Programme

The CERN Council, consisting of delegates from the 13 member states had their 29th Meeting on 25 March. Their main concern at this specially convened meeting was the three-part future European programme in high energy physics.

- Part 1: To improve the existing CERN facilities, including improvements to the 28 GeV synchrotron and its experimental equipment. A cylindrical hydrogen bubble chamber with a diameter of 5 metres (at a cost of over £3 million) may be constructed by a member state. Another bubble chamber proposal, from France, is for a new heavy liquid chamber (given the name "Gargamelle" after Rabelais giant).
- Part 2: The construction of intersecting storage rings fed by the 28 GeV machine. A decision on this project has been called for by the CERN Scientific Policy Committee in 1965.

John Davey reporting in "The Observer" on 28 March said "All CERN Members except Britain have now accepted the improvement and storage ring plans in principle. . . The British excuse. . . was that the new Government is engaged on a major review of all research expenditure. In particular, the new Ministry of Education and Science is trying to draw up a long-term development plan which will allow for CERN expansion without prejudicing other branches of science (including space research, radio astronomy, and work at universities)

Britain's nuclear physicists are expected to ask for a growth rate of 15-20% per year for five years, which would bring the nation's annual expenditure on nuclear physics up to about £20 million a year by 1970".

- Part 3: Construction of a 300 GeV proton synchrotron. Member states have been asked to recommend sites and Britain will probably propose a site in Norfolk. France, Germany, Spain and Belgium have already offer sites.

If the European proposals are implemented they will integrate with the developments in Russia and America as follows:

1. 70 GeV synchrotron, Serpukov, Russia (1966)
2. 28 GeV storage rings, CERN, Europe (1971)
3. 200 GeV synchrotron, Berkeley, U.S.A. (1973)
4. 300 GeV synchrotron, ? Europe (1975)
5. 800 GeV synchrotron, ? U.S.A. (1980)

America has accepted a doubling in expenditure on high energy physics over the next five years. Their plans include important improvements at Brookhaven and Argonne as well as the 200 GeV and 800 GeV machines. They have decided not to build storage rings and are in consultation with Europe about the use of facilities at CERN if the storage rings go ahead in Europe. If they are not built, America may rethink their storage ring decision. They are also considering inter-continental collaboration on the 800 GeV machine.

"The early days of a new department, given men of enterprise and drive at the top, are likely to show civil servants at their best. . . In the new Departments, the staff have no common tradition to make them hidebound. The danger there is that senior officers may impose standards and traditions they have become used to elsewhere, but which are not at all apt in a new context. A Ministry whose key-note is enterprise may not be able to afford the excess of caution found elsewhere: another whose declared aim is social justice may find itself diverted into a cul-de-sac if it spends all its time trying to reconcile the conflicting aims of pressure groups".

H. Trevor Woolston
Editor "Civil Service Opinion" March 1965

How Odd Can You Get

"I say old chap, I wish you wouldn't come up here to my office. I mean, meeting casually in the Restaurant is one thing, or even crawling about on the mound - but anybody might see us here and these metal partitions are very thin."
"Dangerous - I know, but I've just heard, and it's imperative that I see you. You're going to the Headquarters at State House!"

"Yes, I was going to tell you, of course. Don't look at me like that old boy - I've been out every night this week watching the Restaurant in case there were any new developments. I'm doing as much for the cause as you are. Haven't had any sleep don't get all worked UP AND START SHOUTING. REMEMBER THE PARTITIONS."

"It's you that's shouting, man, not me! No, I'm delighted that you're going. You couldn't be better placed - right there among Them."

"You mean - you think They're at State House?"

"Good God, haven't you cottoned on yet? Of course They're there! They infiltrated the SRC as soon as it was formed! I keep telling you - these people are efficient, well integrated and ruthless. It's fatal to underestimate them. They've as good as taken us over, I tell you!"

"I must say this whole SRC business has puzzled me a bit -"

"Ha, ha, ha - the understatement of the century! Their recent moves have been baffling - the subtlety of it all! Even I'm having difficulty following it. The trouble is we've no reliable information - they're as tight as a clam. Notice how the Headquarters was packed with Their own staff? Did we get a chance to send a representative batch of people? Not on your Nelly! Two hundred and forty of them - like an impregnable fortress - it takes your breath away!"

"But I don't quite see what I can do ..."

"You are the undercover man. You are going to make up for our lack of information ... By the way, can you use a miniature camera and make microfilms?"

"Well no ... I'm not very good at that sort of

thing ..."

"Oh never mind! I'll teach you. My idea is to get the information out in the form of microdots on Their own memoranda. Neat, eh? Worthy of Them. Has it occurred to you that the key to all this lies in the shape of the Restaurant?"

"The SHAPE OF THE RESTAURANT?"

"Calm down! Your nerves are in a shocking state! You'll have to pull yourself together if you're going to be an undercover man. I explained it all to you the first time we met. They wanted to build an accelerator so They made out it was a Restaurant symbolising an accelerator. Double Bluff. That's the key!"

"I'm afraid I don't follow ... I'm very tired ..."

"Why They're behaving exactly as if They're A.A."

"A.A. ? Alcoholics Anon ..."

"No, no, Anti-accelerator! They're behaving exactly as if They were trying to cut us down. First They try to force on us an inferior pension scheme, then they attempt to axe our housing scheme ... - and these are only the beginnings. It'll be complement and budget cuts next! Why some people I know are beginning to think they may not get support for their own projects - its fantastic! And when the whole country is lulled into a false sense of security - wham! We're committed to several 1000 GeV machines ... Well aren't you going to answer it?"

"Answer what?"

"Your telephone. It's been ringing for the last five minutes!"

"I never heard it - I'd better see a doctor - -"

"Pull yourself together. And remember, from now on you should be calm, smooth, suave. You'll never know who your friends are. Now for Pete's sake answer that phone. I'll slip out by the side door."

"Hello ... A call from where? ... State HOUSE!
DID YOU SAY STTTATE HHHOUSE ..."

Orbiting Around

Editor: H F Norris
Building R20, Ext.484.

Record Society

Exactly a year ago a small group of people led by Ron Hazell and Terry Harper were thinking about setting up a Record Society to play programmes of music at lunchtimes in the Lecture Theatre. The first programme was presented on 12 May, 1964. No sort of formal organisation was set up and anyone can go to hear any of the music presented.

At first, mixed programmes of classical music and jazz were tried but these were not very successful and the categories are now separated and a ratio of about three classical to one jazz is used in organising the programmes. In October, 1964, the frequency of the programmes was increased and they are now held weekly on Tuesdays at 12.30 p.m. The new sound amplifying equipment which has been installed in the Lecture Theatre is giving reproduction of very high quality and this has improved the programmes considerably.

A very wide range of music has been covered. A series of the Brahms Symphonies has been completed and one of the Sibelius Symphonies is now underway. Opera, operetta, light classical and jazz (ancient and modern) have all been featured. Among the most popular programmes have been a Memorial Programme of the music of Glen Miller on the 20th anniversary of his death; Stravinsky's "Petrushka" and Handel's "Messiah" - three very different programmes.

The selection of music is done by a panel of four people (currently Ben Kingdon, Joyce Wells, Marika Armitage and Brian Southworth) who meet once a month to decide the programmes for the following month. Each person serves for four months on this panel and is then succeeded, so then no-one with an obsession, for example for 17th Century harpsicord music, can monopolise the selection for very long. The panel will do its best to accommodate any request for music, within the categories mentioned above, from anyone in the Laboratory. If you would like to hear something in particular, let any of the above four people know.

The first two programmes in May, will be held at 12.30 p.m. in the Main Conference Room of R1 while the lecture Theatre is closed for installation of a projection booth. The last two will be held in the Lecture Theatre as usual.

- | | |
|---------|--|
| 4 May: | Sibelius Symphony No.4
(continuing the series of Sibelius symphonies) |
| 11 May: | Russian Music
A programme of Russian Folk Music |
| 18 May | Jazz
Music from the career of Charlie Parker |
| 25 May: | Stravinsky "The Rite of Spring" |

A West German firm has ordered a ban on the use of the telephone, for both incoming and outgoing calls, for one hour every day "to permit concentrated work without interruption". The rule applies even to the Managing Director. It follows a recommendation of investigators from the Association of German Industry.

Date for your Diary

19 June Laboratory Open Day

On the afternoon of 19 June the Rutherford Laboratory will hold an "Open Day" for members of the Laboratory, families and friends. It is intended that this year it will be much more a family occasion than previously with such things as Childrens Sports, Inter-divisional Competitions and Side Shows. A dance will probably be held in the evening in the Restaurant

Darts

The annual Rutherford Laboratory Darts Competition will be held in the Conference Room of the A.E.R.E. Social Club on 21 May, from 7.30 p.m. to 11.30 p.m. A bar extension has been applied for.

The knockout competition will be played off in teams of four, pairs and singles. The pairs and singles must be drawn from the teams of four or must represent a particular team. All teams who wish to enter should forward their names to Malcolm Arnold, R9 Workshop (Ext 558) or Eric Kirby, R18 Workshop (Ext 6131) not later than 4 May 1965.

Players should be members of the A.E.R.E. Recreational Association as well as Rutherford Laboratory personnel. Cups and medals will be presented to the winners.

Wives and friends are very welcome to join in the evening.

Table Tennis

The R25 based group of table tennis enthusiasts had another outing to play a friendly match with the players who compete in the local table tennis leagues. This time, on 1 April, they didn't stray far from home to play against a team who had played for AERE. John Crawford, Terry Crago, Don Tansley and Keith Sinclair represented the Laboratory and two others from the Laboratory staff, Paul Chatterton and Brian Southworth, were on the AERE side in addition to Ed Lamb and Irene Sinclair (Keith's wife).

With matches going ahead on two tables, sixteen games were played during the night and the match went to AERE by twelve games to four. John Crawford played particularly well and won three of his four matches.

A week previously, on 25 March, the AERE club held their Annual Handicap Tournament. The winner was John Delury (Nimrod HEP Engineering) who, from a drastic handicap of -24 beat Alan Hewlett (contract draftsman on VEC project) in the final. Alan had a hard match with Colin Morath (UCL on Heavy Liquid Bubble Chamber) in the semifinal and it was fitting that, on what was probably his last formal appearance at the club, he should play so well. Over the past two years, Alan has served the club excellently as Secretary. In the Handicap Plate for those who had the misfortune to be knocked out in the first round of the main tournament, Brian Southworth won the final. Rutherford Laboratory players therefore carried off all the prizes.

The R25 people have started putting together a second table to cope with the increasing numbers of people playing in the lunchtime but conditions in R25 for these two tables are extremely cramped. There is obviously potential in the Laboratory for one or two teams to enter the Didcot League Tournament next year. The enthusiasm is there, only the facilities for playing matches in acceptable conditions are lacking.

Rugby

The AERE Rugby Club are organising a 7-a-side tournament on Sunday afternoon, 2 May at 2.30 p.m. It is hoped that the Rutherford Laboratory will be represented by one or more teams. A team from the Laboratory reached the final in 1963.

We wish them success in their efforts this year not only to reach the final but to bring home the trophy. Anyone who would like to watch the game is very welcome. Suitable refreshments will be available from a beer tent.

Cricket

In recent years, the Rutherford Laboratory has been very successful in the evening league cricket competition with two teams, one from PLA under the Captaincy of Pat Alderman, and the other from NIMROD under the captaincy of Brian Goodenough.

The PLA team entered for the first time last year in Division II and came top of their league. This entitles them to promotion to Division I this year. The NIMROD team came up from Division II in the previous year, 1963, and went on to win the Division I league championship in 1964.

The first game this season is on 10 May when NIMROD and PLA are drawn against each other. The game starts at 6 p.m. and will be held on the main pitch at AERE. Any person interested in playing should contact Brian Goodenough (Ext 6148) or Pat Alderman (Ext 311)

Ex Librarian

Jae Fraser, who resigned from the Laboratory at the end of March, was married on 3 April to Keith Hitchin of the Oxford City Police Force. Jae started work here four years ago and spent the first year with Jean McWilliam who set up the Library. After Jean left, Jae ran the Library single handed for five months and did an excellent job. It is interesting to recall that during her four years the library has been moved three times. Amongst her outside activities Jae is interested in oil painting and twice exhibited in the AERE Annual Art Exhibition. Her helpfulness and pleasant personality will be missed and our best wishes for her future will be echoed by her many friends at the Laboratory.



Editorial Board

Mick Hecken who joined the Orbit Editorial Board in January this year has resigned from the Rutherford Laboratory. Mick had been here about 2½ years and worked in Electrical Services R18. His new job is with Pirelli Cables as Assistant Engineer on site cable laying and will involve quite a bit of travelling around the country. With his interest in social activities, he was on various committees and was the organiser of the darts tournament. We wish him every success in his new venture. His father, Ron Hecken, will succeed him on the Orbit Editorial Board

Professor PD Dunn



Peter Dunn who led the Nimrod R. F. Group until September, 1963, has been appointed to the professorship of applied physical sciences at the University of Reading. He joined the Linear Accelerator Group at Malvern in 1950 and moved with the Group to work on the PLA in 1953. From 1957 he led the design, construction and commissioning of the radio frequency accelerating system for Nimrod. When the accelerator has achieved its design energy, he returned to AERE and led the Applied Physics Group, particularly in direct conversion studies, involving work on the thermionic diode, magnetohydrodynamics and thermoelectricity. Peter says he hopes to maintain an active interest in this field of research.

He has always had an interest in education and was a frequent lecturer, especially on engineering topics. In his new position, he has ambitions to create a new kind of engineer, since, in his own experience, there is generally too wide a gap between the traditional engineer and the physicist, and a tendency for too much specialisation. A need is growing for the type of person who can understand problems from both the physicist's and the engineer's point of view.

We wish Peter every success in his new position which he takes up in October.

Back from the Phillipines



(Around the world in 23,500,800,000,000, nanoseconds). Katie Knight returned recently from a nine months visit to the Phillipines where she was working with their Atomic Agency Commission on a post sponsored by the International Atomic Energy Agency.

Kate has many interesting stories to tell - unfortunately not all suitable for Orbit. The country around the capital, Manila, she found really beautiful with luxurious growth everywhere. The temperature range throughout the year varies between 70°F and the 90's, although one day last December the Manila Times headlines read, "Cold hits record low... Temperatures in the city really went down yesterday - a low 18.1°C, 64.6°F the coldest so far this year. Weathermen last night said the mercury is expected to dip further down early this morning". As far as Kate can remember it did - to 61.7°F.

When asked about the people, customs etc., she said that a country consisting of over 7000 islands, with about 700 dialects, 500 years of Spanish rule, followed by American influence from 1898 to 1946 had created a situation that to Western eyes, was very difficult to understand. Manila, very much a Western city on the surface, is still a mystery underneath. Changes are however taking place and this is shown particularly by the great craving for education.

After she had finished her job in the Phillipines Kate flew on to Sydney, Australia where she stayed with friends for three weeks. To complete her trip around the world she then travelled to San Francisco, visiting Ralph Thomas and his wife, finally reporting back to the IAEA in Vienna before returning here on 29 March.



Comings and Goings

K M Mitchell, A Richards, R Tetford, J Blair, C A Grant, R C Grice and W G Weavers join Nimrod Machine Engineering. D G I Blackford, F J Dickinson and R Moores join Central Engineering;



J D Adams joins Nimrod HEP Engineering
A Accensi and C Brown join Applied Physics Bubble Chamber Group; A G A M Armstrong joins Nimrod Machine Physics; Dr P Palit and P W Wright join HEP Counters Group.

J. C Mogford joins PLA Engineering; C J Hebson joins Atlas Operations Group;

R S Reed, Miss D M Burton, Mrs I M Harding and J R Humphries join Central Administration.

G Gallagher-Daggitt has been granted unpaid leave.

Dr M V Harlow, Miss M J Ashcroft, J B O Howell, J H Edwards, A Groves, B Sizer, R F Ward and C Welch have left us.



Congratulations to -

Gerry Brewer, PLA Accelerator Physics, and his wife Gwen on the birth of a son, Anthony James, on 5 March.

Colin Walters, VEC Group, and his wife Marian on the birth of a son, Adam Paul on 13 March.

David Trew, VEC Group, and his wife Elizabeth Mary, on the birth of a son, Peter Antony, on 17 March.

Mike Turnbull, Atlas Operations, on his engagement to Miss Joy Standing on 19 March.

Ray Waltham, Nimrod Machine Physics, on his marriage to Miss Doreen Noble on 20 March.

Sue Wills, Atlas Operations, on her engagement to Ken Gregory, HEP Engineering, on 26 March.



Suggestion Awards

At the twenty fifth meeting of the Suggestion Awards Committee, held on 31 March, the following awards were made:



£20 to D A Hutchings for his proposed polepiece removal equipment. This will result in a great saving in labour and will also reduce the risk of damage when removing the pole-piece.



£1 10s 0d to T Morgan whose proposal to fit balancing units to the hanging pendants in R6 is being adopted.

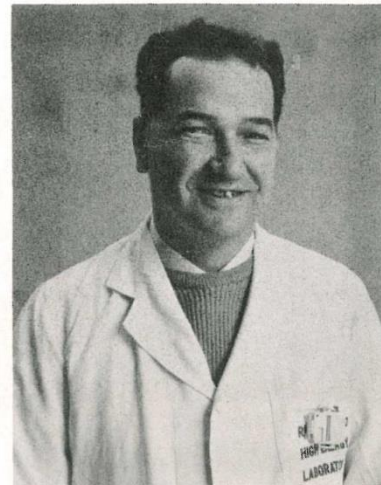


£1 10s 0d to E G Starr whose suggestion drew attention to a minor safety hazard in the R2 side entrance doorway. This is being rectified.



£1 10s 0d to H Webb whose suggestion drew attention to a minor safety hazard at the R9 Stores access hole, which has been rectified.

Encouragement Awards of £1 were made to R Hall and D G Jones.



Denys Hutchings who received a £20 award for his polepiece equipment suggestion. This equals the highest award recorded to date.