

Bulletin

of the Rutherford Appleton Laboratory

17 Apr. 1984 No.6

Advisory Board Visit to RAL

On Thursday 8 March RAL was host to the Chairman and members of the Advisory Board for the Research Councils. They were accompanied by Mr Robert Jackson, MP for Wantage and MEP for Upper Thames and assessors from the Department of Education and Science.

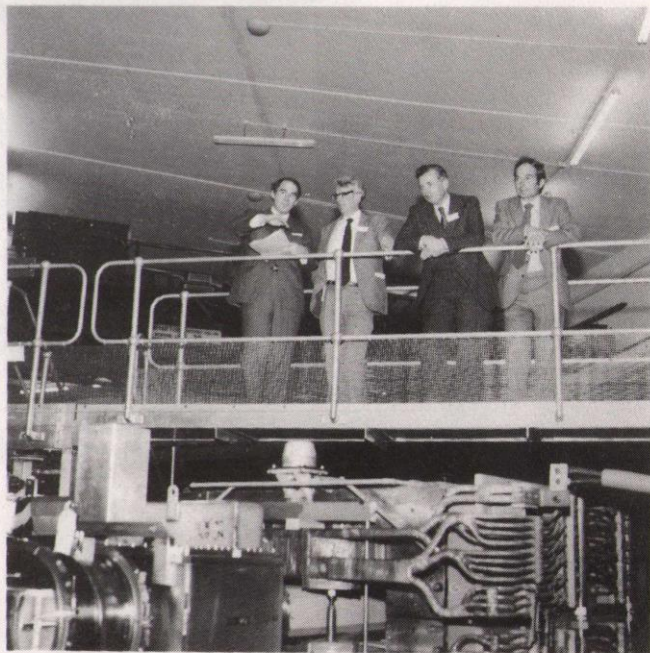
After an introductory talk on the Laboratory's programme by the Director, Dr Geoff Manning, the visitors were shown as much of the wide spectrum of RAL's work as their individual special interests and the time available would allow. Lunch was taken with the Director and Division Heads, before a final question and answer session. The ABRC were well satisfied with their visit and all they saw.

The Advisory Board for the Research Councils advises the Secretary of State for Education and Science on the allocation of the science budget, and on civil matters generally, with particular reference to research councils. Its membership includes heads of research councils, the Chairman of the University Grants Committee, chief scientists of government departments and independent members from industry and the universities.



Photographed during the Visit:

- Top: Dr M Key (RAL)
(l-r) Dr D Pooley
(Dept of Energy)
Dr G A K Elton
(MAFF)
Mr D A Gray (RAL)
- Right: Mr A Carne (RAL)
(l-r) Sir David Phillips
(Chairman ABRC)
Prof JFC Kingman
(Chairman SERC)
Dr G Manning
(Director RAL)
- Left: Mr R Tolcher (RAL)
(l-r) Mr R P Norton
(DES)
Dr D A Bryant (RAL)



Turning to Alternative Power



The wind turbine which can now be seen (just) from the R1 Coffee Lounge is not simply turning idly in the wind - it has already been linked to the Lab's 415 volt grid, and when it speeds up it can deliver over ten kilowatts.

Preparations are in hand to link it with the diesel generator set already installed in the R64 car park at the south western extremity of the site. The objective is an autonomous wind-diesel system for isolated communities.

End of an Era

On Wednesday 29 February 1984 the Space and Astrophysics Division's 40 kJ 40 kV Theta-pinch at Culham Laboratory was fired for the last time. The machine was commissioned in 1968 a few months after the Spectroscopy Division of UKAEA Culham Laboratory had become the Astrophysics Unit of the (then) SRC. Utilised as an emission source for spectral lines of charged ions, the Theta-pinch was fired over 200-000 times. (Is this a world record?)

Studies of the discharge resulted in research papers on spectral line identification and on the measurements of electron excitation and ionisation rate coefficients by the plasma spectroscopy method. The photograph shows some past and present users of the facility. In the foreground is Phil Spurrett who was responsible for the operation and maintenance of the Theta-pinch and associated apparatus.



Missing

Would all HEP Users please check their labs. for a LeCroy 3001 qVt, serial No. 58767.

Information on its whereabouts would be greatly appreciated by HEP Electronics Loan Pool, RAL, Ext.6185.

Film Badge Notice

It is period 4, Colour strip RED. Please be sure that you are wearing the current dosimeter and that all old ones are returned.

NEXT ISSUE

Monday 23 April.

Library Notice

"Science Policy for Britain" - T Dalyell (R61 copy).

This book has mysteriously disappeared! Please could you check and see if it is lurking in a dark corner within the confines of your office. If located please return to the Library R61.

US Award for IRAS

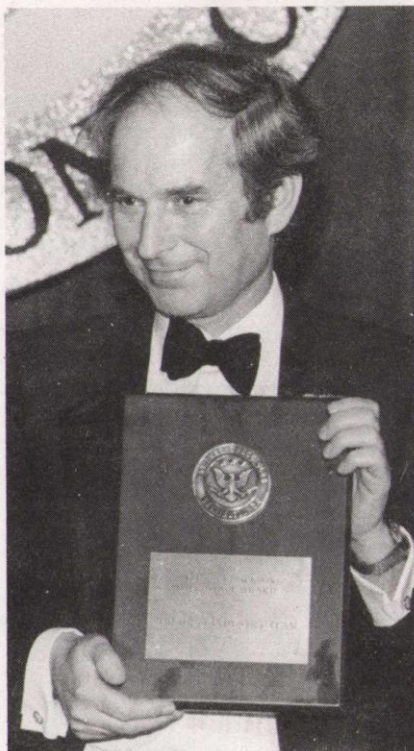
IRAS made further news on Friday 16 March when at the 'Goddard Memorial Dinner', held at the Washington Hilton, Dr Geoff Manning (Director RAL) accepted the Nelson P Jackson Aerospace Award of the National Space Club on behalf of the UK participants in the joint US-UK-Netherlands IRAS project. Mr M Ringoen accepted it for Ball Corporation (USA) and Dr R Van Duinan for Fokker BV (Netherlands).

Presented annually by the Club, at this the premier event of the American space community's year, the award was made to the 'IRAS Industry Team' "for the engineering and manufacturing excellence that resulted in the phenomenal and unexpected discoveries made by the Infrared Astronomical Satellite".

The award is a memorial to the late Nelson P (Pete) Jackson, one of the founders and past presidents of the National Space Club. The Club, founded in 1957, is a non-technical organisation composed of representatives of US industry, government, educational institutions and the press.

Previous winners of the award have been:

The Boeing Company
NASA-NOAA Space Technology Team
The Pioneer Venus Team: Hughes Aircraft Company and the NASA Ames Research Centre



Dr Geoff Manning displays the Award.
(Photo: Ankers Capitol)

Condensed Matter Research Using Neutrons - Today and Tomorrow

A NATO Advanced Research Workshop (ARW) on this topic was held at Cosener's House 26-29 March. The ARW director, Stephen Lovesey from Neutron Division, and his advisor, Reinhard Scherm from the Physik Technische Bundesanstalt, Braunschweig, invited twelve lecturers and twenty participants from Japan, North America and Europe.

The aim of the Workshop was to review some dynamic properties of condensed matter that are studied by neutron spectroscopy, and to identify areas of new science that will be accessible using advanced spallation neutron sources like the SNS. Topics discussed at the ARW included the dynamics of phase transformations, convective instabilities in liquid crystals, electronic and magnetic states in molecules and solids, and excitations in quantum fluids and solids.

The review lectures will be published in Plenum Press later this year.

Thank You

Laura Carr and family would like to thank all Bob's colleagues for their messages of sympathy and attendance at the funeral service.

"I am sorry I was unable to come and thank you personally. Also we wish to thank you for the very generous donation to the Marie Curie Foundation. It will enable the Foundation to help others in the same very caring way they helped us", she writes.

The following note has been received from Ken Moye.

"My thanks to all concerned for the generous gifts and good wishes given to me on my retirement and for the bouquet for Mary.

I would especially like to thank my fellow PTO and craftsmen colleagues for their friendship, help and for the happy times spent at RAL.

Best wishes to all for the future".

Jean Wright wishes to thank Dr Manning for his letter of good wishes on her retirement, all her friends and colleagues for the lovely gifts and Bob and Percy for the beautiful bouquet of flowers.

"I do hope you will all find time to call at 2, Hillside", she writes.

RAL Lectures

The next lecture in this series will take place on Thursday 10 May at 3.15 pm in the R22 Lecture Theatre.

ALVEY AND OTHERS

- an examination of the rash of co-operative programmes in the Information Technology field.

by

B W Oakley

Director of the Alvey Programme

The Japanese announced their "Fifth Generation" computing programme in 1981. This challenge to the supremacy of the IT industries of the West has resulted in a rash of cooperative programmes in the US, Europe and the EEC. The talk will outline the objectives of the Japanese IT programmes, of the US MCC and SRC cooperatives, of the EEC's ESPRIT programme, and of the UK's Alvey programme. The Alvey programme is a cooperative programme of research in the underlying technologies of Information Technology, funded and supported jointly by DTI, MoD and SERC.

It covers work in VLSI and CAD for Integrated Circuits, Software Engineering Intelligent Knowledge Based systems, Man Machine Interface and Networks. The organisation of the programme, the scope of the work, and progress in the technologies will be outlined.

Internal Events

ASTROPHYSICS SEMINARS
R61 CONF RM - 1400 hrs

14 April Dr John P Pye/Leicester
'Fast X-ray Transients'

2 May Dr Michael J Barlow/UCL
'The Evolution of Stars to Planetary Nebulae in the Magellanic Cloud'.

COMPUTING SEMINARS
COLLOQUIUM - ATLAS CENTRE - 1515 hrs

8 May Prof John Murrell/Sussex
'Computing in the Science Board Area: Future Requirements'

Auf Weidersehen Bill



Bill (right) and Gordon see the joke.
(84 RB 1880)

Mr W G A (Bill) Russett, BEM retired from RAL on Tuesday 13 March - his birthday. Bill holds the unique distinction of being the only person in the history of the Laboratory (in all its guises) to be presented with his Honour on site. This occurred on 3 May 1983, when he received his award from the Lord Lieutenant of Oxfordshire, Sir Ashley Ponsonby for "44 years of loyal service in the public domain".

Like many a good RAL man, he was 'ex-Navy' having spent 25 years in the service before joining NIRS in 1962. Bill worked on the PLA until it closed - worked on Nimrod until it closed and is now retiring after working at CERN and DESY.

"Do you know something about those establishments that I don't" enquired Gordon Walker, who was making the presentation at Bill's farewell ceremony. Gordon also told us that Bill's frequent visits to CERN and DESY had resulted in his becoming the nucleus of the visiting work forces - not just at work but in non-working hours too. His RN service had taught him enough of the languages to get around in restaurants and bars and it was he who would produce the cards or dominoes at the right time.

On behalf of Bill's many admirers, Gordon presented him with gifts of a camera and a Peter Davis cartoon card depicting events in Bill's life, including Alte Schiemda hotel where Bill always stayed. A photograph of Bill dining at the hotel was also included in the gifts, but Gordon inferred that this was a forgery. (For non German scholars, like me, the translation of Alte Schiemda is Old Smithy!).

Thanking Bill for the way he had used all his attributes for the benefit of the Lab, Gordon wished him on behalf of all, a long and happy retirement.

In reply, Bill mentioned that he had been apprehensive on first joining the Lab, that he would miss the comradeship of his navy days, but this was soon dispelled. Nothing had changed! He thanked all his colleagues for this, for the gifts and for turning out in force to see him off. For a while he would be popping in to see them, but thought that eventually he would move back to be beside the sea.

Crib

The 1983/84 lunchtime league season has just finished - 12 teams took part.

Champions - ACE HOLES - Peter Craske
(Capt)
Malcolm Davies
John Moir
Steve Stoneham

Runners Up - JOKERS - David Kent
(Capt)
Andrea Roberts
Maureen Smith
Cyril Watkins
Brian Wheeler

The league Knock-Out competition is now under way.

CRIB EVENING

Our very successful annual 'Crib Evening' will be held at RAL on Friday 18th May, 7pm to about midnight - entries please ASAP for singles and doubles, £1 per head - to Tony Lubbock R2 or Tudor Morgan R18.

Christian Fellowship

The Fellowship meets on Thursdays at 12.30 pm in the R2 Conference Room. (4th floor). All are most welcome.

Programme - May

- 3 Prayer Meeting - Frank Smith
- 10 Bible Study - Martin Steel
- 18 Meeting of Praise - Jimmy Darius
This will take place in the Music Room, R58. Please note this date is a FRIDAY.
- 31 Visit of Didcot Power Station Fellowship.

Folk Dance - Sell Out



The Folk-Dance organised by the RAL Barn-Dance Club on Friday 30 March was a huge success for the club, earning the respect and gratitude of the English Folk Dance and Song Soc. (EFDSS) community over a wide area, including Oxfordshire, Wiltshire, Berkshire and even London! It also earned a small profit for Club funds.

The caller was John Chapman, who we had to book nine months in advance due to his popularity. John was supported by the band Kafoozalum from London.

The dance was intended mainly for regular dancers, especially our own Barn-Dance Club at RAL (which meets every Tuesday lunchtime from 12.15 pm until 13.15 pm in R58 for all forms of folk and barn dances, with Derek Cragg and Mike Courthold as resident callers and dancing most weeks to live music).

Drayton Hall was filled to capacity for such an event, with 114 dancers on the floor and all available tickets sold in advance (although we did squeeze in one couple from London who arrived without tickets!!)

Finally, if anyone was disappointed by being turned away at the door, please buy your tickets early next time!

Bulletin

Editor: Jean Banford
Building R1
Rutherford Appleton Laboratory
Chilton, Didcot, Oxon OX11 0QX
Abingdon (0235) 21900 ext 5484

Deadline for insertions:

Mixed Blessings from the Gods

Council Works Unit is involved in two SERC projects on the island of Hawaii that have recently received mixed blessings from the gods.

The two projects concerned are the Hawaii Base Facility (HBF) and the Millimetre-wavelength Telescope (MT) Enclosure. Approval has recently been given to proceed with the FLM Hawaii Base Facility Phase I which will consist of offices, workshops and laboratories to support UKIRT. Phase II will be built later to incorporate staff for the new Millimetre-wavelength Telescope. Construction of the Base Facility is due to start in July 1984.

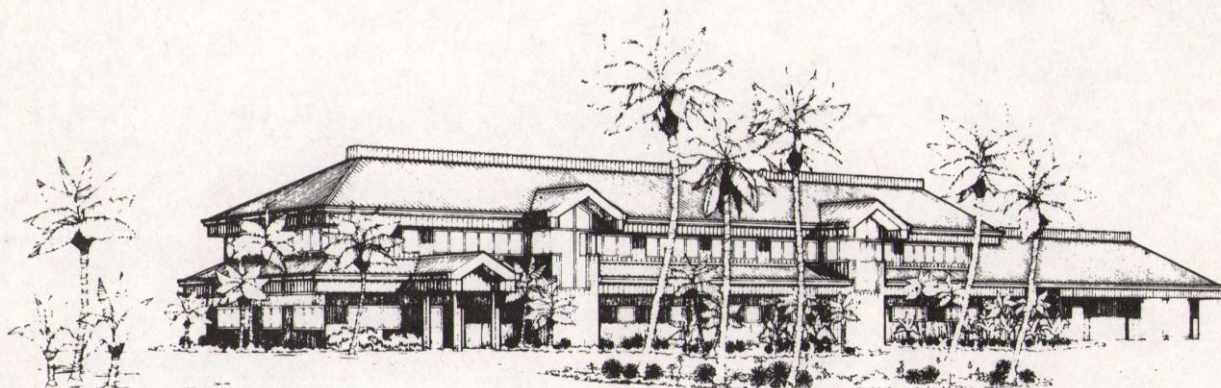
The goddess Pele, however, may have different ideas. The recent eruption of the Mauna Loa volcano on

Hawaii has put some doubt on the programme for both projects. The volcano which erupted on March 25th sent a river of lava toward the city of Hilo, where the HBF is to be built, threatening evacuation of residents. The flow of lava was estimated at over a million cubic metres per hour. If the flow continues for a number of weeks there is a risk that the Hilo site could be enveloped, delaying or even stopping the construction of the facility.

In more imminent danger of disruption is the construction of the Carousel for the MT on the mountain of Mauna Kea. At time of writing the lava is only 3 miles from the only road to the mountain from Hilo. If this road is blocked it could seriously hinder the construction programme,

which has already been delayed. The 'Odin Ace', the ship carrying the Carousel from the UK, has had engine problems and has made an unscheduled stop to pick up a cargo of explosives bound for Ecuador. It is expected to arrive in Hilo over a month late. Odin (a Viking god) is obviously not smiling on us either.

Last April the Bulletin reported on a ground blessing ceremony on the mountain of Mauna Kea. The Hawaiians are at present making offerings and saying prayers to the goddess Pele in the hope that she will stop the eruption of Mauna Loa. Council Works Unit for their part is arranging for a further ground blessing ceremony of their own in an attempt to get the gods back on their side again.



SERC Hawaii Base Facility (83MB5105)

RAL RecSoc AGM

The AGM of the RAL Rec Soc will be held on Monday 30 April 1984 in the Lecture Theatre, commencing 12.40 pm. Items for the agenda, proposals for rule changes, and committee nominations should be submitted in accordance with the notice already circulated to all employees at RAL.

The Rec Soc has undergone numerous changes in recent years, with the formation of many new clubs and societies, and especially with regard to the modifications to Building R58

itself. The most welcome inclusion undoubtedly being the showers and changing rooms. The bar is also likely to be very popular.

The AGM allows members to query past activities, direct the club's future activities, elect the Committee of their choice, and make constructive criticism. Please make every effort to attend and exercise your rights as members!

If the Rec Soc is not satisfying your needs - do something about it (like joining the Committee). Clubs are formed and run by members - have you got something to offer?

M J D Courthold
Hon Secretary
RAL Rec Soc