

# Bulletin

of the Rutherford Appleton Laboratory

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# The Farewell Ceremony

Thursday 24 September 1981 marked the end of an era. At 3.30 pm in the Lecture Theatre, RAL said farewell to its Director General and founder member Dr G H Stafford CBE, FRS.

Other bodies will no doubt pay their tributes to his many contributions over the years (SERC, CERN, the Universities, etc) but the ceremony held on that day was the Laboratory's special tribute for his leadership through good times and, as he will readily admit, when the going was tough. For Godfrey Stafford has been at Chilton since the Lab began and he now leaves to devote more time to activities as Master of St Cross.

Geoff Manning expressed for all the sadness felt at the loss of an old friend and colleague. It was difficult to think of the Lab without Godfrey. Personally Geoff had looked forward to this time - with great trepidation. Theirs had been a long partnership where in tough times it had always been possible to pass the problem to Godfrey. Now the buck stopped at him! A more immediate problem was, what should he say? Should his theme be a review of Godfrey's life, SERC doings, personal reminiscences? He had decided to touch on all.

## Life and Times

Godfrey was born in Sheffield, educated in South Africa and at Cambridge, joined both the South African and British Navies and married an Australian girl. This made him an English, Yorkshire Colonial, foreigner, as the mood took him! "As many of you will have noticed" continued Geoff "he brought to his administrative role at the Lab a Naval Officer's approach". He was always willing to go, boots and all, for what he wanted and to burn his boats, which he literally seems to have done on one occasion in the war.

In 1946 after demobilisation he lectured for a while at Cape Town, from whence he came back to England, to the Cavendish as Cape Town Ebden Scholar. From 1949-51 he worked at Harwell for the South African Government and then returned to South Africa to head the Biophysics Section of their Council for Scientific and Industrial Research.

## The PLA

Since then his research has been in the field of nuclear and elementary particle physics, first at Harwell and then at Rutherford, at its foundation. It was whilst a member of the Cyclotron Group at Harwell that the idea for a Proton Linear Accelerator was

formulated, and Godfrey was eventually given the task of making the idea a reality. NIRS was born and Godfrey and his small band of about ten became the PLA group. To them was entrusted the building of the machine and the building up of the experimental programme. They were also the first to be involved with university collaborations. They laid the foundations of our relationships with the universities - something which is central to our existence today. In this we owe a great deal to Godfrey and to the people in at the beginning.

## Nimrod

The attitude he adopted to research work, also proved to be correct. When he was Head of the HEP Division in charge of the experimental programme on Nimrod he took a realistic view when, after 6 months running, the machine broke down. He ordered that only experiments requiring low intensity should be accepted, and a great deal of scientific work was done which might otherwise have been lost.

Through the 60s and 70s, the extensive use of Nimrod built for the Lab an international reputation. But it was becoming clear by the mid 70s that Nimrod was going to be forced to close down. The dependence on one programme became a threat to the future of the Lab. Under Godfrey's leadership, this threat was overcome, and through a period of great change, the diversity of projects we all know and love today, were born.

In 1979 the Rutherford Laboratory and the Appleton Laboratory were merged. And in a vintage year for Godfrey, he became Director-General of the combination, Master of St Cross and a Fellow of the Royal Society. He had now done every job in the SERC. What was next? The task of raising funds for the expansion of St Cross seemed a fair challenge - he took it!

## Prize Giving

"As usual, at this point in these proceedings" said Geoff, "we have a collection of prizes to give you". The by-now traditional, slightly scurrilous leaving card depicting in caricature facets of Godfrey's life and hobbies was presented first. A crystal & silver claret decanter plus filler was the next offering, followed by a magnificent piece made in the new R25 workshops. This was a combined clock-barometer-thermometer for which the movement had been imported, but the case, gold-plated and lacquered and mounted on a granite base, was the workmanship of R25 - everyone in the workshop having taken a hand. An etching on copper of the Library Building, mounted on granite, was also presented. Goldie Stafford was also thanked for her part in the

life of the Lab with a bouquet of flowers. Godfrey had been known to go home occasionally aggravated and annoyed and she had, somehow, managed to send him back next day smiling.

## Reminiscences

There followed a relaxed and entertaining half hour of anecdotes by Godfrey of his life and times.

"I've never retired before" he started. "Seems alright doesn't it?" he said, surveying the "prizes" laid out before him. The burnt boat episode was explained. The 'Palomares' was its name. At the time Godfrey met it in Liverpool docks it had been through many vicissitudes by which time it was a terrible old tub. On the voyage from Liverpool to the East Indies it broke down many times and the last disaster of its life was being filled in Port Said with oil whose flash point seemed to be lower than that of the ambient temperature - hence the fire. Tales of being pelted with bottles from Americans onboard the Queen Mary in Table Bay; of the birth of his son while a P-P scattering experiment was in progress in Harwell days, and how the poor child almost got the initials PPS; of a trip in a Jaguar across Europe with two broken suspension springs and the prop-shaft rubbing on the chassis, of the remarkable part "chance" plays in one's life; of the challenge and fun of the early PLA & Nimrod days; all made hilarious listening. Even his election as Master had its amusing side, according to Godfrey. It had all come about when in difficulties at finding a new Master, the Fellows had taken Godfrey's advice about procedures, and had realised the great talent for administration they had in their midst. And the buck stopped with him again!

## It has been Fun

His reasons for leaving now, he explained, were also very much dictated by chance. The merger was now going very well, the Lab was in a stable condition, and there were some very able young lads around who should be given a chance. It had been great fun, RAL was a great place to work, but it had been a sweat and it was time for someone else to take the reigns. "One can do very little as Director except set the scene for research," he said and what has given me a kick when I couldn't directly involve myself in research was at least one had contact with those who could. What distinguishes the job in a Lab from other administrative posts is being able to go down the corridor and see people who are doing research and to learn some science. Now perhaps I shall have more time to keep up with scientific trends - anyway I shall be coming back as a university visitor!" he warned. "Thank you all for the magnificent gifts, for your support, and I wish you all the very best for the future".



## ■ame This Project

Approval was given for the detailed design and costing phase of the first European Remote Sensing Satellite ERS-1 Programme, at last week's European Space Agency Remote Sensing Programme Board meeting in Paris.

There will, no doubt, be many further hurdles to get over, but this decision is a very significant milestone in getting this programme of geophysical research from space underway.

The mission is aimed at both the scientific study and commercial exploitation of the oceans. The payload will consist of a synthetic aperture radar (SAR), which can operate in either imaging or wave spectrum (Fourier transform) mode, a wind scatterometer and a radar altimeter. The SAR is capable of providing two dimensional images of the ocean surface, or equivalent information in terms of wave amplitude and frequency spectra: such information is of value in studies of ocean dynamics, for example. The scatterometer detects radar reflections from the small capillary waves generated by winds, and so provides information on the surface wind vector. Finally, the altimeter can give information in the ocean topography (and hence currents), and on the mean wave height. At one level, each of these parameters is of value in the scientific study of the interaction between the atmosphere and the oceans and the effects of these interactions on global climate. At another level, of course, ocean data of this sort is valuable to fishing fleets, oil rig operators, weather forecasters and many other operations. There will also be a laser retroreflector on board to aid in accurate orbit determination from ground-based sites.

There will also be an opportunity to propose additional experiments in earth observations studies, and several UK Groups, including RAL, are working on proposals for this opportunity now. The deadline for submission of these proposals is now 30th November 1981.

The ESA executive has issued an invitation to European scientists to suggest a suitable name for ERS-1. Are there any suggestions?

## Missing

Somewhere between the Library and Room 2.77 Building R25 a copy of 'Product Engineering Journal' dated August 29 1966 went missing. Has this journal turned up in anyone's office and if so would the finder please contact B G Purser on Ext 7474.

Would the person who borrowed the Tektronix High Voltage Probe (type P6015 Serial No 01-0131-00) from Lab 7 in R1 please let Jackie Blissett Ext 6118 know its whereabouts for the purpose of inventory checking.

# INTERNAL Events

## HEP LECTURES

R61 CONF.ROOM - 1100hrs

7 Oct: Dr P Williams/Westfield  
'The Psuedoscalar Mass Spectrum: Gluons, Anomalies, and Topological Charge'

14 Oct: Dr Andre Martin/CERN  
'Heavy Quarks'

## NIMROD SERIES

R61 CONF.ROOM - 1400hrs

5 Oct: Prof P Ramond/Florida  
No title

## ASTROPHYSICS SEMINARS

R61 CONF. RM - 1400 hrs

14 Oct. Dr Prab Gondhalekar/RAL  
'Ultraviolet radiation in Inter-Galactic Space'

## REMOTE SOUNDING SEMINARS

R61 CONF. RM - 1530 hrs

13 Oct. Dr W A Mankin/NCAR Boulder  
'Airborne Measurements of Stratospheric Constituents'

# EXTERNAL Events

## ELEM.PART.THEO.SEMINARS

NPD OXFORD - 1430hrs

8 Oct: R J Hughes/Caltech  
'Kallen's Theorem and the Unphysical Nature of Abelian External Fields in Yang-Mills Theory'

9 Oct: R J Crewther/Bern  
'Search for the Masterfield of QCD'

16 Oct: G G Ross  
'Supersymmetric GUTS'

## NPD COLLOQUIUM

CONF.RM.H8 - HARWELL - 1530hrs

8 Oct: Dr Ian Blair/AERE  
(Bldg 394) 'Nuclear Power'

15 Oct: Prof Daphne Jackson/Surrey  
(Bldg 551) 'Contributions of Nuclear Physics in Medical Diagnosis'

20 Oct: Dr G Pert/Hull  
'Progress towards X-ray Lasers'

## Obituary

### Gerald (Gerry) Hall

With a deep sense of loss and much regret, we record the sudden death of Gerry Hall at the age of fifty.

Gerry had spent twenty years on the Chilton site, mostly with the Chemical Technology Section, where he was widely respected, not only for his immense practical ability and infectious sense of humour, but for his willingness to take on any task and solve it in his own resourceful manner.

Following a period of National Service with the RAF, during which time he developed a liking for aircraft that was always retained, Gerry joined AERE and spent ten years at Harwell. From there he brought his considerable skills, including his great talent for glassblowing, to the NIRS site, where after a period of time in the Vacuum Section of NIMROD, he devoted his efforts to the work of Chemical Technology. Such was his impact on the work of the Laboratory, he will be missed by all who knew him.

To his wife Lorna, and Neil and David his sons, we extend our deepest sympathy and share with them their great loss.

## Film Badge Notice

It is PERIOD 11 Colour strip BROWN. Please check that you are wearing the correct film badge and that all old ones are returned.

Next Film Change

Monday 2 November.

## Dr Stafford Thanks You

The presentation which took place in the Lecture Theatre on Thursday 25 September to mark my retirement from the SERC was a very moving occasion for my wife and myself. We were overwhelmed by your generosity and the gifts you gave us will be greatly treasured. The clock and barometer is already on my mantelpiece and fits well in my 400 year old home. The claret jug and tray are equally at home on my sideboard as they will be at frequent intervals on my table!

Although I am retiring from the SERC I am only moving my place of work as far as Oxford where I shall be the Master of St Cross College, so I expect and intend to remain actively in contact with the Laboratory.

The Laboratory has a fine programme ahead and with the new directorate it is in very capable hands.

Good luck to you all.



## RecSoc Prizegiving 1981

This year the Rec Soc Prizegiving Ceremony took place on Monday 21 September in the Atlas Centre Colloquium.

Sadly, it was the last time that the Society's President, Dr Godfrey Stafford, would be making the presentations and this fact could have dampened the traditional happy relaxed atmosphere of the occasion. But - no way! Mirth and fast repartee appeared to be the order of the day.

Eric Thomas, Chairman of Rec Soc, welcomed all the prize winners of both Indoor and Outdoor Sports Days and thanked Dr Stafford for finding time in a busy schedule to award the trophies. Dr Stafford then, not only performed this duty, but demonstrated his expertise in 'Direction' by composing the sporting groups, ready for the photographer to capture for posterity. On behalf of Rec Soc, Eric Thomas, thanked Dr Stafford for his continued interest over the years. As President he could have been just a titular head, but had shown real interest, and it was largely due to this that RAL Rec Soc facilities continued to improve. Most of R58 was, eventually, to be given over to Club Members, a new Judo Club was being formed, and even hard tennis courts could become a hard fact!. Rec Soc was in a healthy state. 'Thank you, goodbye and good luck in your new life at St Cross', he concluded.



Eric Thomas, Our Sponsor, Peter Kent and Tim Pett with their Table Tennis Trophies.

'Thank you for involving me in the affairs of the Society', replied Dr Stafford, 'I have enjoyed it. Initially the provision of our own facilities was slow due to our historic involvement with AERE, but now the largest fraction of folks here have no connection with Harwell,

and we have been joined by a thriving Appleton Rec Soc, things should develop more satisfactorily in the future. My thanks to all for your good wishes. There's not going to be much sport in my new job - St Cross has no facilities - though we did once have a Rowing Blue. I wish you well'.

### Narrow Boat Trip

Here's a chance for people who went on the RAL Recreational Society Narrow Boat Trip to win a free place on the next trip. All that is required is the answer to the following questions:

- 1) How many locks did we pass through?
- 2) How many bridges did we go under?
- 3) How many miles did the boat travel?

The first person to send the correct answers to N G Angold R25, Room 1/100 will be the winner.

For those of you who missed this rather unusual trip, the facts are as follows:-

On the evening of Wednesday 5 August a coachload of people left the Laboratory and headed towards Lower Heyford. After a hot, sultry day, dark clouds loomed ominously in the sky. On arrival everyone boarded the boat and promptly formed a queue

for the bar. After cruising leisurely down the canal for a couple of pints, a buffet meal was served, the skies darkened and the rain came down. Hatches were battened but spirits were not dampened. The trip ended at Enslow at 22.45, followed by the return coach journey back to the Lab.

### Thanks

Bert Gardiner thanks all at RAL who contributed towards his retirement present and takes this opportunity to say goodbye to colleagues he has missed seeing personally.

### Philatelic Society

The former Appleton Laboratory Branch of this Society is now operating at Chilton and has a few vacancies for new members. The Society holds monthly meetings, auctions and competitions in London, and produces a monthly bulletin. Its main activity is the operation of a postal exchange system in which stamps for sale are circulated regularly. These stamps are supplied by members of the Society, so the system enables members to sell or buy as they wish. The joining fee is £2.00 and there is no annual subscription, but the Society can ask for small extra fees if necessary. New members may, however, pay £2.75 on joining and become life members, in which case extra fees would not be required.

Membership application forms and further details may be obtained from Mrs A Slater, R25, 1/22, Ext 6538.

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