



23 May - 6 June 1977

Look - No Hands!

'Armless Trombonist Performs In Public'

In 1976, West Kent REMAP listed amongst its projects, "Foot operated mechanism to allow armless trombonist to perform in public". Apart from illustrating the remarkable determination of the person concerned, this brief statement poses a number of questions. What is REMAP? What are its aims? How does it operate? Why, and how is the Rutherford Laboratory involved? READ ON.

Introducing REMAP

Some years ago, the British Council for the Rehabilitation of the Disabled formed an organisation known as Rehabilitation Engineering Movement Advisory Panels (REMAP); 50 Panels now cover the UK with Area Organisers co-ordinating the work of groups of Panels, all under an advisory Central Organisation.

The aim of REMAP is to harness the voluntary services of engineers, skilled craftsmen AND others to produce, for handicapped people, "aids for living" that are not commercially available; to improve their quality of life and enable them to live their lives as naturally as possible with the minimum help from others and to foster in them the will to play a full part in society.

Very close liaison is maintained with Area Health Authority and Social Services Department and they are represented on the local REMAP panel.

Labour is provided free of all charges; materials are usually bought at cost price although in some cases local firms provide at low prices. Use is also made of the sale of surplus materials since a lot of REMAP projects can be constructed from other people's scrap. It is often a case of low key engineering and a flexible approach. REMAP is NOT in competition with commercial firms.

Rutherford Laboratory Involvement

Last summer it was decided to form a panel to cover the Oxon and Thames Valley area. The RL was approached to see what voluntary assistance could be given to this local Panel and as a result, a number of Lab people agreed to help. The RL management were also very sympathetic towards the aims and objectives of REMAP.

A small workshop, now being operated under the auspices of the RL Recreational Society, is used for projects approved by the local REMAP and accepted by the Chairman of the workshop unit who is also a member of the local REMAP. Work is carried out by Rec. Soc. members who have volunteered to do this during their own time and a small lathe and milling machine have been obtained for REMAP use.

On Thursday, 24 March the Committee of the Oxon and Thames Valley REMAP held a meeting at the RL which gave members an opportunity to look over the workshop. A number of projects have already been placed with the RL unit ranging from a motorised, purpose built carriage for a young spina-bifida patient living in East Hagbourne, to simple adaption for Yale locks to enable arthritic sufferers to open a locked door with the minimum of effort.

The carriage, slowly nearing completion, is based on a design supplied by the Design and Inventions Laboratory of the Department of Mechanical Engineering, Queen Mary College, London where their laboratory staff actively cooperate with REMAP.

Although a number of organisations support their local REMAPs, the provision of a workshop unit enabling RL volunteers to work on REMAP projects was a real breakthrough for our local panel and is the first of its kind in the country. It is very encouraging to hear that Culham Lab is organising a unit on similar lines to the RL and work has started on a motorised 'Kart' for a handicapped child in Reading; Appleton Lab have also offered help with specialised electronic work.

Of course a lot of work can be carried out in a home or garage workshop, e.g., an 'Easyrider' kart built under the auspices of the Oxon and Thames Valley REMAP in the home workshop of Eric Booth of the Dept of Mech Eng, QMC, who is also Chairman of our local panel.

In some cases, volunteers are required to undertake periodic inspection and simple maintenance of REMAP aids - often a lifeline to the disabled, or to visit disabled folk to examine a specific problem accepted by the local REMAP to see whether a solution is possible.

Volunteers Forward

At the RL we now have a nice spacious workshop, benches, drawing board, a lathe and other tools but not enough volunteers. The carriage, slowly nearing completion is still several weeks away from delivery and a second has only just been started. Lets put it this way - 26 volunteers willing to give just 4 evenings a year would provide one evenings work per week throughout the year. (2 people, minimum in workshop at any one time). We also need a Materials Officer, some Admin help and people prepared to 'think' about problems. MANY HANDS MAKE LIGHT WORK!!

As RL Bulletin Editor, I am only too pleased to pass on messages but it is much better to contact the Local REMAP representative, Peter Hey, R25, Ext 432.

There is a lot of satisfaction in being able to assist in the provision of aids ranging from car modification to assist tetraplegic to enter or leave passenger seat (Salop) to the provision of a commode for a spastic boy (Buxton & District).

Please help if you can as it would indeed be a pleasure to be able to report, 'LOOK - PLENTY OF (WILLING) HANDS'.

INTERNAL EVENTS

NIMROD LECTURE SERIES

Monday 23 May
1130
Lecture Theatre

The Quark Model Applied to Resonance Photo and Electroproduction

F Foster/Lancaster

TECH DIV COMPUTING SEMINAR

Tuesday 24 May
1430
R61 Conference Room

Interactive Graphics as an Aid to Processing Field Problems

Professor P P Silvester/Chairman Electrical Engineering Dept, McGill University Montreal

Prof Silvester has for many years been a pioneer of novel numerical methods for the solution of electrical engineering field problems. His work with finite elements has encompassed both differential and integral operators, however he is now interested in the user interfaces that his methods require. In this seminar he will discuss his latest work on pre- and post- processors including possible future developments.

HEP SEMINAR

Wednesday 25 May
1100
R61 Conference Room

$\pi^+ p$ Elastic Scattering DCS Between 400 MeV/c and 2400 MeV/c.

G Beck/Southampton University

HEP DATA HANDLING GROUP SEMINAR

Wednesday 25 May
1330
R61 Conference Room

The RMS On-line System

Ian Webb/RL

HEP SEMINAR

Friday 27 May
1100
R61 Conference Room

Report on Washington APS Meeting and Boston Meson Conference.

K Sumorok/RL

NIMROD LECTURE SERIES

Monday 30 May
1130
Lecture Theatre

Evidence for Two New Narrow $\bar{p}p$ States at 2020 and 2200 MeV from the Fast Proton Experiment on OMEGA.

B D'Almagne/Orsay

ERSU SEMINAR

Monday 30 May
1400
Lecture Theatre

The Environmental Myth - So Far and No Further.

Professor P O'Sullivan/UWIST, Cardiff

Prof O'Sullivan plans to talk about energy usage in and around our buildings, what we should do about it (if anything) and how we might set about doing it.

HEP SEMINAR

Wednesday 1 June
1100
R61 Conference Room

Radiative Decays, SU(4) and OZI Violations.

J Randa/Manchester University

OVERSEAS VISITS

Mr V Marren & Mr R Blatchford, to CERN 23-25 May, to work on WA3.
Dr F E Close, to Montpellier, France, 22-27 May, to lecture at CNRS and attend conference.
Messrs L Phillips, R Croucher & P Smith, to CERN, 23 May-6 June, for installation of WA11 Exp on SPS.
Dr D Giddings, to Nafplion, 22 May-5 June, to attend CERN Summer School.
Dr J J Thresher, to CERN, 23-25 May, to attend open ECFA meeting.
Mr D A Gray, to CERN, 23-25 May, to attend meetings of ECFA and ECAS.
Dr G E Kalmus, to CERN, 23-25 May, to attend open ECFA meeting and WA30 presentation to SPSC.
Dr W Venus, to CERN, 23-25 May, to attend SPSC meeting.
Dr M Edwards, to CERN, 23-25 May, for discussion with

other members of EMC.

Dr G Manning, to CERN, 24-25 May, to attend Restricted and Plenary ECFA meetings.
Mr J R M Maidment, to CERN, 24-26 May, for discussions.
Mr R Morgan and Mr L Coulter, to CERN, 24 May-3 June, to arrange transportation of SRC equipment to RL.
Mr A I Kilvington, to ILL, 26 May-7 June, to install electron detector in neutron lifetime experiment.
Dr M A R Kemp, to CERN, 30 May-3 June, to work on e/v experiment.
Dr P R Norton, to CERN and Annecy, 30 May-4 June, to work on NA2 experiment and attend EMC collaboration meeting.
Dr D R Quarrie, to Hamburg, 5-17 June, computing for PETRA experiment and group meeting.
Mr C J E McDonald, to CERN, 8-17 June, for discussions.

EXTERNAL EVENTS

ELEMENTARY PARTICLE PHYSICS SEMINARS/NP LAB, OXF - 1430 hrs

- 26 May: Dr P Renton - The observations of a narrow peak in the K^0 (3π) states from antiproton-proton interactions at 12 GeV/c
 2 June: Dr C H Llewellyn-Smith - CHEEP: electron-proton colliding beam at CERN?

ELEMENTARY PARTICLE THEORY SEMINAR/NP LAB, OXF - 1430 hrs

- 3 June: Dr W Zakrzewski/Durham - New trajectories in dual models

THEORETICAL PHYSICS SEMINARS/CLARENDON LAB, OXF - 1615 hrs

- 26 May: Prof A Houghton/Brown & Sussex - Critical phenomena and approximate renormalisation group calculations.
 2 June: Prof G Karl/Guelph & RL - Parity violations in atoms and all that!

NUCLEAR STRUCTURE SEMINAR/NP DEPT, OXF - 1430 hrs

- 30 May: Dr J Lowe/Birmingham - Photonuclear experiments on ^{16}O .

COMPUTER APPLICATIONS SEMINAR/NP LECT TH, OXF - 1630 hrs

- 26 May: Mr J W Jolliffe/Keeper of Catalogues, Bodleian Library - The Bodleian Library's pre- 1920 catalogue: present & future computer processing.

HEP SEMINAR/CAMP, CAMB U, ROOM A, - 1500 hrs

- 26 May: F Halzen/Wisconsin, RL - Our interest in very high energies.

HEP SEMINARS/MANCHESTER U. - 1430 & 1415 hrs

- 25 May: P Thomas/Cambridge - Parity violation in atoms (1430 hrs).
 2 June: J Randa/Manchester - SU(4), the OZI rule, vector dominance and meson decays (1415 hrs).

THEORETICAL PHYSICS SEMINAR/MANCHESTER U. - 1430 hrs

- 1 June: Dr P T Greenland/Daresbury - Two centre solutions to two centre potential models.

THEORETICAL & HEP SEMINARS AT SOUTHAMPTON - 1430 hrs

- 27 May: Dr M Green/Cavendish - The renormalization group for coupled lattices.
 3 June: Prof J R Taylor/Colorado - The three-body problem.

THEOR PHYS SEMINARS/AERE, CONF RM, BLDG 8.9 - 1415 hrs

- 27 May: Prof B V Felderhof/Aachen - Electromagnetic fluctuations in media.
 3 June: Prof Y M Chen/SUNY - Numerical solutions of three dimensional dynamic crack problems and simulation of dynamic fracture phenomena by a "Non Standard" finite difference method.

NUCL PHYS DIV COLLOQUIA/AERE, CONF RM H8 - 1530 hrs

- 26 May: Dr J V Sharp/Marine Tech Support Unit - Materials problems in the North Sea oilfields.
 2 June: Dr P G H Sanders/Oxf - Unified theories of the weak & electromagnetic interactions & the search for optical rotation in atomic bismuth.

MISSING EQUIPMENT The following items of equipment was reported missing from Room

- 1.87, Building R1 on Sunday 8 May:-
 2 Three claw, 6 inch, bearing pullers.
 Anyone with information on the present whereabouts of these items is asked to contact D Hill, Ext 328/6319.

SALES TO EMPLOYEES Sales of scrap metal/plastics as set out in RLN 12/73 will be made on 10 and 24 June.

FILM BADGE NOTICE Period 6 commenced Monday, 16 May. Colour Strip - ORANGE for 8y films and neutron packs. Please change your dosimeter promptly and return all old ones.
 Six monthly TLD change for people with surnames commencing U,V,W and X.

BULLETIN NOTICE The next issue of the RL Bulletin will cover a period of three weeks, 6-27 June. The deadline for this issue will be 1200 hours on Monday 30 May. If there is likely to be a short delay in obtaining certain items of information, eg the title of a lecture, the Editor should be informed, otherwise this deadline will be strictly enforced.

CHRISTIAN FELLOWSHIP FILM SHOW At 1230 pm on Friday 27 May the Christian Fellowship is showing a film. 'Where the Waters Run' in the Lecture Theatre. The film explores the uniqueness, amazing properties and value of water and shows the similarities between the properties of physical water and 'spiritual water'. All welcome to attend.
 3 June Prayer Meeting, 12.30 in R12 Conference Room.

Rutherford Recreational Society

President

Chairman
 Vice-Chairman
 Hon Gen Sec
 Hon Treasurer
 Committee Members
 Mrs L J Claringbold
 L Patton
 R W Roberts.
 A Forster
 Mrs A M Roberts
 R Hilken

Dr G H Stafford, Director

| | | |
|------------|-----|---------------|
| R E Thomas | R27 | Ext 6219 |
| J N Rice | R51 | Ext 6363,6681 |
| P E Craske | R2 | Ext 232 |
| D Evans | R34 | Ext 297,6243 |
| | R26 | Ext 6613 |
| | R18 | Ext 6615 |
| | R25 | Ext 254 |
| | R6 | Ext 6300 |
| | R27 | Ext 6161 |
| | R26 | Ext 6384 |

Member clubs and their representatives

| | | | |
|---------------|---------------------|-----|---------------|
| Chess | P E Craske | R2 | Ext 232 |
| Cricket | R E Smith | R25 | Ext 334 |
| Darts | A Forster | R6 | Ext 6300 |
| Fishing | P E Craske | R2 | Ext 232 |
| Football | R A Lawes | R1 | Ext 527,246 |
| Model Railway | R W Roberts | R25 | Ext 254 |
| Music | E G Sandels | R2 | Ext 320,502 |
| Netball | Mrs L J Claringbold | R26 | Ext 6613 |
| | P A Braham | R18 | Ext 6258,6638 |
| Radio | P D Hey | R25 | Ext 432 |
| REMAP | J Varley | R51 | Ext 6363,6681 |
| Table-Tennis | Mrs L G Cooke | R1 | Ext 443 |
| Yoga | | | |

Anybody wishing to form a new club or start a new activity would be most welcome and should contact the Honorary Secretary Mr P E Craske or any member of the committee.

Membership now stands at 320.

The Retirement Scene

Several people left the Chilton site at the end of April and we commence our report, as usual with the ladies, by sending Yvonne Cavanagh our best wishes in her new (expected) career. Yvonne joined the Lab in October 1974 and for most of the time was Personal Secretary to Norman Lipman and Alan Astbury. She now has a handsome brass carriage clock to remind her, as she says - 'of a very happy time at the RL'.

The Library also lost a valuable member of its staff when Freda Payne left. She joined the Lab three years ago and since then she has impressed everyone with her ability and quiet charm. Freda, married with a daughter now at University is fond of the outdoor life so her parting gift, 'No through road', an AA book on footpaths and walks around the country, pleased her immensely. It certainly answered one question as to why her husband had been reluctant to buy a copy. Think of us occasionally Freda when tramping along your 'path of the day'.

Our Loss - Oxford's Gain

In the Spring of 1955 three people from Harwell arrived at a partly constructed building outside the fence which was to house the Proton Linear Accelerator (PLA) the first accelerator of the then unnamed Rutherford Laboratory. They were, in order of arrival, Laurie Phillips (still here), Norman Swan-Taylor (early retirement last June) and John Macken who arrived in May; how John came to be there is a little unusual.

His 7 year apprenticeship as a surgical instrument maker was completed in 1941 and he spent the rest of the war working at his trade in London.

In 1953 Harwell advertised for instrument makers of various kinds, including surgical, and John jumped at the chance to live in a rural area. He thought he was going to work on remote handling, but his skill in working with stainless steel (not the easiest of materials) was soon in demand for early development work on the PLA.

Following the construction of the machine, John became chargehand in the experimental area and later, foreman, giving a service to the experimenters. With the closure of the PLA in 1969, John who had been awarded the British Empire Medal in 1967, took on the development of spark chambers and similar exotic devices rising through promotion to become a Professional Technical Officer.

Dr Gordon Walker, the present Head of the Nuclear Physics Apparatus Group, before presenting John with a parting gift from friends and colleagues, many of whom were present in a packed R12 Conference Room, recalled with humour, tales of the early days. He paid tribute to John's great service to the RL, continuing "Our loss is Oxford's gain". (John is already working at the Nuclear Physics Department at Oxford University).

The Editor has received the following letter:-

I would like to express my thanks to all my colleagues who contributed to my retiring present. The especially

nice thing about it is that having presented me with a Cassette Recorder, it was also "engineered" that a recording was made of the proceedings. So now I have an audio memory of that day and am able to play it to family and friends with added interest. It was good to see many familiar faces at the occasion and their presence was a support at a time when my feelings were rather mixed, it being the end of a long period of work and fellowship. Already at Oxford I have met people I knew years ago on the PLA so I feel at home.

I wish the Rutherford Lab success in the future, with all the changes that must come. I leave you with my thanks and say 'Cheerio', especially to those I did not manage to see personally.

John Macken

A 'Quality' Surveyor

On the following Monday, 2 May the Lab said farewell to Mr L Bartle who arrived on the Chilton Downs site in January 1948 to work first at Harwell and then in about 1964 at the Rutherford Lab. It may come as quite a surprise to many people to read that Leonard Bartle was not a member of the AERE or RL staff; he worked as a quantity surveyor for F N Falkner & Partners all those years. Nevertheless he has been regarded and treated as if he were a member of the staff and a very valuable member as well. This was amply illustrated on Monday, 2 May when Leonard Bartle was presented with a truly magnificent brass clock on behalf of his wide circle of friends and colleagues many of whom were present, by the Labs Chief Engineer, Mr P J Bowles. Mrs Bartle, who was also present for the occasion, received a large bouquet of flowers.

Mr Bowles spoke at some length about the early days at the Lab and recalled his first meeting with Leonard in January 1958. Throughout the years Leonard had rendered a great service to the Lab, and Mr Bowles in expressing his regret at losing the advice and assistance that had been a feature of their relationship, nevertheless wished Leonard a very long and happy retirement.

In reply Leonard recalled his initiation into the Nimrod project at a meeting at the Crown & Thistle Hotel, Abingdon in early May 1957 and of the huge drawings laid out on the floor of the hotel room. He felt very honoured by the occasion and by the gift which would be a constant reminder of his many years at the Lab and of the excellent fellowship and co-operation which had been so essential in his long and happy association with the Rutherford Laboratory.

Outside his working life Leonard Bartle has for over 20 years, given his time freely to the blind by servicing 'talking books' and back in February 1966 he contributed an article to 'Orbit' on this subject.

We join in wishing him many years of happy retirement which, knowing him, will not be spent in idleness.

SUGGESTIONS AWARDS

At the meeting of the Local Suggestions Awards Committee,

held on 19 April 1977, the following awards were approved:

| | | | |
|-----------------|-----------------|-----|-----|
| Mr J O Talbot | Administration | R40 | £5 |
| Mr J O Talbot | " | R40 | £5 |
| Mrs E G Landy | " | R20 | £5 |
| Mr F N J Cooke | Engineering | R9 | £10 |
| Mr E Boyers | " | R18 | £5 |
| Mr E Boyers | " | R18 | £10 |
| Mr K Swindells | Instrumentation | R12 | £5 |
| Mr P J Champ | Nimrod | R55 | £15 |
| Mr P J Champ | " | R55 | £5 |
| Mr B Pottrell | " | R2 | £5 |
| Mr E G Starr | " | R3 | £5 |
| Dr J H Coupland | Technology | R25 | £5 |

WHERE ARE THEY?

Mr A G Parham, Room 2.78, Building R1 requests information on the

current location of the following teletypes as soon as possible:-

| TYPE | SER.NO. | BUILDING | ROOM | LAST SERVICED |
|--------|---------|----------|--------|---------------|
| ASR 33 | 99785 | R1 | Lab 7 | Pre Aug 75 |
| ASR 33 | 182149 | R1 | Lab 6 | Pre Dec 75 |
| ASR390 | 375759 | R1 | Lab 4 | Aug 75 |
| ASR 33 | 139319 | R1 | 1.6A | Jun 76 |
| ASR 33 | 304824 | R2 | G.02 | Dec 74 |
| KSR 35 | 337722 | R6 | G.76 | Sep 76 |
| ASR 33 | 253934 | R55 | Hall 3 | Jan 77 |
| ASR 33 | 291731 | R25 | Stn.4 | Jan 77 |
| ASR 33 | 171752 | R36 | Lab 19 | Jan 77 |
| ASR 33 | 278956 | R36 | ? | Mar 75 |

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Abingdon (0235) 21900 Ext 484

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