



Autumn 1968

G.E. Johnson

Harlequin

price one shilling

HAIRCUT SIR !

APPOINTMENTS TAKEN

Phone 1933

JOHN

of Abingdon

(THE NEW PRECINCT)

Or call at your leisure

Minimum waiting with '4 Chairs'

**OFFICIAL
SCHOOL OUTFITS**

**BOYS:—
GROUND FLOOR**

**GIRLS:—
FIRST FLOOR**

FOR:—

JOHN MASON HIGH

FITZHARRYS

DUNMORE

CARSWELL

LARKMEAD

**DIDCOT GIRLS
GRAMMAR**

LONGWORTH

DRAYTON

DRY SANDFORD

ST. NICOLAS

ST. EDMUNDS

**WALLINGFORD
GRAMMAR**

CALDECOTT

TESDALE

HIGH STREET

ABINGDON

Tel: 33

BEESLEY'S Of ABINGDON

MENS WEAR

LADIES WEAR

HOUSEHOLD

LINENS

FABRICS

FOOTWEAR

SCHOOL WEAR

*The Store with
the Useful Gifts
for Christmas*

*Look ahead
and
Look Round Now!*

OPEN

Monday to Saturday

9 a.m. until 5.30 a.m.

(Thurs. 9—1)

A PERSONAL SHOE SERVICE BY

**MR RICHARD BAILEY
AT ABINGDON**

AND

**MR GEOFFREY BAILEY
AT WANTAGE**

Backed by a Trained Staff,
stocks of fine footwear and a
modern shoe repairs factory
ensure your comfort and
satisfaction

BAILEYS

**12 Bath Street
Abingdon Tel. 266**

**Market Place
Wantage Tel. 3098**



AUTUMN 1968
Vol. XXIII, No. 3(62)

GETTING READY TO SAIL

in this issue

Editor

D. A. TYLER

Guest Associate

A. L. SHEPHERD

Sales Manager

J. DALEY

Treasurer

R. WAKEFIELD

DR. R. JACOBI

A.E.R.E. Nursery School	14
Chilton School	15
R.A.F. Harwell	22
A.E.R.E. Harwell	24
Wantage	30
A.E.R.E. Recreational Association	40
The System	45
Can you Communicate?	52

58, Cornmarket Street, Oxford, Tel.: 44151

5, St. Martins Street, Wallingford Tel.: 2651

110, Bartholomew Street, Newbury, Tel.: 3631

2, Market Place Wantage Tel.: 3611

3, Market Place, Banbury Tel.: 3131

PROPERTIES FOR SALE IN BERKS and OXON

A SELECTION OF NEW HOUSES AVAILABLE NOW

Houses for Sale and To Let. Auctions of Furniture. Valuations. Structural Surveys.
Modernisation Schemes. Compensation and Rating Work. Planning Applications, etc.

BUCKELL & BALLARD

R. B. Ballard, F.A.L.P.A.; H. I. F. Ryan, F.R.I.C.S., F.A.I.; H. S. Ballard, F.R.I.C.S., F.A.I.;

B. J. Pollard, A.R.I.C.S. J. F. Offen, A.R.I.C. S., F.A.I., A.R.V.A.



COXETERS LTD.

Complete House Furnishers

Furniture Removed and Warehoused
China, Glass, etc.

Curtains Loose Covers & Carpets
Cabinet Repairs Upholsterers
Funeral Directors

TRY ABINGDON FIRST

21-27 OCK STREET, ABINGDON

Kindly note that our telephone number is now
Abingdon 4747

*We are pleased to arrange
Hire Purchase facilities*

Established 1836

READ & PARTNERS LTD.

ELECTRICAL ENGINEERS
and
CONTRACTORS

*At A.E.R.E., Harwell
continuously since 1946*

**READELEC HOUSE,
59 BERMONDSEY STREET,
LONDON S.E. 1.**

Telephone: Hop 5332-3-4

Site Office
A.E.R.E., HARWELL, BERKS
Telephone: Rowstock 357

THE FRIZZELL

HOME LOAN SERVICE

Over 80% of our new clients in the past few years have come from the recommendation of colleagues who are happily installed in their own homes

Why not allow us as INCORPORATED LIFE ASSURANCE BROKERS to advise you on the selection of your MORTGAGE, LIFE ASSURANCE, UNIT TRUST or BUILDING SOCIETY SAVINGS?

MAXIMUM LOANS AVAILABLE

Mr. J. W. BERRY, the Reading Branch Manager, visits the site most Mondays and appointments for discussion of your Mortgage, Savings or Life Assurance problems, may be made through General Admin., Ext. 3224 or by telephoning **Reading 53459**.

U.K.A.E.A. Establishments should contact our Branches as follows:

- | | |
|--|--|
| Aldermaston, Amersham, Culham, | 35 Station Road, Reading, Berks. |
| Harwell, Rutherford, Wantage, Etc.: | Phone: ORE4 53459. |
| Capenhurst: | 96 Northgate Street, Chester. |
| | Phone: OCH4 23384 - 42745. |
| London Office: | 128 Buckingham Palace Road, S.W.1. |
| | Phone: 01-730-6168. |
| Risley: | 74 Corporation Street, Manchester 4. |
| | Phone: 061 BLA 2544. |
| Springfields, Windscale: | 4 Starkie Street, Preston, |
| | Phone: OPR2 57062. |
| Winfrith: | Kingsland House, Hinton Road, |
| | Bournemouth, Hants. Phone: OBO2 20428/9. |

Other Branch Offices at,
Bath, Glasgow, Guildford, Leamington, Leeds, Liverpool and Southampton.



NORMAN FRIZZELL

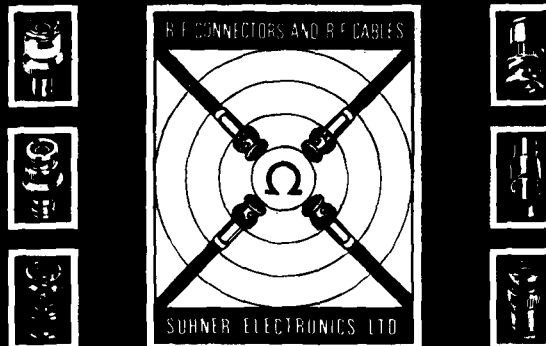
LIFE AND PENSIONS LTD., 3 NEW STREET, E.C.3

(Tel 01 709 0555)

SUHNER ELECTRONICS LIMITED

37 individual Connector
Pictorial Charts giving
illustrations, descriptions,
U.S. Mil. Numbers
and equivalent NATO
Numbers, where
applicable.
Your Free Copy gladly
sent on request.

CONNECTOR PICTORIAL CHARTS



SUHNER ELECTRONICS LIMITED
172/176 King's Cross Road, London, W.C.1. Tel.: 01-278 2841/8

Covering BNC, TNC, N, C,
UHF, HIGH VOLTAGE,
BNC Crimp, TNC Crimp,
Miniature Connectors,
Range-to-Range
Adaptors,
Banana Adaptors,
Terminations etc.

172/176 KING'S CROSS ROAD, LONDON, W.C.1.

Send for your copy today

To **SUHNER ELECTRONICS LTD**

172/176 KING'S CROSS ROAD,
LONDON W.C.1.

PLEASE SEND FREE OF CHARGE.....copy/copies of your publication.

Name of Company

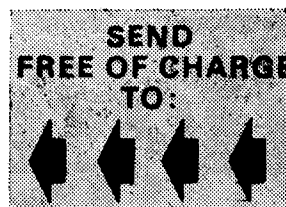
or Establishment

Address

.....

For the attention of

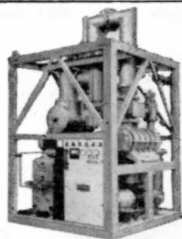
Department



Tel. No.

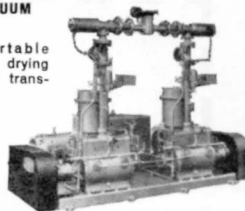
Extn.

vacuum equipment
from General



TRANSFORMER VACUUM PUMPING UNIT

A compact, portable pumping unit for drying and oil filling of transformers.



LABORATORY VACUUM PUMPING GROUP

A vacuum pumping group designed to serve all vacuum points in a laboratory, interconnected to allow one or both pumps to operate, according to demand.



GENEVAC MOBILE PUMPING PLANT

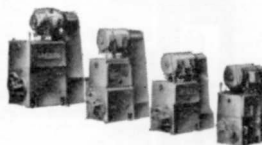
Self-contained, combined pumping plants, supplied as manually or semi-automatic operated units.



GENEVAC COATING UNITS

Manual, semi-automatic or automatic coating units with 12", 19" or 24" work chambers. Available with a wide variety of pumping systems. Special plants to customers' requirements.

VACUUM PRODUCTS DIVISION
GENERAL ENGINEERING CO.
(RADCLIFFE) LIMITED
STATION WORKS, BURY ROAD
RADCLIFFE, MANCHESTER
Telephone: 061-723 3271 & 3041
Telex: 66200 Generalrad Mchr.



KINNEY TRIPLEX HIGH VACUUM PUMPS SERIES G.K.T.

A range of oil sealed vacuum pumps producing pressures of 1 torr and below. Operating on the rotary piston principle and utilising a new balancing system, these pumps offer unparalleled compactness and vibration free operation.

Four Seasons double glazing specified for many of Britain's most important new buildings

Four Seasons Double Glazing is now in use in many of Britain's most important new buildings — hospitals, schools, ministry buildings, office blocks and many private housing projects. The Four Seasons covers all types of installation whether in entirely new buildings or conversions.

Advice and estimates given free and without obligation by trained consultants.

For complete Commercial or Domestic information write or telephone: —



FOUR SEASONS DOUBLE GLAZING LIMITED

Dept. HW/2, Southall, Middlesex. Telephone: 01-574-7111. (24-hour answering service)
Members of the Aygee Group (Est. 1881) and the Insulation Glazing Association.



NEW from PERGAMON

OPTICAL PROPERTIES AND BAND STRUCTURE OF SEMICONDUCTORS

David L. Greenway and Günther Harbeke

An introduction, from the experimental viewpoint, to the study of the deep lying energy band structure of semiconductors from investigations of their optical properties. Potential readership extends over solid state physics and electronics, materials science and theoretical physics. This is the first in a new series for Solid-State scientists.

170 pages 70s

SPECTRAL PROPERTIES OF DISORDERED CHAINS AND LATTICES

J. Hori

In this book a systematic account of phase theory is given. This is a new theory which has developed in order to treat the problems concerning disordered lattices as exactly as possible. This book is the first which gives a full account of phase theory and its variations.

237 pages 75s

TYPE II SUPERCONDUCTIVITY

D. Saint-James, G. Sarma and E. J. Thomas

This book is the first to deal specifically with type II superconductors, and describes in some detail both the reversible and irreversible properties of these superconductors. The book will be of value to those studying superconductivity from both the theoretical and experimental point of view.

300 pages 105s

a recent publication

FERROMAGNETIC RESONANCE

S. V. Vonsovskii

This is a collection of articles dealing with the basic theory of one of the most important facets of modern radiospectroscopy — the phenomenon of resonance absorption of the energy of high frequency electromagnetic field in ferromagnetic substances.

360 pages 63s

For further details of the above, and a complete list of titles in your field, please write to:



**The Manager, College Sales and Promotion
Pergamon Press Ltd
Headington Hill Hall, Oxford.**



the

high fidelity

and

components specialists

Ampex, Armstrong, A.K.G., B & O, Decca,
Ferrograph, Garrard, Goldring, Goodmans,
Gramplan, Grundig, Leak, Ortofon, Philips,
Quad, Radford, Record Housing, Reslo,
Rovex, Rogers, Sony, S.M.E., Thorens,
Truvox, Wharfdale, etc. etc.

WESTWOODS

**46 GEORGE STREET,
Phone OXFORD 47783**

"Europe On Your Doorstep"

Regular Summer Coach Cruises

Didcot, Abingdon, Oxford

to

ALL CONTINENTAL COUNTRIES

NO OVERNIGHT TRAVEL — ALL THE WAY IN THE SAME COACH

Brochures on Application

**3 to 14 Day Tours from £14 to £51 17 6. No worries about currency
restrictions — you get top value with us.**

**If you want to know how good these holidays are — ask any of our clients
(we can give you names and addresses)**

RELIABLE COACHES, DIDCOT, BERKS.

DIDCOT 2357



Cottage at Letcombe Regis

NORTH BRITISH & MERCANTILE INSURANCE Co. Ltd.

HIGHEST EVER BONUS RATE 65/- COMPOUND

This record rate makes the Company's 'With Profit' policy one of today's most attractive investments for the long term saver. A with profit policy shows substantial growth, and bonuses once granted are permanent additions to the sum assured, earning extra bonuses themselves in the future.

SEE HOW YOU SAVE

By taking advantage of the special terms available to members of U.K.A.E.A., (available on all types of Life Assurance) a man of 30 next birthday effecting an Endowment Assurance now could, if current bonuses are maintained, secure the following:—

By monthly payments of £5 deducted from salary.

An initial sum assured of £1,777.

Total Payments	£1,800
Less Income Tax relief if at 8/3 in £	£297
Net cost	£1,503
Value on Maturity at age of 60	£4,327
PROFIT	£2,824

COMMERCIAL UNION HOUSE, LONDON ROAD, READING.

Tel. 55692

or 8, ST. MARY'S STREET, WALLINGFORD.

TEL. 3443/3628.

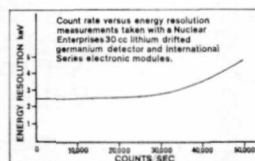
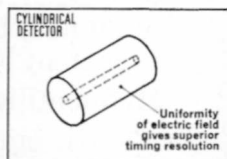
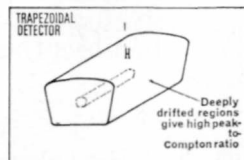
LOOKING INTO THE FUTURE



This modern crystal gazer can foretell the future of a germanium crystal with surprising accuracy — surprising, that is unless you know the amount of painstaking work which goes into its preparation as a lithium drifted spectrometer. He knows that the plated ring of copper on the top surface indicates a drifted depth of 15 mm and an intrinsic volume of 80 cc. Within a few days his forecast will be verified by efficiency measurements made using calibrated radioactive sources. This particular detector has been drifted to comply with a customer's own stringent requirements. However, we also market a standard range of detectors which is the largest in the world. The two detector shapes shown right are currently the most popular, and are available as standard in volumes up to 40 cc.

The system energy resolution is improved by fitting a cooled preamplifier first stage. Field effect transistors, specially selected for low temperature operation, are thermally 'floated' at 30-70°C above liquid nitrogen temperature to optimise their contribution to the spectral peak width. (Ref. Smith and Cline, IEEE Transactions on Nuclear Science, June 1966, Vol. NS-13, pp 468-476).

And now we are delighted to announce that optimized performance can be obtained by using lithium drifted germanium counters with the new International Series (compatible with USAEC TID-2089-13 standards) of modular electronics. The graph right shows the excellent spectral resolution obtained as a function of count rate using a 30 cc detector in conjunction with an NE 4603 amplifier incorporating pole zero cancellation.



Why not contact us to see how your future analyses of gamma spectra can be improved.

NUCLEAR ENTERPRISES LIMITED

SIGHTHILL, EDINBURGH 11, SCOTLAND. TELEPHONE: 031-443 4060
TELEX: 72333 CABLES: 'NUCLEAR, EDINBURGH'

Bath Rd., Beenham, Reading, England. Telephone: Woolhampton 2121. Telex: 84475

Associate Companies: Nuclear Enterprises Inc., 935 Terminal Way, San Carlos, California
Nuclear Equipment Corporation, 931 Terminal Way, San Carlos, California





(Oxford Mail).

Established 1857



OVERSEAS REMOVALS

LOCAL AND LONG DISTANCE
REMOVALS

EXTENSIVE, SPECIALLY BUILT
WAREHOUSES for the STORAGE
of FURNITURE

ESTIMATES FREE

Archer, Cowley & Co. Ltd.

36-39 PARK END STREET, OXFORD

Telephone: Oxford 41061/2

Telegrams: "Removers, Oxford"

Chandler's

of

WANTAGE

TRANSPORT SERVICES

- Luxury Coaches for all occasions
- Hire Car Service

Grove Street Garage, Wantage

Phone 3123



The Symbol of your Friendly Trustee Savings Bank

For further information of the many services of your Local Trustee Savings Bank, simply contact the Branch Manager at one of the undermentioned Branches.

**7 MARKET STREET, OXFORD ★ 1 STERT STREET, ABINGDON
BROADWAY CORNER, DIDCOT**

**A Representative of the Bank attends at A.E.R.E. (Bld. 303, by Main Gate) each Friday
between 12.30 and 2.30 p.m. when Savings Bank facilities are provided.**

The Restaurant of the Upper Reaches

ABINGDON-ON-THAMES

TELEPHONE: 4585/6

<i>The River Room</i>	<i>The Mill Stream Bar</i>	<i>The Swan Buttery</i>
Lunch and dine at your leisure in superb surroundings	<i>and The Buttery Bar</i> are open during licensing Hours Splendid rendezvous	Morning coffee 10 — 11.30 Light Lunches 12 — 2.30 Teas 3 — 5.30 and Suppers 6 — 10.00

*The Terrace
with unrivalled riverside views*

Weddings, Private Parties and Banqueting facilities for up to 100

Open seven days a week

Private Parking Space for up to
70 cars

Up to 20 beds being planned for
Spring '69

NEW AUSTIN . RILEY . VANDEN PLAS

BETTER USED CARS

ABINGDON'S LEADING GARAGE



TELEPHONE ABINGDON 1831/2/3
FORECOURT SERVICES . SPARES . AUTO-SHOP
FULLY EQUIPPED B.M.C. WORKSHOP

Special low prices on Tyres and Batteries for Harwell Employees



EDITORIAL

Some words are like ripe fruit;
Lovely they are, and sweet
As apples mellowed by autumnal showers.

Enchanting as a flute
Are other words, and fleet
As humming birds that skim exotic flowers —

Some words are like the bruit
Of distant waves that beat
On unknown shores, when midnight wakes strange
powers.

“WORDS”, Herbert Bluen

Effective communication is what we most need these days. This need applies to all segments of our complex existence: to the home, the school, the church, in industry and in all branches of government from the parish or town level to the field of international relations.

To communicate is a vital part of each individual's life. Even the lower forms of animal life have numerous methods of contact. It is impossible to imagine the advanced stage of life today if we were still limited to animal-like means of communication.

Its evolution has been slow and laborious. From crude hieroglyphics and drawings and smoke signals, we have advanced to the high-speed printing press as used for this magazine, and to instantaneous transmissions bounced off satellites to any part of the world.

Nevertheless, communication is still not easy. Some of us are just too indifferent, or lazy, to express ourselves. Others are too “long-winded”, taking five minutes to say what could more effectively be said in one, or possibly writing several pages of gobbledygook when several paragraphs would suffice.

Effective communication is an art that must be developed through practice.

Express yourself! It is a challenge to every one of us in every part of our daily life.



Young Workers at A.E.R.E. Nursery School

WORLD, TAKE MY SON BY THE HAND

My son starts school tomorrow.

It's all going to be strange and new to him for a while and I wish you would sort of treat him gently.

You see, up to now, he's been king of the roost.

He's been boss of the backyard. I have always been around to repair his wounds and I've always been handy to soothe his feelings.

But now . . . things are going to be different.

This morning he's going to walk down the front steps, wave his hand, and start on his great adventure that probably will include wars and tragedy.

To live his life in the world he has to live in will require faith and love and courage.

So, world, I wish you would sort of take him by his young hand and teach him the things he will have to know.

Teach him . . . but gently, if you can.

He will have to learn, I know that all men are not just, that all men are not true.

Teach him that for every scoundrel there is a hero; that for every crooked politician there is a dedicated leader. Teach him that for every enemy there is a friend.

Let him learn early that the bullies are the easiest people to lick.

Teach him the wonders of books. Give him quiet time to ponder the eternal mystery of birds in the sky, bees in the sun and flowers on a green hill.

Teach him that it is far more honorable to fail than to cheat. Teach him to have faith in his own ideas, even if everyone tells him they are wrong.

Try to give my son the strength not to follow the crowd when everyone else is getting on the bandwagon. Teach him to listen to all men — but to filter all he hears on a screen of truth and to take only the good that comes through.

Teach him to sell his brawn and brains to the highest bidders, but never to put a price tag on his heart and soul.

Teach him to close his ears on a howling mob—and to stand and fight if he thinks he's right.

Teach him gently, world, but don't coddle him, because only the test of fire makes fine steel.

This is a big order, world, but see what you can do. He's such a nice little fellow—my son.



The Photographs on
the following pages of

CHILTON PRIMARY SCHOOL

were taken for
'Harlequin' by
Malcolm Buckle.

Tim Ryan (Dad:— Mr. M. J. Ryan, S.R.C.) and Anne Flowerday (one of the Flowerday triplets, (Dad:— Mr. P. Flowerday, Institute of Physics) working on a co-operative collage.

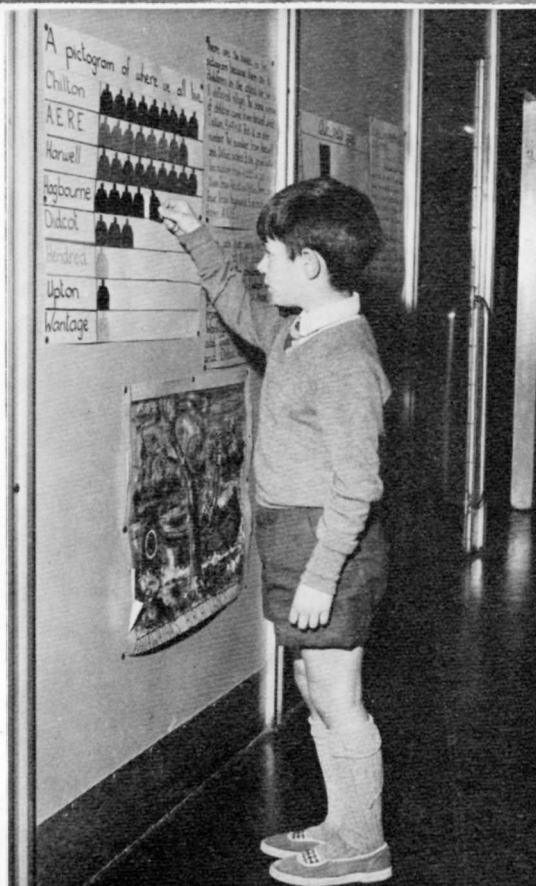
Martin Phillips (Dad:— Mr. R. H. Phillips, Chemical Engineering) and Matthew Napper (Dad:—Mr. J. R. Napper, Contracts and Stores) prepare for the future. Such technical stimuli never fail to provide interest and enthusiasm for discussion and written work.





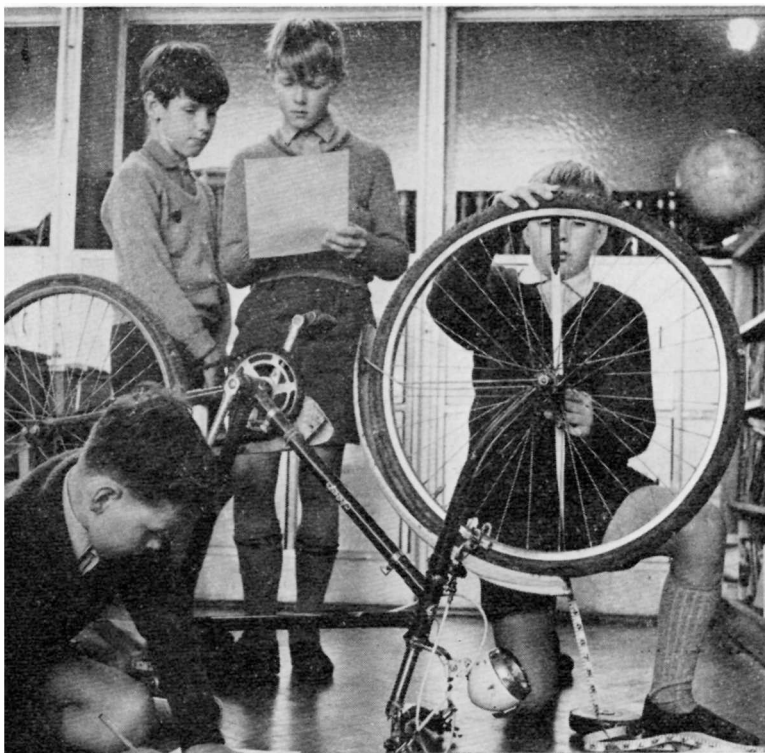
The Swimming Pool at Chilton School was opened by the late Sir John Cockcroft in 1959. Hundreds of pupils have been taught in this Learner-Pool. With added amenities since the opening, the cost has exceeded £2,000 but the generosity of parents and friends has seen to it that they have never been in the red! The changing-room shown in the photograph is called 'The Wheeler Chalet' — after Mr. D. M. Wheeler (Management Services) the enthusiastic Chairman of the P.T.A.

This year has seen the installation of an efficient pool-heating system, the planning having been devised by Mr. Wheeler, Mr. R. J. Stone (S.R.C.), Mr. K. J. Howard (Chemistry), Mr. J. E. Bown (Engineering Support), Mr. W. Millar (Culham) and Mr. W. Watson (M.R.C.).



Here, Richard Smith (Dad:— Mr. A. C. H. Smith, University of London) of the Upper Infants ensures that his house is recorded on the correct graph-line.

Such simple graphs provide a sound basic concept for more complicated work in later stages of the modern Primary School.



Form III — Road Safety, Mathematics, Recording and Cycling Proficiency — all are integrated in this little problem.

Standing:—

Left: Francis Woollen (Dad: Mr. W. B. Woollen, Health Physics & Medical) Right: Brian Plester (Dad: Mr. S. J. Plester, Rutherford H. E. Lab.) At the wheel Nicky Bown (Dad: Mr. J. E. Bown, Engineering (Support) Sitting: Ralph Betts (Chilton Village).

Sister Ferries (Health Physics & Medical) pays her regular visit to demonstrate Oral Resuscitation on Andrew, the model.

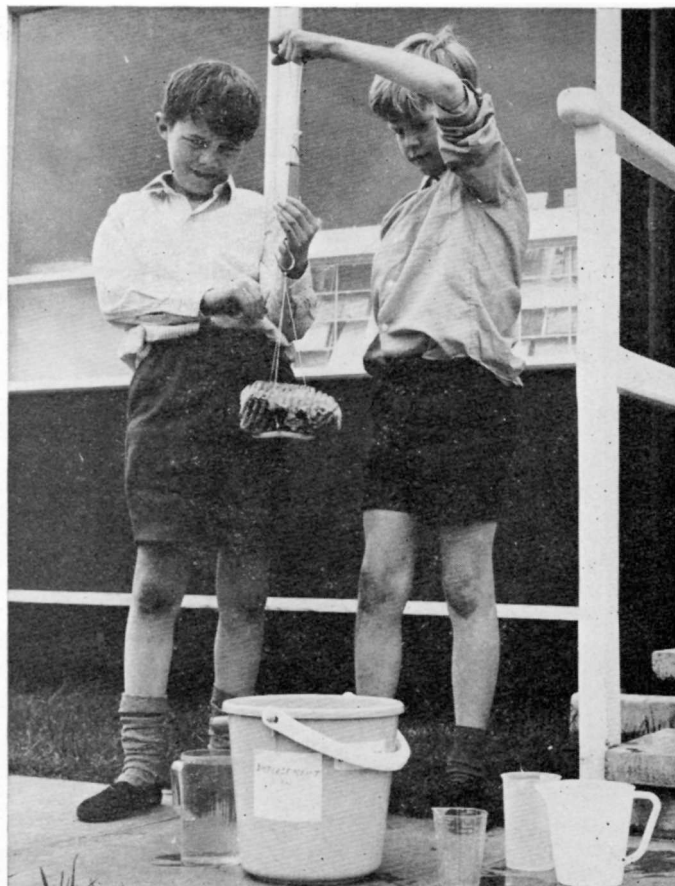


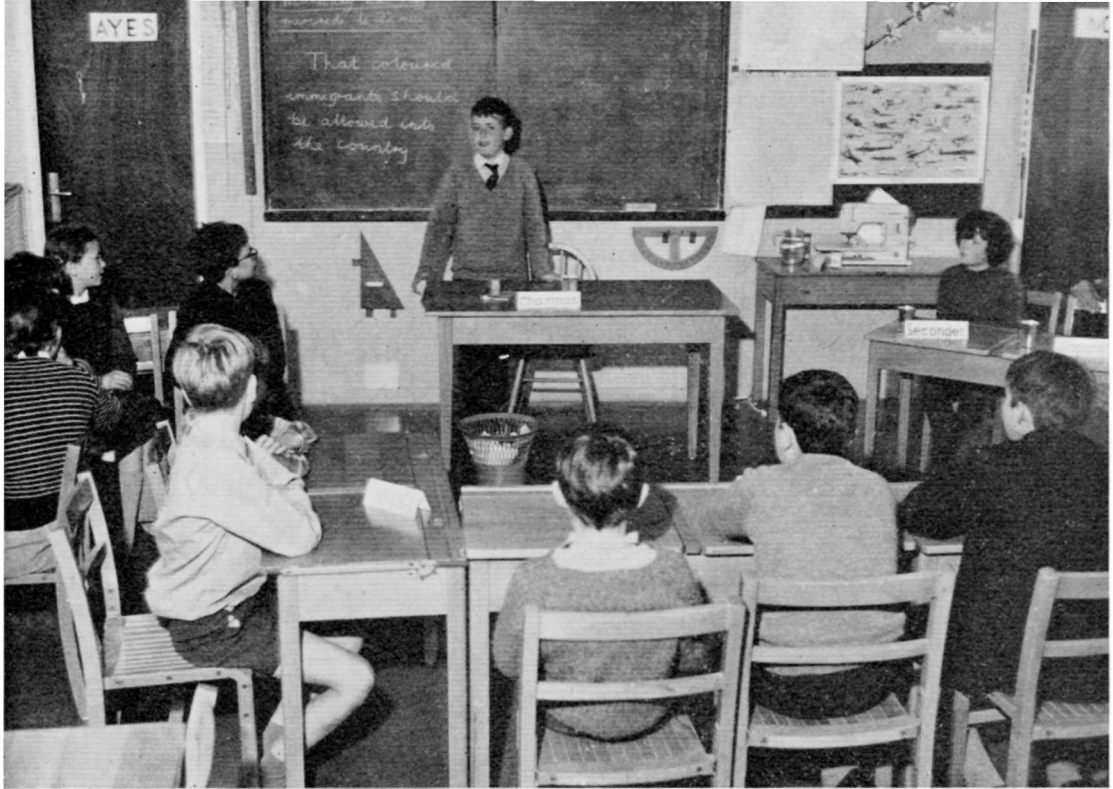


Nowadays, school is fun for *nearly* all the children! . . . For one spring is in the air!

Many of the older pupils enthuse on local rocks and fossils. Here, Richard Bosley and John Wiffen (Dad:— Mr. R. D. Wiffen, Health Physics) use their maths to good advantage in ascertaining the weight and volume of a mammoth's tooth recently excavated locally at a depth of 25 feet! The fossil was provided by a parent . . . will these two *ever* forget this little experiment? . . . This typifies the modern integrated outlook of a primary school.

Note the dirty knees after a game of football!



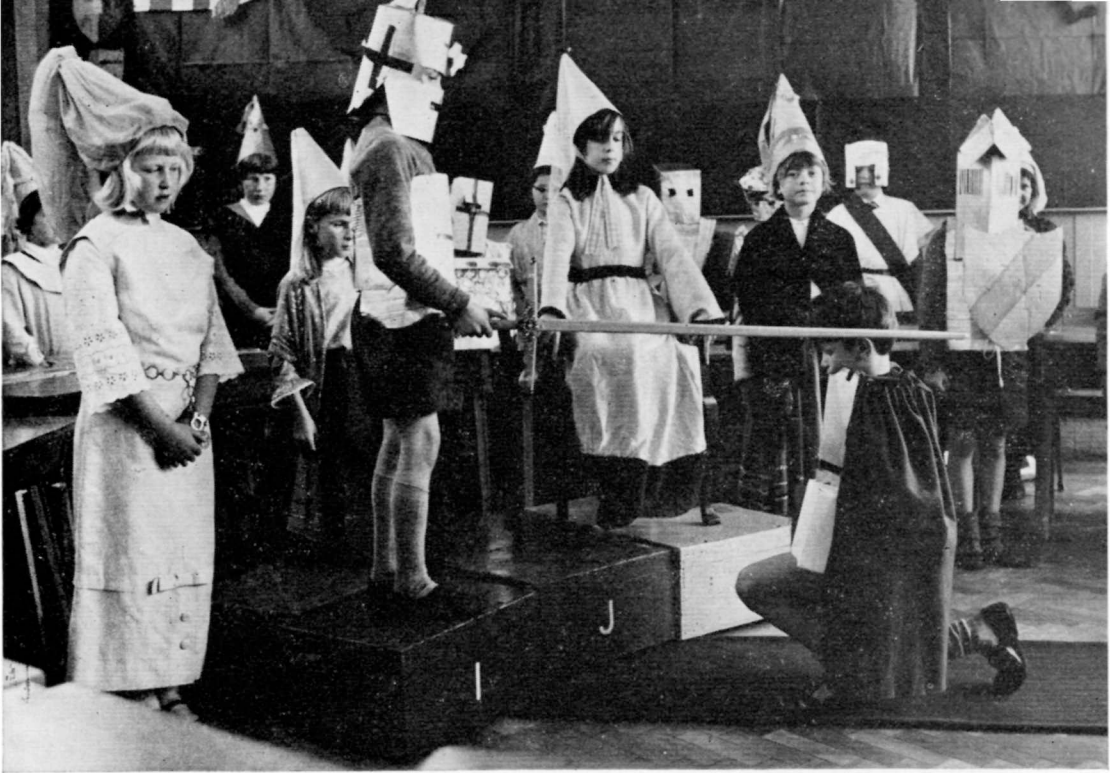


Form IV (Eleven year olds). Future citizens prepare by debating current motions chosen by themselves. Here Nigel Bowes (Dad:— Mr. H. Bowes, Research Reactors) chairs a lively discussion.

As the juniors' Time-Table is so flexibly full, the young musicians gather in their play-time to learn to play the recorders. The young players accompany all Assemblies and in School Entertainments.

The girl on the right concentrating so well is Allison Roddy (Dad:— Mr. F. J. Roddy, Scientific Administration) and next to her, Caroline Oliver (Dad:— Mr. P. J. Oliver, Reproduction and Photographic Section, Culham Laboratory.)





The culmination of an enthusiastic project of the Knights of the Round Table! Here King Arthur (Robert Lynch, whose father is a professional actor) knights Sir Peter Lee (father Dr. J. A. Lee, Process Technology). Whereas it is usual for a class of this age to be enthused on one idea for, say, a fortnight, this project has covered the best part of a term. An experienced teacher 'exploits' this spontaneous enthusiasm, building up the stimulus, until such facets as Source-reading, Creative Writing, History, Literature, Art, Mathematics—all can be gainfully involved. Herein lies the essence of thoughtful teaching!

POSTSCRIPT NO 1

To the Headmaster of Chilton School — An Open Letter from a Parent

Dear Mr. Denzey,

Long before my son was offered a place at Chilton School, I had regarded it as one of the best primary educational units in the country. My son has since concluded several happy and successful years there.

When one meets you and your staff, one feels that your influence is everywhere: a Dylan Thomas poem here, a play in French there (with you taking part) and always the same uplifting theme. Here is a good school, a good staff, and our pupils — as seen from these "Harlequin" photographs — are happy, interested and industrious.

May Chilton School go forward from strength to strength.

Harold Bowes,
Research Reactors.



POSTSCRIPT 2

Last month — 20 years after the opening of the Nursery School at A.E.R.E. saw the marriage of Ian Battershill and Susan Hitchman, two of its early pupils. They had moved on together to the new Chilton Primary School and now — after work at Rutherford Laboratory for Susan and work as a Computer Programmer at A.E.R.E. for Ian — they have moved on again, this time for two years at Vienna's International Atomic Energy Agency.

● Ian Battershill was Secretary of A.E.R.E. Model Club. His Father works in Research Reactors, and Mrs. Battershill of Nuclear Physics will be known by many members of the Recreational Association.

● Susan is the daughter of A.E.R.E.'s P.C. Vic Hitchman (left), who was born in Harwell village, where he was a ploughman in the years when it had changed but little from its medieval ways.

This happy occasion at Harwell Church is an example of how the once divergent interests and opportunities of the old and new communities have become linked. ★

Photos: Ivor Fields





The King's visit of 30 years ago in which the planes are (left) Harrow, (centre) Whitley, (right) Blenheim and (front) Battle. Squadron-Leader Tuttle, in the back row of officers, finished his RAF service with the rank of full Air Marshal.

R.A.F. HARWELL

*From Group Captain N. E. Hoad,
AOC RAF Abingdon*

Thank you so much for the two issues of 'Harlequin'. In the years since World War II the name Harwell has, of course, become very strictly synonymous with activities other than Air Force and it was with some surprise that I saw the articles on Harwell's beginnings. It is nice to think that we are still remembered.

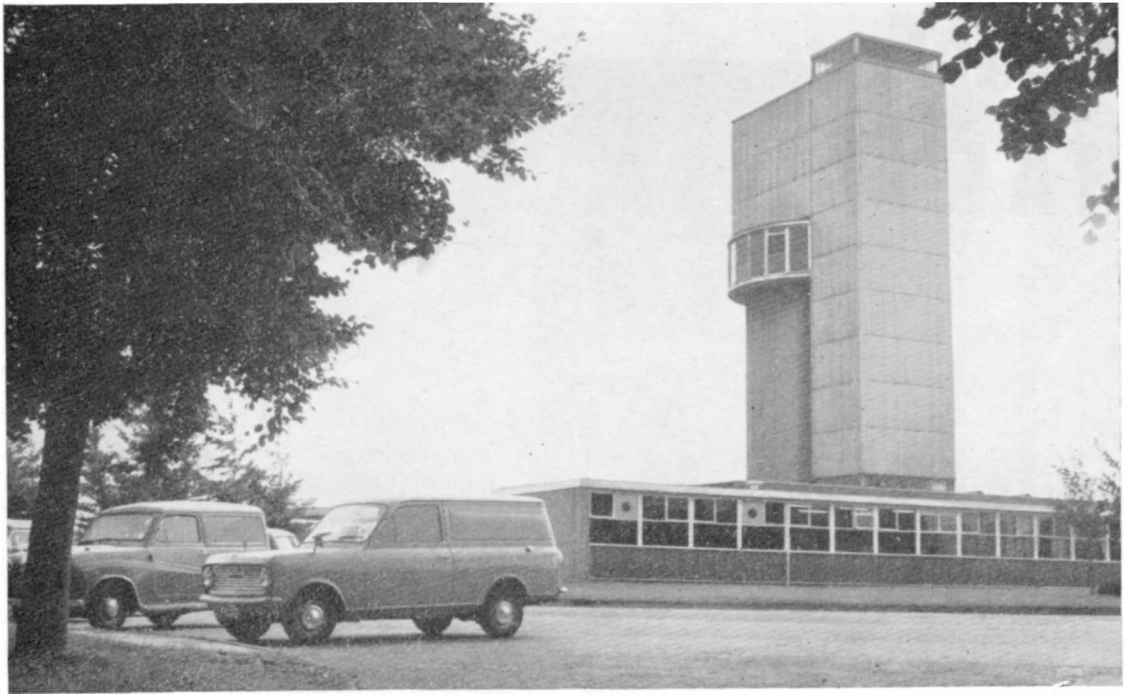
It is hoped to have further memories of RAF Harwell — Ed.

From F. Broderick, Site Stores, WRL

When I arrived at Didcot Station and enquired the way to R.A.F. Harwell, no one had heard of it until I enquired from a bus conductor outside, who said in Berkshire dialect, *That be that there Drome at Ilsley.*

As there were no sleeping arrangements when I finally reported to the Guard Room, my first night was spent in one of the cells sleeping in the bed of one of the R.A.F. police who was off-duty.

An incident later on that I recall was of practically everyone being awakened at about one o'clock in the morning by a terrific din on the square. Barrack room windows were all open and heads looking out at the spectacle of a police car chasing another car round and round trying to stop it. I discovered afterwards that the airman in the car being chased was drunk, had stolen the car and, singing at the top of his voice, had driven straight through the Main Gate with the police car following. Another incident was a semi-final of the R.A.F. rugby championships held on the field near the main gate opposite the police lodge. Harwell had won and the CO, officers and everyone else were dancing round the pitch. They later



The entrance of Hangar 8 as seen today with the Tandem Generator — designed to double the voltage through which particles can be accelerated — providing a notable landmark at this south-east corner of the old Station.

won the final at Uxbridge and that year soccer was hardly mentioned.

One incident not so amusing to me at the time was when I volunteered to enter for the novices' boxing to represent H.Q. flight. Of course, the physical training instructor wanted us to win so we had to run to Ilsley and back for a fortnight, twice a day!

From F. Jeal, Metallurgy Division

War years were anxious years, yet, looking back to Harwell in 1939, all I can recall are the more light-hearted incidents of that time, such as the big exercises in case of gas attack. At that time the Junior Officer air crews were billeted in two wooden huts (recently removed from near the Cockcroft Hall) and by these huts was a deep air raid shelter. At the sound of the alarm the young officers donned their gas masks and disappeared into the shelter with instructions to remain there until the all-clear. After two hours of perspiring and no sound of an all-clear, one of them decided to see what had happened and dashed to Headquarters (now Bldg. 77) only to find everyone moving around quite normally. "Oh! I'm so sorry," explained the powers-that-be, "but the all-clear should have been a trumpet blast.

Unfortunately we have only one trumpeter and he's on leave."

On another occasion the station defence party, of which I was a member, had a sudden call to the station armoury. On arrival we were called into line and ordered to "on" gas masks. The sergeant then explained that shortly lorries would arrive and take us to support the Berkshire Regiment who were being attacked at East Ilsley (just an exercise, of course). It was a hot day and we had a long wait so that by the time the lorry arrived all including the driver, also wearing his mask, were steamed up to a point of semi-blindness. Into the lorry we scrambled and away we went; not very far, just a few yards. At the first road junction the lorry overshot the turning and the wheels mounted the pavement, which proved to be just flag stones over a pipe duct. In the trench went the wheels, sideways went the lorry, and into a tangled mass of men, rifles, helmets and gas masks went the passengers. All that could be heard for the next few minutes was grunts and snorts as we tried to free ourselves of our clinging fellows. Yet none was shot, or strangled, though we never reached East Ilsley. I often wonder what happened to the Berkshire Regiment! ★

AERE HARWELL

DEMOGRAPHIC EFFECTS AND THE GROWTH OF TOWNS

It is obvious that the establishment of houses for A.E.R.E. employees in the towns of Wantage, Didcot and Abingdon and, more recently, in the villages of the adjacent Rural Districts has contributed significantly to the overall population increase of the region. This is an area which, prior to the development of A.E.R.E., displayed only slowly rising, stationary, and even falling population movements. Furthermore, that the area is susceptible to a high net "in" migration, particularly in the working age group, is seen from the fact that approximately 82% have been resident for less than fifteen years.¹

The annual wage bill for the A.E.R.E. currently stands at £9,000,000. This sum will have a multiplier effect on the economy of the region. If we assume a marginal prosperity to consume of .75, the induced consumption would be £36,000,000. (There is a correlation between this figure and the 30,000 people said to depend on A.E.R.E.) This adds considerably to the wealth of the region, but the evidence is that the service element in the towns has not responded to these demographic and economic changes until very recently. The result has been to throw additional strain on the facilities of Oxford and Reading, and to increase the profits of existing traders. The following table illustrates this.

— CONCLUSION

For his researches J. M. TURNEY was given the help of the Establishment, but opinions expressed are his own in this geographical appraisal.

	Abingdon		Didcot	
	1956-66	1968	1956-66	1968
	Actual	Pro- posed	Actual	Pro- posed
% Increase of Houses	30.2	36	40	44
% Increase of Shops	15.4	33	26	40
% Increase of Schools	90.0	—	81	—

Reference to the proposed percentage increase brings the ratio between population and services more into balance, and therefore the differential at present may be regarded as merely a time lag, providing a large influx of population does not occur in that period.

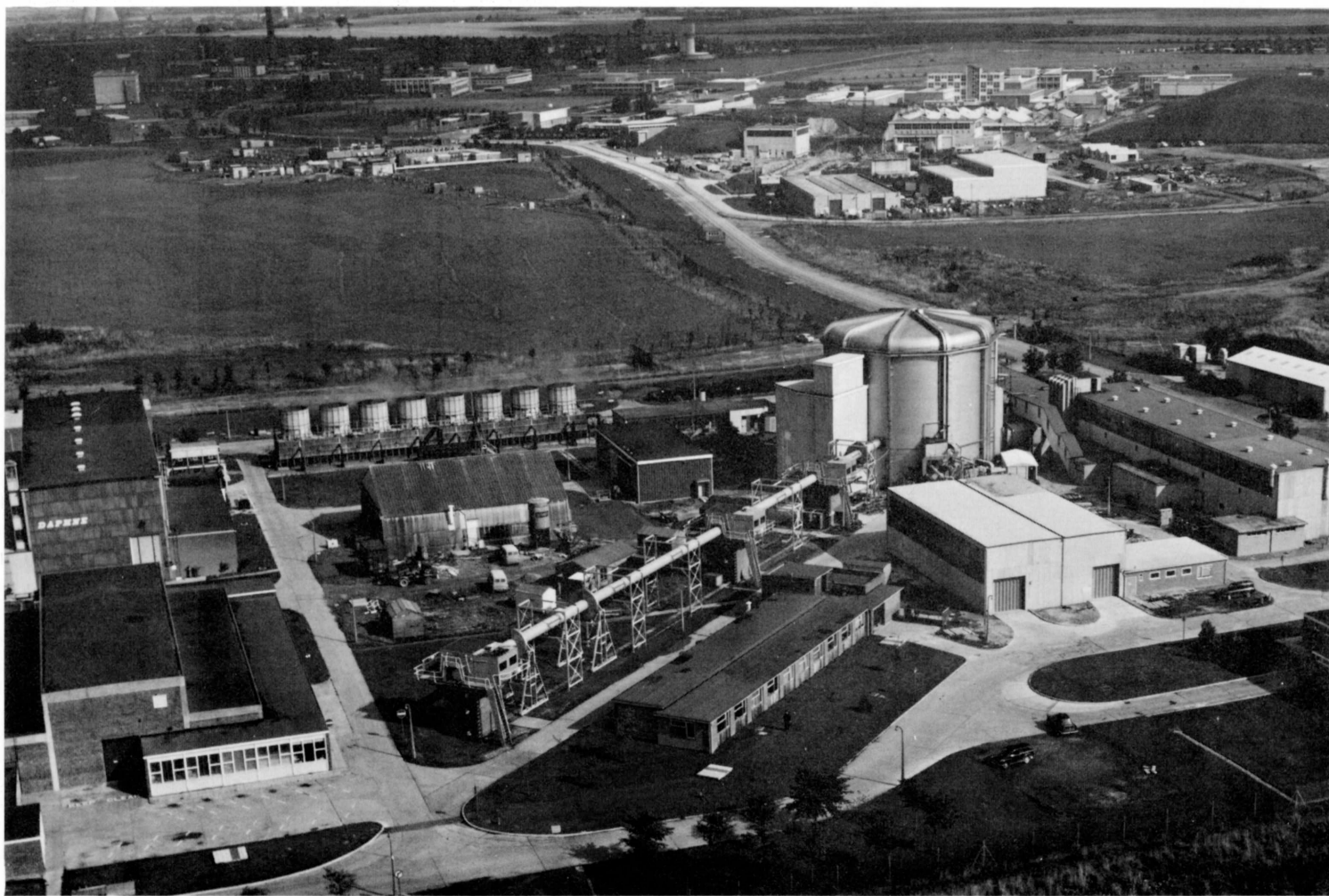
The time lag seems to be due to the fact that major planning problems have had to be solved before shopping facilities could be expanded in these towns. For example, in Abingdon an open cattle market was moved from the central area, the road pattern in the central area re-planned, the development area defined, the developer brought in with the Council to redevelop the area as a shopping precinct, and the future traffic pattern for the town as a whole settled. This process was started in the 1950's, and is a good example of a town consciously changing its facilities to meet new needs.

It is difficult, however, to separate the influence of A.E.R.E. from other factors which have contributed to the population growth in the region. According to the Llewellyn-Davis Report, "... the Abingdon/Didcot district has shown a rapid increase in population due mainly to the proximity of Oxford, and to

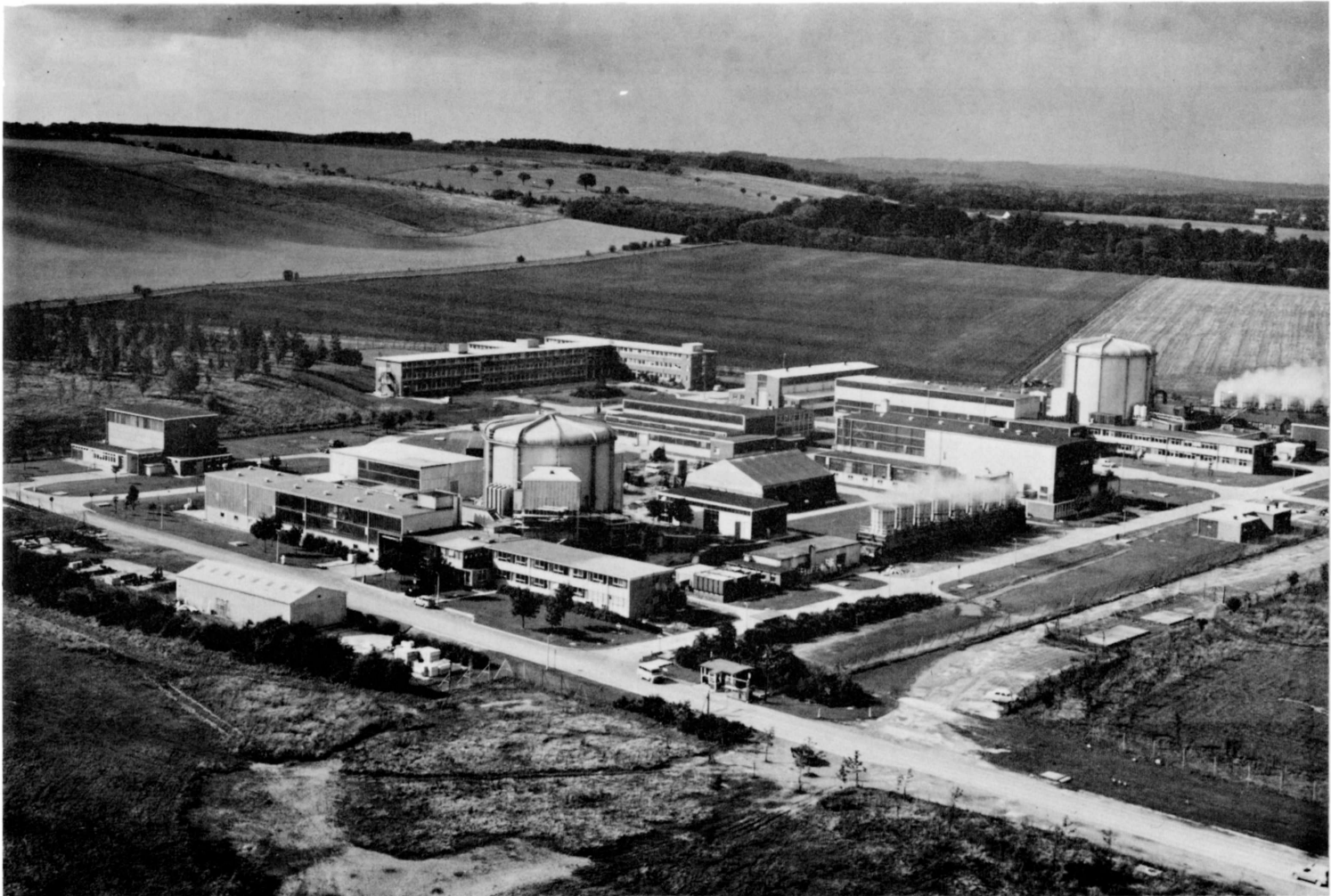
Concluding also the presentation of photographs of A.E.R.E. taken by helicopter flying at 600 ft. "The general appearance of the Establishment resembles a cross between a factory estate and a University, and this description reflects the atmosphere of the place." ➤



View of the site with the Chemical Engineering Building in centre background, Medical Research Council Unit, right and the Rutherford High Energy Laboratory in the distant background.



View of DIDO reactor with the neutron 'time of flight' tube in the centre of the picture.



View of the main reactor area. DIDO reactor is on the left of the picture and PLUTO reactor right.



View of the main reactor area from the S.E. with DIDO reactor, right and PLUTO reactor centre.

planning policies of Oxford which have prevented expansion within the city. This has resulted in a considerable overspill from Oxford into the area." They admit, however, that a "... still more important factor has been the establishment of A.E.R.E. at Harwell. A very considerable population—approximately 30,000—depends on A.E.R.E. and consequently there has been substantial development of housing and tertiary employment."

Yet another complicating factor stems from the fact that Berkshire has in the last fifteen years shown the most rapid population increase in all England.² The growth of the region is inextricably tied to the overall growth of the outer London provinces, as part of "overspill", which makes the task of assessing the impact of Harwell more difficult.

Census of England and Wales—Berkshire, 1951 and 1961. H.M.S.O.

Population	Year			
	1921	1931	1951	1961
Abingdon, N.C.B.	7,469	7,829	10,176	14,287
Wantage U.D.C.	4,201	3,793	5,690	5,949
Didcot		3,630	8,694	11,212
Abingdon R.D.	10,007	11,687	23,459	30,321
Wallingford R.D.	8,585*	9,464	15,598	19,092
Wantage R.D.	11,389	11,673	14,589	16,779

*Includes Didcot

The initial impact of the Authority up to 1951 can be seen to have concentrated employees close to the Establishment. Between 1951 and 1961, the increase is more evenly distributed, pointing to greater dispersal and longer journeys to work. Large increases adjacent to the cities are likely to be due to city extension into the rural parishes.

A large proportion commutes from the cities at the extremities of the labour field. For the remainder, whilst the distribution is fairly even, a correlation between larger clusters of employees and the road network is discernible.

Abingdon represents the personification of the "Harwell" settlements.³ Here, 25% of the townsfolk are A.E.R.E. induced, and this accounts for half the increase of population since Harwell was established.

CONCLUSION

This study provides an example regarding industrial location and the necessity for the geographer to consider the time factor in his work, even in a problem as recent as Atomic Energy. Decisions were made in the light of factors which were important at the time. Furthermore, in a period of only twenty years, the "Harwell" community, conspicuous by their occupation and their diversity of origin, have successfully blended into the region and become an inseparable part of it. So successful has this been that any run-down or closure of the Establishment would threaten economic and social disruption to the area, and thus the Establishment provides its own geographical inertia.

Harwell itself is indeed a unique phenomenon.

NOTES

¹ Census of Migration in England and Wales. Note: National Average of duration of residence of less than 15 years is 75%.

² P. Hall, "Thames Valley Tangle". New Society Dec. 1st, 1966, No. 218.

³ H. Pulsford, "The Impact of Harwell Staff on a Local Community". Harlequin, 1959, p. 61.

Visit to AERE by Men of the Trees

The Men of the Trees is a society for tree lovers and socially conscious foresters that was founded in 1922. On a perfect windless evening this summer a party of Berkshire members was conducted around some of AERE's more mature plantings and saw banks of mixed trees and shrubs used to screen unattractive areas. It is pleasing to quote from their report:—

'The dark and light greens, copper and gold, natives and exotics gave an impression of bounding health which quite took the eye from those little markers denoting subterranean installations to be avoided by eager roots! Constant development and the requirements of screen planting necessitate the frequent removal of mature trees, at which the staff are expert. We were also shown roses ancient and modern, lawns, sheltered tennis courts and games fields, greenhouses full of flowers for use at functions, vegetables grown for the canteen, labour-saving tricks with borders, all important in this vast project. Only when the light and our feet gave out could we tear ourselves reluctantly away.'

Tribute was paid to the Grounds staff for their knowledge and keenness, and the site was summed up in three words: *Modesty without desecration.*

This autumn they will be going to see the work at Culham.



WANTAGE

The natural urban centre of a rural district of 32 parishes including Harwell. A look at its place in history and then, with the help of Mr. J. Maude, Clerk of the UDC, a look at progress to date and at the plans for the future of the town.

The ancient Town of Wantage lies between the Berkshire Downs and the Vale of the White Horse, where the old Icknield Way crosses the Letcombe Brook. Perhaps its principal claim to fame is that it was the birthplace of King Alfred, whose statue dominates the Market Place. The Town is also famous because of the Wantage Sisters, the largest Anglican community with missions in many lands.

HISTORY OF WANTAGE

Saxon Times. After the Romans left England the country lapsed into troubled times and nothing is known of the history of the region during the Dark Ages. We do not know when Wantage first grew up but the meeting place of the Roman road to the north and the east-west Portway would be a natural place for a settlement and by Saxon times Wantage must have been a flourishing township.

In 849 A.D., as every schoolboy knows, Alfred the Great was born at Wantage in his father's palace. Asser, his friend and chronicler, tells us that Alfred paid two visits to Rome as a boy and returned to Wantage to continue his studies. As a young man he had to take up arms with his elder brother against the Danes, and after many adventures he defeated them at Ashdown and, finally, at Ethandune. The exact sites of these battles are conjectural but they were on the Downs not far away. After the settlement with the Danes Alfred was free to devote himself to the task of welding the Kingdom together. His achievement was truly great; he advanced learning, modified the law, remodelled the Army and founded the Navy and left England a nation.

The site of Alfred's palace in Wantage is not known. It would have been of wattle and



Wantage Parish Church

H. E. CROOKS, H.P. & MED.

ALFRED THE GREAT

The West Saxon King, born at Wantage AD 849

Alfred found learning dead,

And he restored it.

Education neglected,

And he revived it.

The laws powerless,

And he gave them force.

The Church debased,

And he raised it.

The land ravaged by a fearful enemy,

From which he delivered it.

Alfred's name will live as long as mankind shall
respect the past.



The Convent, Belmont



The Market Square, Wantage

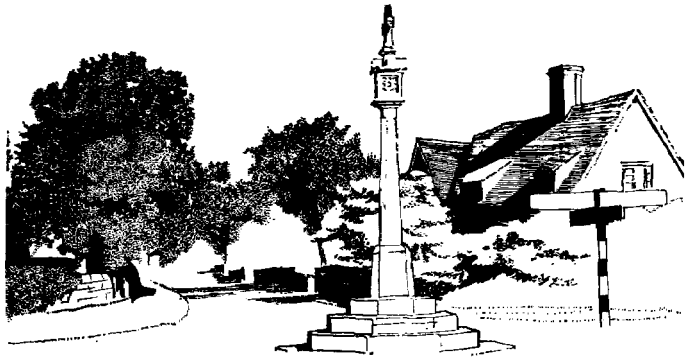


The 18th century Post Office Vault

daub and since the settlement was burnt by the Danes nothing would remain to indicate its exact site. The tradition, however, is that it was somewhere on the high ground near Belmont.

In 997 Wantage must still have been of importance for a code of laws for all England was drawn up at a council (or Witan) called by King Ethelred. The town was probably destroyed in 1006 by the Danes.

Norman times. By Norman times Wantage was again flourishing and is mentioned in the Domesday Book as belonging to the King and worth £61. After 1215 the Manor of Wantage was given to Fulk FitzWarin and remained in his family throughout the Middle Ages. One member of the family, Alice FitzWarin, married Dick Whittington. There were three lesser manors within Wantage but no trace of these nor of the FitzWarin's home remains.



The Market Cross of 1580

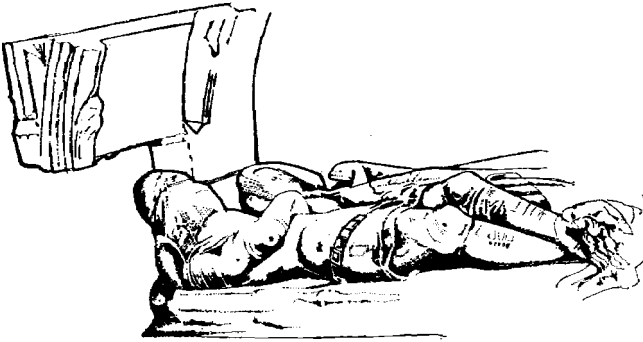
Stuart times. Wantage was fairly peaceful although the Civil War raged at Newbury and there were skirmishes nearer home, at Fawley. Charles I twice passed through on his way to Oxford, spending one night with Sir George Wilmot, probably at Charlton, and dining here on April 11th, 1644. Later on Cromwellian soldiers were quartered in the town and probably destroyed the Market Cross, erected in 1580 by the Earl of Bath.

By now Wantage was a prosperous business centre with an annual fair to which people came from all parts of the country. In 1665 it was necessary to cancel the fair to prevent the plague being brought into the Town.

In 1692 the theologian Joseph Butler was born in the house near the church called The Priory. He became Bishop of Durham and is best known for his book "The Analogy of Religion".

Golden Wantage. In the late 18th Century Wantage enjoyed a considerable prosperity. As well as being the market town for a very fertile district it had industries of its own. There were tallow chandleries and four tanneries. These latter gave their name to "Tanner Street" as Priory Road used to be known. Rope factories had brought trade to the town and employed no less than 500 people. A relic of this may be seen in the little lane off Wallingford Street. The brick wall on the right bears numbers at intervals which may mark off the measures of yards of rope.

Along the stream were a cloth mill and several grain mills. The coming of the Berks and Wilts canal in 1810 brought increased prosperity to the Town which earned for itself the name of "Golden Wantage". A branch of the canal ran to the Wharf at the bottom of Mill



A weekly market was granted to the town by Henry III in 1216 and by 1285 it had been taken over by the FitzWarin of the time. The town continued to prosper on the produce of the surrounding farmlands and on the growing wool trade.

Town Lands Act. The Middle Ages and Tudor times were uneventful except for the passing of the Town Lands Act in Elizabeth I's reign. Various lands in the neighbourhood had been given as far back as Henry VI's time for charitable purposes but the income from them was being so misused that it was necessary by special Act of Parliament to vest the administration of the town lands in the hands of twelve "Governors". Today the present Town Land Governors still handle certain charities and a copy of the Act sealed with the Great Seal of Elizabeth I is in the hands of their solicitors.



ULTRASONICS

We are European Distributors for MATEC INC. of
Warwick, Rhode Island.

Shown above is their Model 6000 Ultrasonic
generator and receiver which has been specifically
designed to provide transducer driving waveforms
and receiving amplification for pulsed ultrasonic
measurements from 1 to 800 MHz.

THE RODITI INTERNATIONAL CORPORATION LTD.

130 Regent Street, London, W1

Telephone: 01-437 1997

Telex: 265661

Street and brought in coal and took out corn and flour and malt. The dried-up bed of the canal can still be traced to beyond Grove and near Barwell a typical canal bridge remains in open fields.

Black Wantage. One of the most thriving trades was malting and several breweries started up. Public Houses sprang up all over the town which acquired a bad name for drunkenness and disorder. Its good reputation declined and religious influence was unfortunately at a low ebb, with an absentee Vicar. The roads were in a lamentable state and the narrow alleyways in the town favoured an increase in crime and also frequent fires. For some reason Wantage became the resort of gangsters and undesirables from London and even became known as "Black Wantage". It is said that Bow Street Runners looking for an escaping criminal came first to Wantage to search for him.

The conduct of the Town became so bad that it was necessary in 1828 to pass a special Act of Parliament entitled "An Act for the better Lighting, Watching, Cleansing, Paving and otherwise improving the town of Wantage." Instructions were laid down for dealing with "nuisances, annoyances and obstructions" and Commissioners appointed to enforce the Act, which became a model for subsequent local government Acts.

Transport in the 19th Century. At the beginning of the century communications with Wantage were very poor. Transport on the canal was slow. The turnpike roads into the town were in poor order. Apart from a twice weekly coach to London from the Alfred's Head, the only other means of reaching the capital was by a waggon which took two days. The coming of the Great Western Railway in 1840 did not at first much help matters. The nearest passenger station was at Challow and was served by a small horse bus from Wantage which daily met the single train in each direction, the "Parliamentary" train which stopped at every station and took eight hours to run from London to Bristol. Trade in the town declined and Charles Dickens, staying at the Bear, was probably justified when he called Wantage "lazy" and "sleepy".

The Wantage Tramway. Things began to improve when a passenger station was opened at Wantage Road in 1863. This being over two miles from the Town local enterprise resulted in the opening of a tramway connecting the station with the Town. At first a horse-drawn tram was used but in 1876 Wantage became



Maryfield Flats Ormond Road

the first place in England to run a steam tram, called "The Grantham Car", a model of which is in the Science Museum in South Kensington. A later locomotive was the second-hand tank engine "Shannon" which did noble service for many years and was nicknamed "Jane" by the passengers. Travel by the Wantage tram may not have been speedy but it can never have been dull. Derailments were frequent and there is even a tale of a race against the local chimney sweep in his donkey-cart. The moke won but "Jane" continued to pull her ornate carriages until passenger traffic ceased in 1925. The line was used for goods until 1946 when "Jane" herself drew the lines as they were taken up behind her. "Jane" has been removed from the platform at Wantage Road Station (now closed), and will be stored in Wantage* until she can be displayed in a permanent building.

MODERN WANTAGE

Local affairs are now in the hands of the Urban District Council, the only one in Berkshire.

Housing. The advent of the Atomic Energy Research Establishment at Harwell has brought a new era of prosperity to the town and a large influx of population. On the old Charlton House Estate the Establishment has built an estate of about 400 houses which is well planned in relation to the contours, and includes several green open spaces.

*For some years now "Jane" has been given sanctuary at the Authority's Wantage Laboratory.

SOUTH OF ENGLAND BUILDING SOCIETY DECIMALIZATION

or to *coin* a phrase. "Where's the *point*?"

There is a *point* when it comes to
investment with the South of England
Building Society

£4.75%

TAX PAID

that's the *point*!

Local Branch Office
1a High Street, Abingdon.

Telephone Abingdon 528

HOBBS & CHAMBERS F.R.I.C.S.

Chartered Surveyors, Auctioneers & Valuers,
House, Land and Estate Agents

House Agents

for the sale of Town and Country Houses and
Cottages in Berks/Oxon/Wilts and Glos.

Valuers

of Houses and Furniture on sale, purchase and
probate, Compulsory Purchase, Rating and
Capital Gains.

Surveyors

Of Residential Property, Land and Estates on
sale and Purchase

Insurance Agents

for leading Companies on all classes of
Residential, Furniture and Motor Business

Auctioneers

for the sale of Houses, Cottages, Furniture
Farms and Farmstock

Land Agents

for Farm Improvement Schemes,
Farm Accounts,
Stock Taking, Timber and Management

Market Place, Faringdon, Berkshire
(Tel: 2356, 2357 and 3261)

and at Cirencester, Glos and Swindon, Wilts.

As a member of the United Kingdom Atomic Energy Authority you are entitled to special reduced terms on all classes of insurance. Are you receiving a high no claims bonus on your motor insurance. *Plus* a discount from normal premium rates? and worthwhile discounts for your life endowment insurance requirements and householders fire policies?

are you taking advantage

**of these Special
Reduced Insurance
Terms?**

Full information on these valuable
concessions can be obtained,
without obligation from

MIDLAND ASSURANCE LIMITED

187 KING'S ROAD, READING, BERKS

Telephone: 50010 & 53734



Established 1898
Assets exceed £37,000,000

MIDLAND
ASSURANCE
LIMITED

HEAD OFFICE: Midland Assurance Building, Hagley
Road, Birmingham 16. Tel. Edgbaston 4811 (17 lines)

Member of the British Insurance Association.

POST THIS COUPON FOR FURTHER DETAILS

NAME.....
COMPANY.....
ADDRESS.....

There has recently been considerable building in and around the town, both private and council. There are three post-war council estates on the western outskirts of the town and more building is in progress. A group of old people's bungalows has been built near the centre of the town, secluded and yet near the shops, and blocks of old people's flats nearby in Ormond Road.

The Berks County Council acquired the Stirlings site in Wallingford Street, and the Welfare Committee has built a home for elderly persons who are unable to look after themselves adequately.

Behind the home more old people's bungalows have been built, and the Georgian stable block is to be adapted for an old people's club.

Amenities. In the centre of the town there are new shops, including the most modern self-service kind, which have been designed with great care so that their external appearance blends well with the rest of the Market Place. Other shops have opened on new housing estates and many old-established shops have been modernised.

Behind Mill Street there is a new car park for 190 cars. The cost is 6d. for 12 hours. The approach is via Limborough Road.

A small museum was opened in the Council Offices in Portway in 1958 and has been transferred to the Victoria Cross Gallery, and it is hoped to re-open it late in 1968. It is for objects of local interest and many treasures have been given or loaned by townspeople. The remaining portion of the Market Cross is on view, and so too is "Johnny Barr", an old fire engine and a collection of wheelwright's tools. As well as manuscripts and many "bygones", the Museum owns a lovely copy of the famous "Alfred Jewel" found at Athelney and now in the Ashmolean Museum.

Next to the Bear Hotel a new Post Office has been built, set back in a little pedestrian precinct. Another modern building is the new Library near the Church on the site of Streets' Offices. It was built by the County Council to an elegant design which won a commendation by the Civic Trust.

Education. The increased population has put a strain on the existing school facilities, but the Berkshire Education Committee is expanding its schools to meet this need. The three primary schools have had extensive additions, and a new school has been built at Charlton.

Two secondary modern schools have been



The Public Library

H. E. CROOKS, H.P. & MED.

built, and the King Alfred's Grammar School for boys has been extended. At present most grammar school girls go to Faringdon County School, 9 miles away, or to St. Helen's School in Abingdon.

Eventually all the maintained secondary schools in the area will be reorganised for a comprehensive system of education. The schools will all be mixed and will cater for all the children in the town. In the meantime, new buildings will be provided at Icknield and Segsbury schools to accommodate the growing numbers of children of secondary school age.

Icknield School is the headquarters of the Wantage Youth Centre which has its own youth wing and a large membership. The Evening Institute is also based there, and activities take place on most evenings during the winter terms.

In 1969 an E.S.N. School will be opened at Stockham on the Denchworth Road. It will give special education to the children who at present travel to the E.S.N. School at Abingdon. Another primary school has been planned on a nearby site.

There has been considerable development in the town in recent years and there are plans for a new road to relieve the congestion of traffic in the centre. Recently the Berkshire County Council decided that Wantage and Grove should be expanded together to form a town of between 40,000-50,000 inhabitants by the 1980's. A joint committee is considering this and it is hoped to attract industry to the area before any considerable expansion takes place. ★

STEVENTON MOTOR REPAIR SERVICE

HIGH STREET, STEVENTON, BERKS.

L

STEVENTON SCHOOL OF MOTORING

Telephone: Steventon 304

BODY REPAIR SPECIALISTS

RESPRAYS

ESTIMATES FREE

TAXIS FOR ALL OCCASIONS

TOWN & COUNTRY

Marriage Bureau

Suitable introductions arranged with
a view to marriage.

Write in confidence:—

45/H CROMWELL ROAD,
LONDON, S. W: 7.

or telephone 01 - 584 - 2212

R. G. Bradley and Son

WATCHMAKERS AND JEWELLERS

See our selection of Watches

ROLEX · TISSOT · MARVIN
AVIA · ROAMER · SERVICES
INGERSOLL & HAMILTON

Free Insurance for Rings and Watches
over £10.

208 THE BROADWAY, DIDCOT
Telephone 3113

DONALD MACINTOSH (*Insurance*) LTD.

DONALD MACINTOSH (*Life & Pensions*) LTD.

INCORPORATED INSURANCE AND LIFE ASSURANCE BROKERS

give expert advice on all Insurances. Why not take advantage of our personal service and
and special rates offered to all U.K.A.E.A. staff! Maximum Motor No Claim Bonus 60%,
C.S.M.A. membership not required.

We also specialise in Unit Trust Endowment Policies of all types and will be happy to
provide quotations on request.

A limited quota of Deferred House Purchase Policies are available guaranteeing 100%
Mortgages after three years.

HEAD OFFICE 265 HIGH STREET, ORPINGTON, KENT

Telephone: Orpington 31641/2

WANTAGE CHESS CLUB

Formed in 1957, the club meets in King Alfred's Grammar School from October to April. More than two thirds of the members are A.E.A. staff, and there are also several juniors.

Friendly matches are played with neighbouring clubs, and there are lightning and other internal tournaments. Instruction is gladly given to beginners. Often the club is sufficiently strong to enter into the Oxford and District Chess League. Individual members may enter for the county championship of Oxford or Berkshire according to registration.

The Club Chairman is H. E. Crooks, 4 Upthorpe Drive, Wantage (A.E.R.E. 4712) and the Secretary is D. B. Punter, 44 Wasborough Avenue, Wantage (WRL 40 and 11).

THE WANTAGE ROYAL NAVAL ASSOCIATION

As behoves the birthplace of King Alfred the father of the Royal Navy, Wantage has a branch of the Royal Naval Association which was commissioned on the 19th December 1961.

The Branch, which normally meets on the first Thursday in the month at the "King's Arms", Wallingford Street, has twenty one members, nine of which are employees of the U.K.A.E.A. at either A.E.R.E. or W.R.L.

THE BRITISH RED CROSS SOCIETY, WANTAGE

Last year money was raised to buy a Red Cross ambulance and an effort is now being made to obtain a Headquarters. The County ambulance at Wantage is covered at nights and week-ends on a voluntary basis, and help offered to the community ranges from medical loans to patients at home, to escort duties and welfare visiting. Nine members of the Wantage Detachment, including the Commandant, work at Harwell or Culham.

1st KING ALFRED SCOUT GROUP

This consists of one scout troop and two cubscout packs. J. N. Hull (E. & T.D.) is Group Chairman and his wife a cub mistress; the Group Secretary is R. E. Wilkinson of MRC and the Scout Master is Bill Johnstone of RRD.

WANTAGE DISTRICT GIRL GUIDE ASSOCIATION

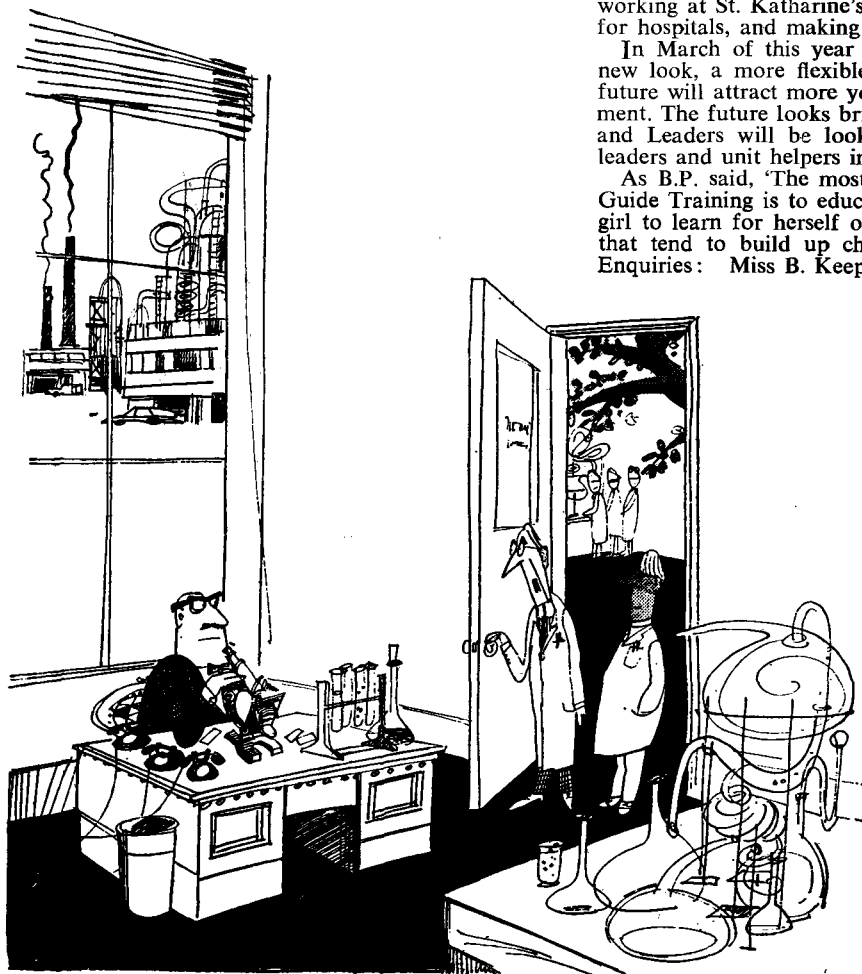
Since the influx of U.K.A.E.A. staff the number of companies has been increased from two to five but most have long waiting lists. There are 231 Brownies and 139 Guides, of which five of the eight Queen's Guides are daughters of Harwell personnel. Since March 1968 the number of Rangers has doubled to 16.

The young people have given service to the town by their visits to the Hospital, good turns to the old folk, working at St. Katharine's House, making scrapbooks for hospitals, and making up Christmas parcels.

In March of this year the Association launched a new look, a more flexible programme, which in the future will attract more young people into this movement. The future looks bright and the Commissioners and Leaders will be looking to A.E.R.E. for more leaders and unit helpers in specialized fields.

As B.P. said, 'The most important aim in the Girl Guide Training is to educate, that is, to draw out the girl to learn for herself of her own desire the things that tend to build up character in her.'

Enquiries: Miss B. Keep, M.R.C.

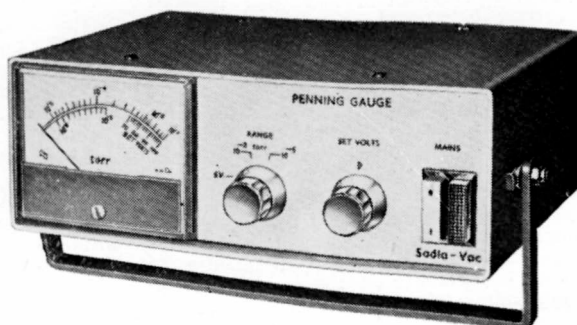


"I don't know how to say this, sir, but Humphries here can make a tree."

Cartoon by permission of "Punch"

Sadla-Vac

**HIGH
VACUUM
EQUIPMENT**



PENNING, PIRANI & THERMOCOUPLE VACUUM GAUGE UNITS

A range of high vacuum and medium vacuum gauges, Penning Pirani and Thermocouple Gauges.

The Pirani Gauges are Voltage stabilised and show a low zero drift when operating one or two heads and the instruments cover the pressure range from 10^{-3} to 1 torr.

The Penning Gauge covers the pressure range from 10^{-2} to 10^{-6} torr with an extended scale between 10^{-5} and 10^{-6} torr.

The Thermocouple Gauges are available in the Standard Control Box (as illustrated) or in a miniaturised form which may be mounted directly in the pipeline in addition to Panel or Bench mounting. Five different versions are available, covering the pressure range from '001 to 10 torr.

The heads terminate on standard tube to B.S.S. 659 for Vacuum connection and a number of versatile connectors are available for direct connection to the different manufacturers standard couplings.

Standardisation enables any two units to be coupled together both mechanically and electrically, giving a combined instrument which covers the pressure range from 10^{-6} to 10 torr.

Write for full details to: — **SADLA - VAC**

MERCURY WORKS · WINDSOR BRIDGE · SALFORD 5 · LANCs.

Telephone 061 736 3820

MORE CLUBS AND SOCIETIES OF A.E.R.E. RECREATIONAL ASSOCIATION

CAMERA CLUB

The Club has as its main objectives the fostering of all aspects of the practice of still and cine photography and the appreciation of colour and black and white photographs.

Membership of the Club is open to all members of the Recreational Association and their families and under certain circumstances can be extended to others.

The main Club activity is the series of weekly Club meetings held on Monday evenings during the period September to April. The programme includes talks by well-known practising photographers, practical sessions in the Club Studio or darkroom, colour slide and print shows of members' work and inter-club competitions. An essential feature of the Club year is the Annual Exhibition which is usually held during the summer months.

There are extensive and well-equipped facilities to aid members in the practice of their hobby. These include a studio suitable for portrait and other forms of indoor photography, a work room with mounting and trimming facilities, and two darkrooms equipped

with enlargers accepting the common negative sizes, print trays and print washers. The commonly required chemicals are purchased in bulk and supplied to members at cost and photographic equipment, printing paper and films can be obtained for members at a discount.

Further information on any aspect of the Club can be obtained from the Secretary: Mr. Philip Marsden, Ext. 2711, P.A.U. Bldg. 329.

CALEDONIAN SOCIETY AND REEL CLUB

The constitution of the Caledonian Society was changed some time ago to include the Reel Club, and formally allow 'foreigners' who are interested in Scottish Country Dancing to be members. The club now has a membership around 50 and meets on Tuesday evenings at 7.45 p.m. in the Social Club.

Three larger functions are usually held each year:

- a) St. Andrew's Ball (late Nov./early Dec.)
- b) Burns' Supper (about Jan. 25th)
- c) Spring Ball (late April/early May);

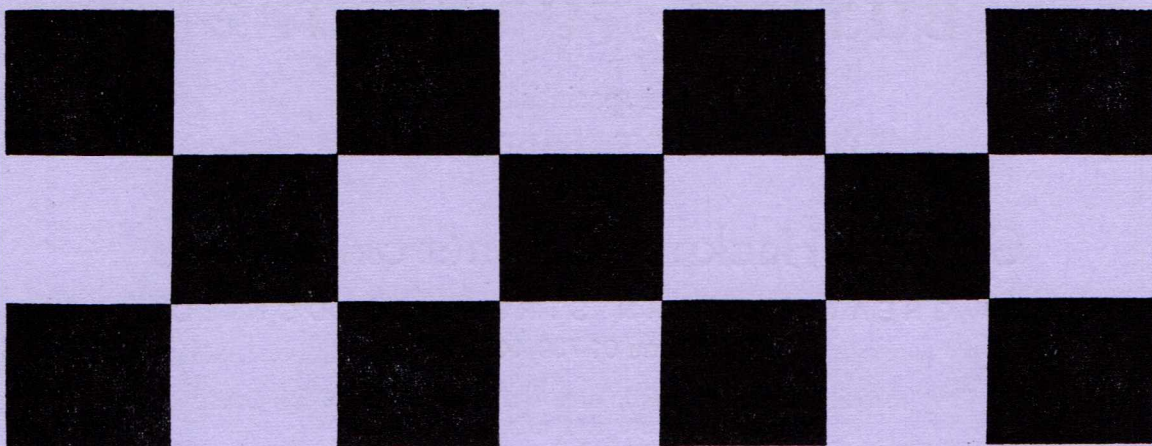
although there has not been a Burns' Supper for the last two years.

The club also supports a Demonstration Team who dance, often as a cabaret, for a wide variety of functions held around the area.

Secretary: W. P. Stanaway, Ext. 4614.



TWENTY YEARS' SERVICE Back row, left to right: T. Moreton Cox, A. E. Fairful, D. N. Fletcher, A. J. Keats, A. J. Davies. Centre (l. to r.) L. R. Simmonds, V. R. Butler, T. M. Kelly, P. G. Legge, C. Jackson, S. W. Cooper, A. R. Jones, W. G. Sparke, R. Little. Front row (l. to r.) H. T. Lambourne, B. Lloyd Rogers, Mrs. K. Classey, W. E. Johnson, D. Parks, W. F. Green.



Atomcover is synonymous with comprehensive motor insurance for Authority Staff at inexpensive premium rates. Atomcover provides full business use, including carriage of goods, in connection with official journeys. Atomcover is underwritten on the Lloyds market and is only available to Authority Staff. Richard Nolan & Company Ltd. is your Insurance Broker, write **TODAY** for a quotation.

Complete the following and return this slip in accordance with the instructions on the prepaid notice overleaf.

Please send me a quotation, without obligation, for my:

Make c.c. Value £ Year

Name Age

Address

I would be prepared to bear the first £..... (£10/£25 Excess).

I have been insured for years without accident and my present

Insurance Company is Company Ltd.

I require Comprehensive/Third Party Fire and Theft/Third Party.

(Strike out whichever are not applicable).

One Driver/Any Driver.

Present Renewal Due.....

BUYING FURNITURE

You still need specialist advice from
SPECIALIST FURNISHERS

such as

Griffiths Hackney Cabinet Company Limited

54 GREAT EASTERN STREET LONDON EC2

Telephone 01-739 4431/2/3

Easy to visit (map on request), large stocks of Modern High-Grade
Branded furniture and a long-established
recommended service.

We are in the heart of the traditional
furniture district of London and give a

Comprehensive Complete Furnishing Service

*plus SPECIAL CASH DISCOUNT and CREDIT TERMS on already economical
prices to Members of A.E.R.E.*

Cut along this line.

Please fold—2.

No Postage
Stamp
necessary if
posted in
Great Britain
or
Northern
Ireland

Postage
will be
paid by
Richard Nolan
& Co. Ltd.

BUSINESS REPLY CARDS
LICENCE No. RG. 83

**RICHARD NOLAN & COMPANY LTD.,
INSURANCE & MORTGAGE BROKERS,
3 CHURCH ROAD, CAVERSHAM,
READING, BERKS.**

Fold and tuck in—3.

Please Fold—1.

DRAMATIC SOCIETY

The Society was formed shortly after the inception of A.E.R.E. and after a promising start, survived some low periods to achieve its present flourishing position. During the last few years the Society has earned a reputation for itself as one of the best amateur dramatic groups in the area, winning awards in one-act festivals as far afield as Reading. Recent full-scale productions which built and enhanced this reputation include John Mortimer's "Two Stars for Comfort", Peter Ustinov's "Photo Finish", "My Three Angels" and Jean Anhouilh's "Waltz of the Toreadors".

The Society rehearses and presents its productions in the Social Club which, although not ideal from the theatrical point of view, does have certain advantages not enjoyed by similar societies—for instance, it is said to be the only theatre in the country where one can take one's drink into the auditorium and where said drinks are at club prices! It is also alleged that the propinquity of the bar lubricates the progress of rehearsals to no inconsiderable extent. The Society neither admits nor denies this.

The membership is about forty, reasonably divided between back and on-stage staff, but there is always a need for more; in the one case, to share the work of building and decorating the sets, in the second, to increase competition for acting roles. If you have any interest in 'ham dram', do call (almost every

Thursday in the Social Club) and see what it's all about. They are an informal lot and—with vast experience or none at all—you will be made welcome and probably be put to work immediately!

The Secretary is Richard Bullock, Ext. 4304.

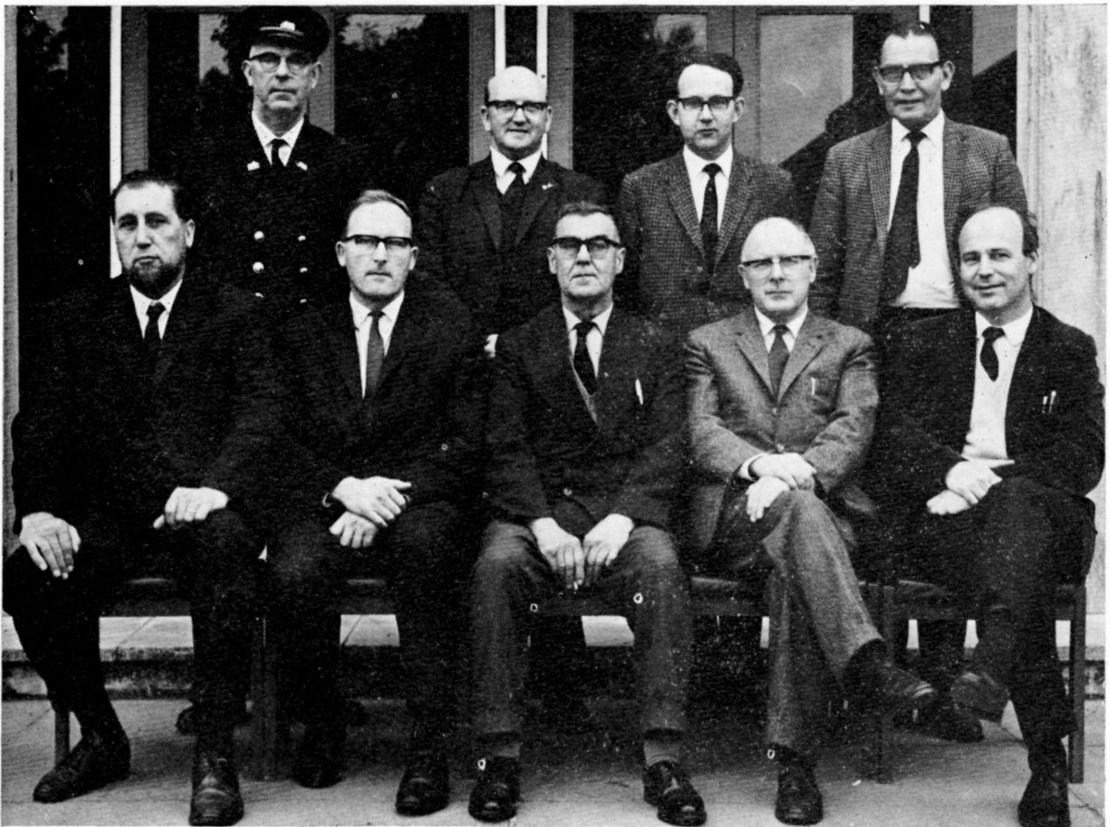
TABLE TENNIS CLUB

The Club meets on three evenings a week, in the season, in the games room of the Social Club. Its membership continues at the high level achieved in 1967 with 25 senior members and 6 juniors. The number wishing to play regular league table tennis has risen appreciably and there are now five teams entered in the Didcot and District Table Tennis League. The first team finished third in the first division.

Members have on numerous occasions been invited to represent Didcot in the Berkshire Inter-Town League, and one member has been the No. 1 ranked player in Oxfordshire and has regularly represented that county in the County Championships.

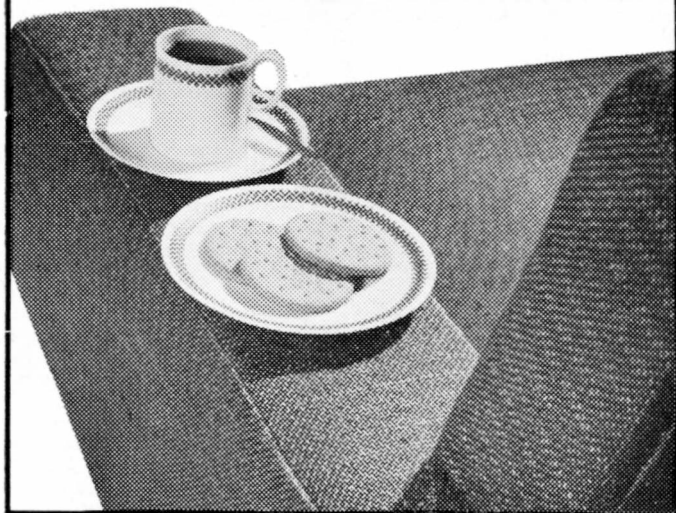
The Club continues to provide as much variety of play as possible and has several handicap tournaments, in addition to the normal Club evening on Tuesdays. A new feature has been the running of a lunch-time inter-departmental competition.

Secretary: R. O. Butt, Ext. 2421.



TWENTY YEARS' SERVICE Back row, left to right: C. Bishop, A. E. Simmonds, H. C. Sanson, G. Colville. Front row (l. to r.) H. A. Ballinger, R. Atkinson, W. E. Crompton, L. A. Birtwistle, J. T. Maskray.

This is the extra-wide arm on G-Plan's Danish design sofa. It takes a cup and saucer safely. Come in and see.



VINEYS
OF ABINGDON LTD.

Practical Furniture

is what you'll find in our modern showrooms.

We stock only the best from leading manufacturers in Britain and Scandinavia.

A.E.R.E. Employees
Please enquire for
Special Discount Terms

15 OCK STREET
Tel. 1068.

NIKON – A CAMERAMAN'S CAMERA



a complete system from

357 OXFORD RD. **FOTOKINE** READING

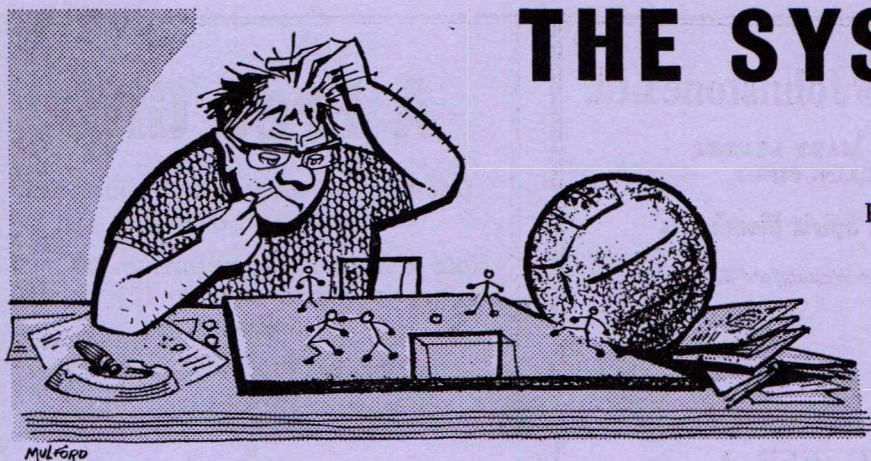
and at 100 ST. ALDATES OXFORD

*Suppliers of photographic equipment to A.E.R.E. and Culham
Camera Clubs*

THE SYSTEM

REG WILKINSON

M.R.C.



A number of you will probably have read the reports which used to appear in "A.E.R.E. News" under the heading of "Football Club". A typical example went something like this:—

RESULT Sat. 21st Feb.

1st XI v Blogsdon F.C. Away Lost 0-6

"The team made a disastrous start in their first visit to new team Blogsdon, two goals were conceded in the first five minutes, from then on the Blogsdon forwards swarmed into attack and a third goal came in the sixteenth minute. A.E.R.E. tried hard up to half-time but goals evaded them. Blogsdon added three more in the second half for good measure."

Perhaps you have wondered why the reports dwindled down to the few lines which appeared last season in "A.E.R.E. News". Allow me to throw some light on the subject.

One morning a few years ago I had reason to visit the chap whose job it was to compile the reports. His door was ajar when I arrived so I knocked, and walked straight into the room in time to find him in a state of complete confusion! As I entered he was sweeping, with one hand, about two dozen coloured ping pong balls into the drawer of the table at which he sat. The other hand was occupied in placing a dark cover over a mysterious-looking cabinet which appeared to have a transparent plastic top. With his feet he was endeavouring to push two sheets of foolscap paper under the carpet!

A couple of seconds later most of the ping pong balls and the cover were on the floor and the foolscap sheets each had a footprint bang

in the centre. Neither of us said a word as we bent down to pick up the debris.

The first ball I retrieved bore the legend "WELL DESERVED WIN", the next said "GOAL AFTER 5 MINS", the message on another read "COMFORTABLE VICTORY". Some of the balls were red and some were blue. In the position which I occupied, kneeling half-way under the table, the sheets of foolscap were right under my nose. On one sheet were two columns of phrases similar to those on the balls. On the other was a half-finished report resembling the one at the beginning of this article.

When we had finally picked everything off the floor and straightened things out a bit I asked him what it was all about, although I must confess that a germ of an idea was already starting to take root in my cranium. At first he seemed reluctant to comply with my request, but after a little more persuasion he began to explain, and by the time he had finished he appeared relieved to get it off his chest.

It seemed that the whole set-up was called "The System" and could be obtained from *F.A. for use by all correspondents responsible for writing reports on weekend football matches. The red balls carried phrases appertaining to the weather or to actual players, the blue balls concentrated on terms describing the tactics employed in play. The cabinet was divided into two compartments each of which was connected in some way to a 40 p.s.i. compressed air supply. A small compressor was

*"Footballers' Anonymous"

Reynolds & Johnstone Ltd.

17, ST. MARY STREET
WALLINGFORD

Wine and Spirit Merchants

Telephone Wallingford 2035

**WE OFFER A
WIDE SELECTION OF WINES
SPIRITS Etc.**

Case lots available at trade prices

WEDDINGS & PARTIES

*Goods on sale or return
Glasses on Loan free of charge*

DELIVERIES

*Throughout the district weekly
Wine lists & Order forms available
on request*

We shall be pleased to see
Personal Shoppers

A Free Gift

One-tenth of the value of your cash
purchase if over £10

Note this includes purchase tax and
is therefore equivalent to 12½ to 15%
discount

Our variety of stock is sure to surprise
you



Longines, Rolex, Avia, Oris Ingersoll,
Roamer, Services, and Russian
Watches.



Wedding, Engagement, Signet and
Dress Rings



Electric, Automatic, Alarm, Eight-Day
and 30-Hour Clocks.



Barometers, Sheaffer and Parker
Pens.



Colibri and Ronson Lighters.



Silver, E.P.N.S. and Stainless Steel
Tableware

Also a Wide Choice of Good Jewellery
to suit all Pockets

Frend & Co., Ltd.

(Jewellers)

**NEW SHOPPING PRECINCT
ABINGDON**

Tel. Abingdon 3444



A.E.R.E. FOOTBALL CLUB
PLAYED AS ONE MAN.

provided if required. The red balls went into one half of the cabinet and the blue balls into the other half. On the side of the cabinet was a dial with a pointer which could be set at any number between zero and 100.

All the operator had to do was settle himself comfortably with the cabinet near at hand. He then set the pointer to a number on the dial and pressed a red button marked "start". Then at regular intervals ping pong balls were projected through a funnel from each compartment in turn. The machine was similar to those used by "callers" at Bingo sessions. Instead of a number on each ball there was a phrase connected with football. The following are a few examples:—

- (1) FUMBLING THE CHANCE
- (2) HARD EARNED POINT
- (3) BRILLIANT ONE HANDED SAVE
- (4) STERLING PERFORMANCE
- (5) ADVANTAGE OF THE SLOPE
- (6) HARSH PENALTY DECISION
- (7) ATROCIOUS CONDITIONS
- (8) CLOGGING MUD
- (9) CONTINUOUS RAIN
- (10) GOAL MOUTH SCRAMBLE
- (11) SLIPSHOD DEFENSIVE PLAY
- (12) ENTERTAINING GAME

As the balls came up a note was made of the phrases on a sheet of paper, reds one side, blues the other.

If the pointer was set at 10 on the dial, ten red balls and ten blue balls were projected to the surface. The actual setting on the dial would depend on the length of the report to be written. Obviously a report for a national news-

paper would be longer than one for "A.E.R.E. News". Once armed with the phrases and the final score the correspondent could insert a few verbs and adjectives here and there and compile a report without actually having attended the match!

I left the office in a daze. So that was how it was done! "The System" was ideal for use in the event of inclement weather, or if there was an interesting programme on television, or even if the correspondent was just too idle to watch the match on which he was supposed to report. I realized that it had rained in torrents on the previous Saturday. I must have barged in when my informant was making full use of "The System"!

Soon after the incident which I have just described I noticed that the Football Club reports had been cut to include only the score for recent matches and fixture dates for future matches. I made discreet enquiries and discovered that a new chap was compiling the reports, but unfortunately nobody seemed to know his name. I even rang up the Editor of "A.E.R.E. News", but all I got from him was something to do with "lack of space". Everywhere I turned I came up against a blank wall.

Of course, I *think* I know what really happened. It could be one of two things. Either "The System" was taken out of use because I had found out about it, or when the new chap took over he found it too complicated to use and gave up trying. Anyway, it does not seem to have gone out of use entirely. Have you seen the full-length reports in "A.E.R.E. News" once again?



**"THE KNOWL"
ABINGDON, BERKS.**

The
headquarters of the old-established
INSURANCE BROKING FIRM of
POPE & CO: (Insurance) Ltd.—
a business set in the very heart of
England, with its finger on the
pulse of the London insurance
market.

ACCIDENTS DO HAPPEN!

Personal Accident Insurance will take care of the extra expense incurred
Premiums are not expensive
Why not ask us about this

MOTORISTS

RING ABINGDON 1860

FOR IMMEDIATE FREE FITTING

25% Discount

ON NEW AND REMOULD TYRES

AND BATTERIES

AT

ABINGDON TYRES Co. Ltd.

39a OCK STREET

ABINGDON

DRIVE THROUGH THE ARCH OPPOSITE MORLANDS BREWERY

Your Garden in Autumn

EASY DOES IT

Leisure is increasing but the time to enjoy it gets less and less.

And gardens take time — and effort.

Conserve your energy and speed the work by using today's equipment and methods.

Modern Weedkillers such as Simazine and Paraquat take care of paths and borders.

Battery and Motor Mowers cut time as well as lawns. More shrubs and more lawn, paved patios and plants in tubs reduce digging and weeding.

Get all your Garden requirements at

LANGFORD'S
Gardener's Centre

Stert Street, ABINGDON
and at Wantage & Faringdon.

When in touch with our
Advertisers please mention
Harlequin

B. J. SMITH

**Estate Agent,
Mortgage & Assurance Broker**

All types of new and existing properties
available.

100% Deferred Mortgage Scheme for
engaged and young married couples.

**4a, BEECH ROAD,
HEADINGTON, OXFORD.**

Tel: Oxford 61091

GREENGROCERY FRESH FRUIT
FLOWERS PET FOODS

ALL GARDEN EQUIPMENT
LOCAL DELIVERIES

Agent for Sutton's and Webb's Seeds
and for Interflora

A. F. SAVAGE

**SHOPPING CENTRE,
A.E.R.E. Harwell, Berks.**

Tel. Rowstock 365

ALSO — THE NURSERY, BLEWBURY

Children's Wear

Wool

Haberdashery



**ICKNIELD WAY P.O.
SHOPPING PARADE
AERE HARWELL**

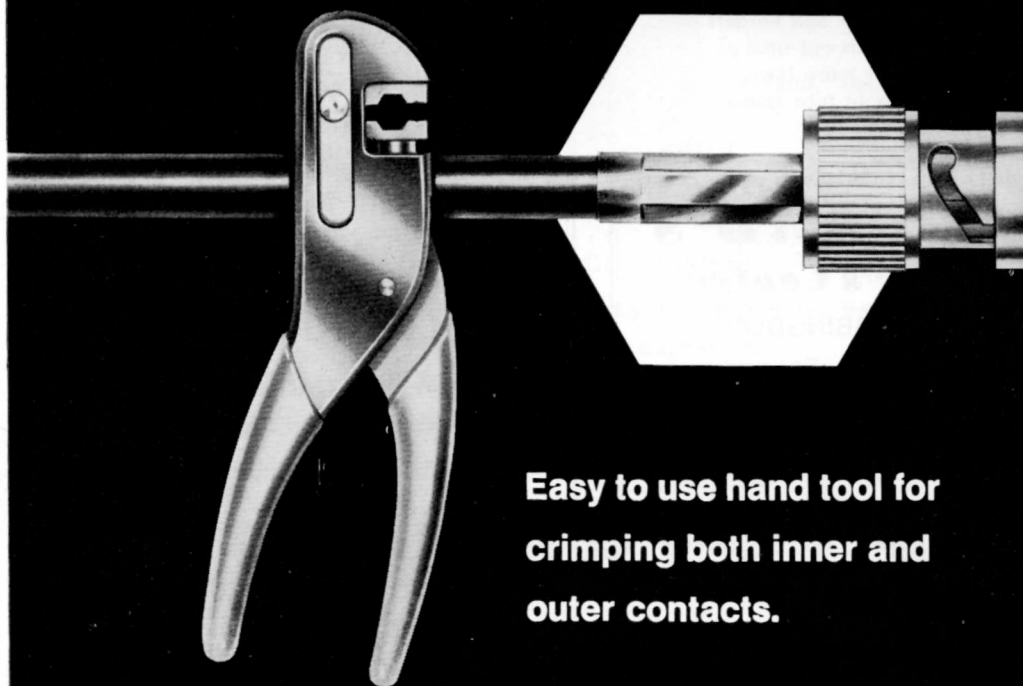


ROWSTOCK 259

Robin — Hayfield — Ladybird
Kiddicraft.

TRANSRADIO

now offers you an easy method for
CRIMPING standard coaxial cable



**Easy to use hand tool for
crimping both inner and
outer contacts.**

Advantages of a better crimp...

- The strength of the connection equals the tensile strength of the cable.
- Assembly time is reduced 50%.
- V.S.W.R. matching is fully maintained when cable is correctly cut for crimping.

Note: Soldering and braid combing can cause reduction of insulation resistance... CRIMPING ELIMINATES RISK!

Types available in SM, BNC, TNC and 83UHF Series for cables 0.195" and 0.242" OD, other types and sizes in development.

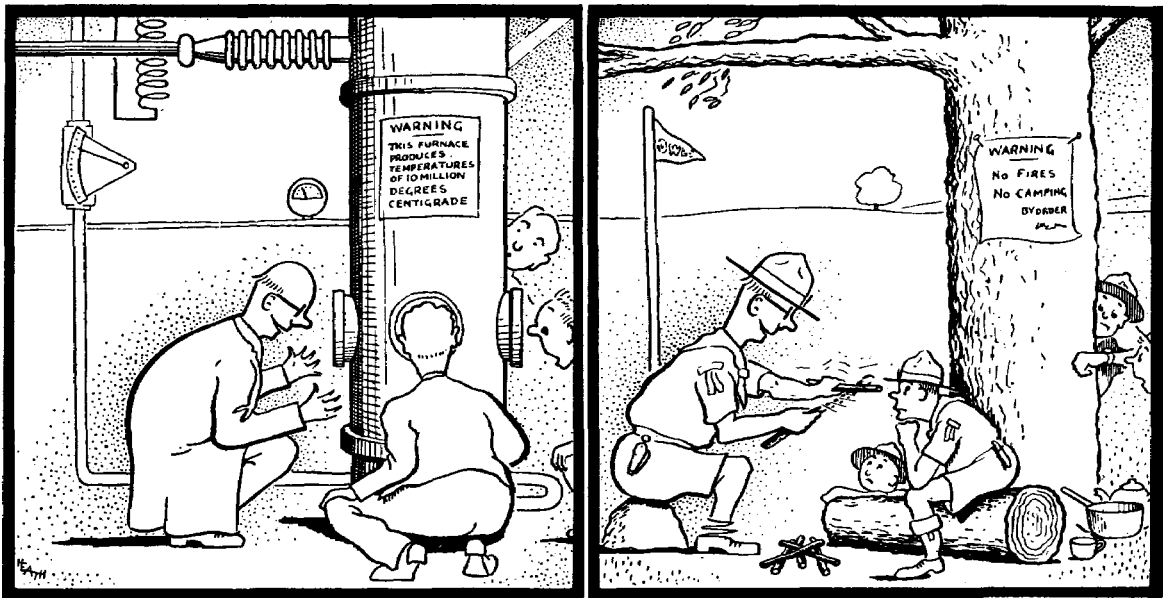


*Products manufactured by TRANSRADIO are sold **only** by TRANSRADIO...*

TRANSRADIO LTD.

183 PARK AVENUE, LONDON, NW 10

Tel. 01 965 6281



YOUR bright ideas on safety — and productivity — are worth cash!

Over £600 has been given in awards so far this year.

Please send suggestions (by internal mail) to:—

The Secretary,
Suggestions Schemes,
Personnel Division,
Building 329.



CAN YOU



COMMUNICATE?

Communications have never been more vital than today, when events move so swiftly that there is often no way of undoing the harm caused by the loose use of words or the misjudgment of the meaning of a statement.

Most of us have something to say, and we are less likely to be misunderstood if we can express ourselves well.

That is why, all over the world, including Britain, groups of men gather regularly, weekly or fortnightly, to help each other to learn the art of public speaking and critical listening.

They are members of Toastmasters International, a non-profitmaking, non-sectarian, non-political educational organisation, which now has 3,700 clubs in 50 countries. In Britain there are nearly 140 clubs with well over 3,000 members, all about to start another season's activity.

The movement was brought to Britain in 1935 by a Glasgow businessman, Mr. Will Goldie, after he had visited the United States, and Britain's first club was established in Glasgow in 1937.

For a number of years after the war, while "Toastmasters" was spreading throughout Scotland, recruitment in England was slow. But now there are signs that a balance may be achieved in a few years' time. Progressing from two clubs in 1945, there were 20 by 1950 and the "century" was passed in 1961.

What distinguishes it from all other public-speaking bodies is its practice of mutual, constructive criticism—each speaker has an individual critic, and the whole of an evening's proceedings, in which there are set speeches and a number of impromptu answers to "table topics", is evaluated by a general critic.

While they achieve their results—better listening, thinking and speaking—in a spirit of friendliness, their purpose is of supreme importance in a world where the bombardment of speech on the ears of an audience made captive by television and radio has reached unprecedented proportions. "Toastmasters" is convinced that by teaching logical thinking, the power of self-expression and, above all, the facility for critical listening, it offers a most important method of assessing the value of speeches which are heard or read in everyday life.

For some time the nearest club at Oxford has included members of A.E.R.E., SRC—and even A.W.R.E.—but in most cases its members have now "graduated" to other fields such as the local council.

Meetings are held on the 2nd and 4th Tuesdays of the month, and "Harlequin" will be pleased to take any reader along as a guest.

If you are interested, but find the time or place inconvenient, "Harlequin" will still be pleased to hear from you. A.E.R.E. was successful in launching the first ToCH Group within industry, and the launching of an evening or lunch-time meeting in the "Toastmaster" tradition could be another lead for Harwell to take.

D.A.T.

"HARLEQUIN", 2.02, BLD. 77, A.E.R.E., HARWELL, BERKS.

1970

The Oberammergau Passion Play and the World Cup Football Championship in Mexico are two outstanding events and we have details of many holidays incorporating these events. Prices are very reasonable and early booking for these events is necessary as it is certain that the demand will be greater than the available accommodation.

1969

Information is now available for cruises and 1969 will see a wonderful variety of cruises featuring such ships as the Queen Elizabeth 2, Carmania, Andes, Uganda, Reina Del Mar, Chusan, Iberia, Arcadia, Canberra and many other modern fully equipped vessels. We also have many 1969 tour brochures covering holidays by air, rail or coach to all parts of Europe giving a range of holidays previously unequalled in cost or quality.

1968

8 Day holidays to Majorca, Costa del Sol, Benidorm or Tunisia still available at present — or perhaps a ski-ing holiday. We have a wide range including Winter Sports holidays in Spain, Norway, Austria, Switzerland or Rumania.

For further details visit or telephone:—



ABINGDON TRAVEL AGENCY LTD.,

24 STERT STREET, ABINGDON

TELEPHONE: ABINGDON 138 OR 4992

Officially appointed agents for all airlines and shipping lines



***For all your insurance needs
call in the man from the***

Prudential

THE PRUDENTIAL ASSURANCE CO LTD HOLBORN BARS LONDON EC1



IS THERE A DONOR IN THE HOUSE?

Anyone, at any time, as a result of accident or illness, may be in need of a blood transfusion.

If someone in your house suddenly needed blood you would not hesitate to give some of yours—BUT IT MIGHT BE TOO LATE. There would be a delay while your blood was taken and grouped and it might not be the same group as that required; it might not be enough. Frequently three or more bottles are needed for one transfusion.

Thanks to the thousands of voluntary blood donors, there is always blood available for these emergencies; but the ways in which blood can be used to save life are increasing, so more and more donors are always needed. This year, in this region alone, we must have an additional 12,000 new donors to keep our BLOOD TRANSFUSION SERVICE operating.

**mobile collecting teams make
regular visits to —
the A.E.R.E., Harwell,
the Culham Laboratory,
the Rutherford Laboratory.**

**Please apply to your d.a.o office for
an appointment as soon as dates are
announced in A.E.R.E. News, and
Posters.**



issued by
the Regional Donor Organiser, Regional Transfusion Centre,
Churchill Hospital, Oxford.