

NO. 20/80

MARCONI AVIONICS NEWS

House Journal of Marconi Avionics Limited

MOTTO FOR THE MONTH
 ★ ★ Enjoy your own life without comparing it with that of another ★ ★

Marconi Avionics wins \$50 million order for a new pilot's display

General Dynamics order 'wide angle' HUD for F-16C/D fighters

General Dynamics Corporation, whose widely-used F-16 combat aircraft are equipped with head up displays (HUD) supplied by Marconi Avionics Limited, has now ordered a new design of 'wide angle' HUD system from the British Company. The initial production order for the new HUD, valued at nearly \$50 million, (about £30 million), covers development and production by the Company's Airborne Display Division, Rochester, England and is for equipping F-16C and F-16D (two seat) aircraft, from July 1984.

With the new HUD a pilot will see, ahead of him, and over a much wider field of view than with previous HUD systems, the latest kinds of electronically generated symbols which aid piloting, navigation and weapon-aiming. This is a more powerful aid in combat, for both air-to-air and low altitude operations, by day or night.

The new F-16C/D HUD features the latest electronics techniques, for symbol generation and for producing raster (TV-like) pictures of the scene ahead at night. It incorporates the new USAF specifications and architectures for the MIL STD 1750 airborne computing hardware and Jovial J73 software and for MIL STD 1553 data transmission.

Marconi Avionics, which leads the world in the innovation and production of head up displays for aircraft, has set a number of production records. One of the first was for the Vought A-7 aircraft, when the first HUD ever to incorporate digital electronics was developed, tested and put into production. The time scales of the General Dynamics F-16C/D programme are practically identical.

Big overseas application for UK Thermal Imagers

Marconi Avionics £1 million order for Brazilian Navy equipment.

Marconi Avionics Limited is to supply advanced electro-optical equipment, worth £1 million, for use in new Fire Control Systems for the Brazilian Navy. The equipment is to be supplied to Ferranti Computer Systems Limited, Bracknell, England, which won the contract to equip four new Brazilian corvettes, with Fire Control Systems, against strong international competition.

The Marconi Avionics Electro-Optical Products Division, Basildon, England, will supply and commission the equipment, which includes a new 24-hour all-weather imager designated V3800, which is based on UK Class 2 Thermal Imaging Common Modules (TICM2).

The V3800 is a private venture development and the first application of TICM2 for an overseas customer. This has closely followed the UK Ministry of Defence decision to order the Modules into quantity production, to meet the day/night viewing requirements of its three armed services. The new V3800 thermal imaging sensor is designed as a "stand alone" unit capable of incorporation into various defence systems, to give a 24-hour indirect-viewing capability in all weathers.

The electro-optical equipment also comprises Marconi Avionics V3342 daylight television cameras and displays, for use in tracking targets passively with the ships' gun Fire Control Systems. Like the V3800 Thermal Imager, it is particularly suitable for mounting on a tracking radar.

This is the second major naval contract from Brazil in which Ferranti and Marconi Avionics have co-operated. The television systems supplied by Marconi Avionics in the early 1970's, for automatic control of the Seacat missiles of six UK 10 destroyers, are now operational with the Brazilian Navy.

ADVANCING WITH THE TIMES

Marconi Avionics gets its first-ever comprehensive Product Guide

A team of specialists in information, publications and word processing has worked to produce the Company's first-ever Sales Directory and Product Guide. Covering the whole of Marconi Avionics Limited's activities at all the UK sites, it has been written with the aim of helping prospective customers to get the products or services they require.

Compiled, edited and typeset entirely by computer, the new publication, which has already been widely distributed at the Farnborough Air Show, will be especially easy to up-date, to reflect the Company's developing product range. The task of producing an alphabetically-indexed product guide has never been undertaken before because of the great diversity of products and applications, across the whole Company. In aviation alone, Marconi Avionics has a bigger product range than any other company in the world. With word processors, and the software which can convert the words to the type-set layout required for printing, the whole job has become manageable.

The team which produced the new publication, under the direction of the Company's Information Executive, comprised John Lockyer who heads the Technical Library and Information Services at Rochester, Barry Rouse, Chief Illustrator, AS&RD, and his colleagues, Dave Linkin, Senior Illustrator, and others, and Jackie Cook, the Editor, who produced the text using the word processor.

The booklet describes the Company's business fields in general, the activities of all Divisions in detail, together with their addresses and telephone and telex numbers, as well as the alphabetical product guide, with codes to show who does what. Its layout is designed to be "user-friendly" (in the language of avionic systems design), to enable customers to get answers to their sales enquiries quickly and accurately. The authors hope that it will not only help to promote sales but will also help those who answer enquiries from many people who telephone the Company each day, a task which is so ably managed at Rochester by Mrs. Pat Kennett, the Information Officer.

Copies have been sent to agents and representatives around the world and are available at all exhibitions the Company attends. In addition, they have been sent to the Information Officers of other GEC Companies to help them to detect those enquiries which should come to Marconi Avionics.

The booklets are available for use by all Divisions of the Company, at all establishments, from the Technical Library at Rochester.



Left to right: Barry Rouse, Dave Linkin, Jackie Cooke and John Lockyer.

www.rochesteravionicarchives.co.uk

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Volunteers should offer their services through Divisional Administration Officers or direct to the Editor



NOTICE
Spend 5 nights half board in
JERSEY
during June 1983

ALL IN PRICE — £95
including Travel, Free Bottle of Spirits,
2 Bottles of Wine

Senior Citizens £10 Reduction
Special Rates for Children

Details, bookings etc from
Rod Cole MASD main works int 2792
or evenings on Medway 48282

Congratulations

Births

We offer our congratulations to **Phillip and Julia Lamb** on the birth of a daughter **Vari Jade Lamb**, born on 26th February 1983 weighing in at 7lbs 2ozs.

Phillip is an Engineer in FARL, New Road while Julia was previously in IN D/O.

Other family connections are that grandfather is Lewis (Jack) Rogers of Metal Finishing Dept., Flying School and Allan Hinkley, of IN Buying Dept. is the child's uncle.

To **Susan and Neale Hunt**, on the birth of a son on 6th January 1983 at 7lbs 2ozs. Susan was employed in ISD as a Buying Clerk/Typist while husband Neale is Senior Software Engineer ISD.

Engagements

Susan Hough became engaged to **Trevor French**, on 8th January 1983. Susan is a Secretary in ISD Engineering Dept., and has been with the Company for 4 years.

Tony Henwood became engaged to **Angela Searing** during January 1983. Tony is a Planner within CACD, while the intended bride works for NatWest Bank.

Anniversary

Our best wishes go to **Eileen Mallia** on her Silver Wedding (25 years) Anniversary on 15th March 1983. Eileen has, for 5 years, worked in CACD Library as a Reprographic Operator, and her husband is employed at Kingsnorth Power Station.

The March issue of Marconi Avionics News contained an item regarding complaints of semi nudity in the bar of the clubhouse. Offenders will be asked to leave. Little did the editor realise that deep in Gyro Division lurks a 'close relative' of Sir John Betjeman.

A Sportman's Love Song

Miss J. Hunter Dunn, Miss J. Hunter Dunn,
There in the clubhouse, your clothing undone,
What strenuous sports you played after tea,
That made you loosen your buttons for me.

The scoring went with you, was it a play,
To take off your tracksuit, a vision, such joy,
The number of games you so easily won,
I am weak from your loveliness, Joan Hunter Dunn.

On the floor of the bar lie jumper and shorts,
The room's full of drinkers, young bucks and sports,
To arouse their emotions is part of your fun,
Bewitching, beguiling Joan Hunter Dunn.

Miss Joan Hunter Dunn, Miss Joan Hunter Dunn,
Be off from the bar, you wonderful one,
The regular patrons are apt to complain,
So remember your manners, don't come here again.

Based on: An extract from 'A Subaltern's love song'.

Extract from
'A Subaltern's Love Song'

by John Betjeman

Miss J. Hunter Dunn, Miss J. Hunter Dunn,
Fumish'd and burnish'd by Aldershot sun,
What strenuous singles we played after tea,
We in the tournament — you against me.

Lovethirty lovelofy, oh! weakness of joy,
The speed of a swallow, the grace of a boy,
With carefulest, carelessness, gaily you won
I am weak from your loveliness, Joan Hunter Dunn.

Miss Joan Hunter Dunn, Miss Joan Hunter Dunn,
How mad I am, sad I am, glad that you won,
The warm handled racket is back in its press,
But my shock headed victor, she loves me no less.

On the floor of her bedroom lie blazer and shorts,
And the cream coloured walls a be trophied with sports,
And westering, questioning settles the sun,
On your low level window, Miss Joan Hunter Dunn.

Letters to the Editor

Dear Sir,

I feel I must write to make some form of protest regarding unpriced food items, i.e. cakes and sundries in the snack bar.

On Monday 14th March 1983, I purchased four cakes — nothing fancy — 2 slices of battenburg and 2 bakewell tarts, at a cost of 18p each (which I would not have purchased had they been priced). Mr. Kipling bakewell tarts sell at 52p for six. Now we all know that inflation has rocketed, but to make a 100% profit in a supposedly subsidised canteen, is to say the least, absolutely scandalous.

Yours sincerely,

Eve Harker
Airborne Display Division

Editors note

On receiving this letter, I contacted the Catering Managers, who instigated an enquiry. It is regretted, that on this occasion a relief was on the serving desk, and it is likely that an overcharge was made. However, had the matter been queried at the time, any correction due, would have been made. If anyone has a complaint, it should be taken up at that time when it can be dealt with.

The MAV News

Understand that the editor, Mr. Jess Griffiths is to retire shortly. I'm sure he deserves a note of thanks for all the dedicated effort he has put into producing the paper.

When appointing a new editor I don't feel that the management should try to find another 'Jess'; there just isn't one.

Perhaps a change of style is called for. Nothing too drastic, but the new man must try and increase the contributions from employees. With a circulation of over six thousand copies he should hope for, I would have thought, more than sixty inputs covering everything from sport, human interest to humour.

Good luck to the next incumbent — he has a very high standard to live up to.

John Brambleby

News from afar

At times we get some strange items of correspondence from overseas. We reproduce below, a letter recently received in the Company Information Services Dept., from Turkey.

'To England with love from Turkey'

Dear Miss Parrett (Parnell)

I'm really sorry for disturbing you. I've received the letter which was very important to me. Keeping in touch with you pleases me a lot. If you continue corresponding with me I'll be very happy.

The photographs (Aerospatiale Lynx, Boeing YC-14, Concorde and F16) you've sent me made me very happy. They are the most precious pieces of my collection.

I'm sending you 4 postcards from Turkey; I hope you'll accept these; though, we can't compare the value of it with the ones you've sent. With the hope of keeping in touch, I wish you the best.

Sincerely,
B. Akkasli

My address is:
Bulent Akkasli, 298 Sok, 17-8, Srinyer-Zemir, Turkey

OCCUPATIONAL HAZARD?
(ODE TO PHASE III)

This place is full of draughts
from window, vent and door.
The air — so cold — blasts down your back
Then bounces off the floor

The engineers are often asked
To come and do their bit.
Meanwhile, dressed still in coats and scarves
It's frozen-stiff we sit.

From clocking-on, to going home
It varies hot and cold
To get it right's so difficult
We keep on being told

Never mind, we'll muster on
With stiff-necks, cold and flu.
'Cos if we don't, the sad thing is—
We know what we can do!

Brain Teaser

See if you can make a sensible report of the story given below. Each blank space being the name of a musical instrument.
Attempt it, before turning to page 8 for the answers.

Joe met Ena on a liner. She looked marvellous in an pleated skirt with a bunch of at her waist. Joe, hearing her like voice, rushed to meet her falling over a of oil on the deck. He said 'Would you like to come to the?' But she said 'No! I would rather hear the'. Before they went, Joe said if he did not have a he would get a chill in his They decided to play cards, but Ena said 'When you should play a high card why do you always?' Joe replied 'You are a', to which Ena replied '..... sticks'. So they packed in and had an ice-cream He kissed her as a of his affection. She, however, hit him on a prominent so he went and had a He lit a and watched the sailors while he idled away his time leaning over the rails.

CASTAWAY

The castaway victim for this issue is a comparative new-comer to the Company, in the person of Miss Julia Powell-Williams. A native of Swansea, she studied at Buckland House University, Oxford, before moving up to London, where she completed Law Studies. As a Barrister, she was called to the Bar and is a Bencher of Gray's Inn.

An energetic, and erstwhile studious personality, she enjoys Egyptology, Antiques, playing Backgammon, Squash and Tennis. Her selections for companionship on the lonely isle are below.

MUSIC

1. Fleetwood Mac. 'Rumours' — For university nostalgia.
2. Joni Mitchell. 'Blue' — For melancholic moods.
3. Fashion. 'Fabrique' — Just in case I feel like getting some exercise, and anyway it would be lovely to drool over the lead singer's photograph!
4. Dire Straits. 'Making Movies' — Another university favourite. The group's name being a constant reminder of our under-graduate lack of finances.
5. Rimsky-Korsakov. 'Scheherazade' — Very expressive musical portrayal of human emotions and also the more demonstrative bits are great fun for charging round Hyde Park Corner and the like — that is if I ever get off this island!
6. David Bowie. 'Scarey Monsters and Super Creeps' — Just to remind me that in the outside world there is still plenty of insanity and I am not the only one who is suffering!

BOOKS

1. 'Forty Years of Murder' by Professor Keith Simpson (My hero). — It satisfies my morbid fascination in forensic medicine.
2. 'Riotous Assembly' by Tom Sharpe — For sheer hilarity.
3. 'Cancer Ward' by Alexander Solzhenitsyn — For an expressive and in depth study of the fears and tribulations of patients ensnared by their disease.

MORE SUCCESSES

Mrs. Thatcher presents Awards to 39 professional engineers

On Monday, 14th February, at a ceremony in London, the Prime Minister, the Rt. Hon. Margaret Thatcher MP, presented Awards to 39 young professional engineers. They each received a specially struck medallion and a Certificate, marking the successful completion of an 18 month concentrated programme as EITB Fellows in Manufacturing Management. Their names were inscribed on a Fellowship Roll inaugurated four years ago when the first intake group completed their Fellowship.

The Engineering Industry Training Board embarked on this Fellowship Scheme because most of the engineering graduates in this country go into research, development or design departments and never move into manufacture. Indeed, in this country, less than one in five of the professional engineers and qualified scientists in industry are employed in production or manufacturing management.

This situation, which is contrary to the practice found in most other industrialised societies, has greatly concerned the EITB. The manufacturing function is growing in importance, while at the same time the traditional supply of managers from the shop floor has, mainly because of changes in educational patterns, begun to dry up. Technology graduates must, therefore, increasingly be the manufacturing managers of the future.

The object of the scheme is twofold. It is a demonstration that high calibre professional engineers in non-manufacturing functions can, with the right practical training, be brought into posts of responsibility on the manufacturing side — to the advantage of the engineering industry and of the economy as a whole. It is also an invitation to industry to take similar steps.

The EITB decided, as a start, to offer three sets of 15 Fellowships at yearly intervals to young professional engineers with some experience already in non-production activities and who aspired now to a career in manufacturing management. The recipients would undertake an 18 month programme commencing in April in each of the three years 1977, 1978 and 1979. Since then the Fellowship has been extended and expanded to accommodate three intakes of up to 15 each year.

The 39 Fellows who received their awards from the Prime Minister are members of three intake groups to the Fellowship. Two of the intakes completed their programme in 1982, the other (the ninth intake) completes in March. The thirteenth intake group commenced its programme on 24th January. The fourteenth intake group is currently being recruited to commence in May.

The programme begins at Cranfield Institute of Technology where six months are devoted to an intensive study of the techniques of manufacturing management, combined with short industrial assignments. Then each Fellow undertakes a real management project lasting a year at an engineering company.

The end result is an able professional engineer with shop floor experience of managing production by dealing effectively with organisational, personnel and technical problems and who is now well equipped to compete for a responsible management position in manufacturing. Since it started the scheme has recruited 178 Fellows, of whom one third were sponsored by engineering companies.

FELLOWSHIPS IN MANUFACTURING MANAGEMENT

BIOGRAPHICAL NOTES



Mr. D. Walters receives his Award from the Prime Minister, the Rt. Hon. Margaret Thatcher, at a ceremony in London 14th February to mark his EITB Fellowship in Manufacturing Management.
Photograph by Courtesy of EITB

D.T. WALTERS

After graduating in Engineering Science, David Walters joined Plessey as a graduate trainee and then worked as an assistant development engineer on avionics. He spent five years at Electronics Ltd, eventually becoming projects manager before joining CTL (Control Technology) Ltd as divisional manager — standard products. Here he was responsible for standard product design and subcontracting manufacture.

David is undertaking the Industrial Phase of his Fellowship at the Automatic Test Equipment Division of Marconi Avionics Ltd, he is responsible for a wide range of activities which focus on the introduction of computers and automation. Experience has been gained of justifying capital expenditure, of project planning and implementation and of managing a staff of eight.

David lives at New Ash Green, near Dartford, Kent.

P.T. ROWLANDS

Aged 28, Peter Rowlands worked with STC Ltd., in Norway before joining the Fellowship. He holds a degree in Mechanical Engineering. He undertook the Industrial Phase of his Fellowship with Marconi Avionics, Arado Systems Division, Basildon, being appointed assistant production manager with joint responsibility for two assembly areas, test area and production control.

This work involved controlling day to day activities in the electronic assembly area and the implementation of a computer aided production control scheme.

Following the Fellowship programme he has remained with Marconi as project controller for the Arado Systems Division.

Peter lives at Wickford, in Essex and is employed as Project Controller, Marconi Avionics Ltd, Basildon, Essex.



Mr. Rowlands receives his Award from the Prime Minister, the Rt. Hon. Margaret Thatcher, at a ceremony in London 14th February to mark his EITB Fellowship in Manufacturing Management.
Photograph by Courtesy of EITB

SUCCESS REWARDED

GOLD AWARD FOR MARCONI AVIONICS STUDENT TECHNOLOGIST

Alan Bryant receives Duke of Edinburgh Gold Badge

At the Rochester head office of Marconi Avionics Limited Alan John Bryant, a Student Technologist with the Company, received the Duke of Edinburgh Gold Award, for work successfully carried out over the past four years.

The Gold Badge was presented by Peter Heame, Director and General Manager of the Company, at a ceremony attended by Alan's parents and colleagues, Mr. Ian Hazell, the KCC's Divisional Education Officer, Mr. Ron Slater, Divisional Youth and Community Service Officer, and other colleagues, and Mr. Malcolm Litton, who is responsible for the Duke of Edinburgh Award activities at Rainham Mark Grammar School.

The Duke of Edinburgh Gold Award is for young people all over the world who can complete an exacting scheme of work involving exploration,



Alan Bryant receives his Duke of Edinburgh Gold Badge, from Mr. P.A. Heame.



Alan Bryant, together with his parents, receives his Gold Badge from Mr. Heame.

community service, skills and interests, physical training and a residential project. It is the highest of three Awards, the others being the Bronze and Silver Badges. Alan's is one of only five Gold Badges to be awarded in the whole of North Kent since last August, all of which are for the Medway Towns and Gillingham.

His achievements included a 50 mile walk in Snowdonia, completed in 4 days, running an outdoor pursuits club, preparing a history and illustrated technical treatise on photography, carrying out a strenuous programme ("not unlike Superstars") of physical training, and doing field work on nature conservation at a National Trust Centre.

Alan Bryant, 20, who lives in Rainham, joined Marconi Avionics in 1981 and is studying for a degree in Electrical and Electronic Engineering at City University, as part of a "thin sandwich" course, sponsored by the Company. The work which has

qualified him for the Gold Award was mainly carried out whilst he was a student with Gillingham Technical High School (now the Rainham Mark Grammar School).

Alan, who plans to graduate in 1985, has electronics as one of his main hobbies, others being music (he plays the guitar) and photography (doing his own developing). His ambitions are to qualify as a Design or Development Engineer and to walk from coast to coast across Iceland, both of which he considers to be worthwhile challenges.

He recommends the Duke of Edinburgh Award scheme to other young people, as a welcome change from purely academic work, a chance to become involved with teaching staff outside a school curriculum and an excellent preparation for later life.

On a subsequent date, Alan will go to Buckingham Palace, to receive a Certificate to go with his Gold Badge.

TO PASTURES NEW



Peter Lloyd reading the good wishes and signatures, with the carriage clock.

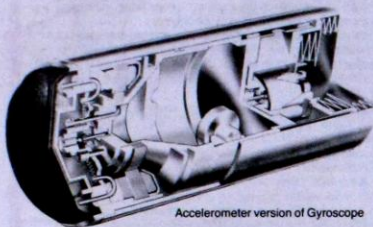
"Away to the Woods" after many years serving Marconi Avionics on the top floor, is Peter Lloyd, the Company Contracts Manager. Though lost to Rochester, he remains within Marconi — as he has joined MSDS. As an expression of good wishes for success in his new venture, friends and colleagues subscribed towards a carriage clock, which Mr. W. H. Alexander presented.

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Around the Divisions

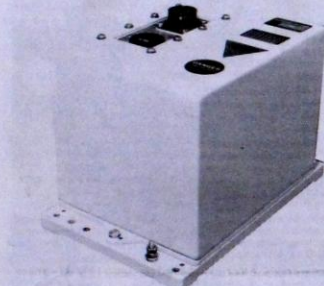
GYRO DIVISION

Although one of the longest established divisions of the Company, the question is often asked: "What is a GYRO and what does it do?" A GYRO (or to give it its full name—a Gyroscope) is a revolving wheel supported in gimbals or rings. Supported in this manner, its inherent physical characteristic of maintaining a constant attitude with respect to its external surroundings can be used to steer and control air, space, land, sea and underwater vehicles. GYRO is not to be confused with GYRO, which is a bank credit transfer system by which money is made to rotate!



Accelerometer version of Gyroscope

Manufacture of the GR-H4 rate gyro of which we have now made over 12,000 started at Rochester almost 20 years ago and will continue for several years to come. During this time we have improved this gyro to make it perform better and cost less than it did originally. Current applications include Sea Dart, which did so well in the recent Falklands conflict, the Harrier auto-stabilizer system, the Tiger Fish torpedo, Sky Flash and the enhanced Blowpipe launcher.

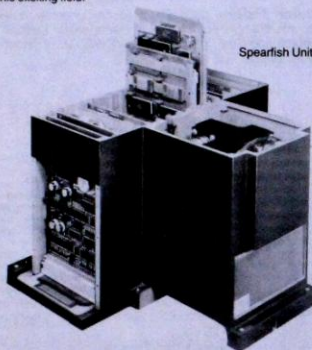


Part of equipment for "Strapdown" Unit

GYRO Division is engaged in bringing into production a new torque re-balance rate gyroscope, the GI-G6, made under licence from the Northrop Corporation of the USA. This gyro performs very well and is able to meet the higher accuracy requirements being demanded for future systems. Qualification models of this gyro are planned to start coming out from our production facilities next month. The GI-G6 gyro is finding wide acceptance in a variety of applications including sight-line stabilisation, such as the SCOT 1A satellite tracking aerial system, aircraft control and more particularly in 'strapdown' systems.

'Strapdown' is a term describing the application of rate gyros and accelerometers 'strapped-down' or solidly mounted to the body of an aircraft, missile or other vehicle, and the use of their outputs to compute and determine the attitude of and the direction in which the vehicle is travelling. Used in this manner, miniature rate gyros replace the much larger conventional directional and vertical gyros, thereby providing the benefits of small unit size, low weight, increased ruggedness and short activation time.

Production of the strapdown attitude sensing unit (CSU) for the new air-drop lightweight torpedo—Sting Ray—is in progress. Further orders, including export, are confidently anticipated, thus ensuring continuity of this work for some time to come. This unit is the first strapdown guidance and control system to be brought into production in the UK (and probably in Western Europe) and represents the outcome of many years of excellent work by the Division's engineers in this exciting field.



Spearfish Unit

The main thrust of our present engineering effort is in a strapdown system, using the GI-G6 rate gyro, for Spearfish, the Royal Navy's new heavyweight torpedo. For this application the Division is contracted to develop and produce a guidance unit incorporating microcomputing to provide attitude and direction information to steer and control the torpedo during its run-out to a target.

Whilst the current order book value represents some one and a half years of work, our marketing team has been strengthened and an engineering team has been formed to concentrate on new proposal work and new ideas to enable GYRO Division to compete successfully for future business opportunities.

"Gyroscopy—Divination... by walking in or around a circle, until one falls over due to dizziness and prognosticates from the place of falling!"

GYRO DIVISION Promotions and reorganisation

There has recently been a re-organisation in the Sales and Engineering Department of Gyro Division. Mr. R.J. Scott, formerly the Sales Manager, has moved his office to Christchurch and become the Division's Marketing Consultant. He is replaced by Mr. Graham Baker who moves from Engineering Project Management to become Marketing Executive.

The promotion of Mr. Ian Cooper from Chief Engineer to Technical Manager has left the way open for a rationalisation in the Engineering Department.

Mr. Alec Fraser becomes Engineering Manager for Underwater Weapons with new Projects Managers, Mr. Paul Barstow and Mr. Colin Dawes, responsible for the Sting Ray and Spearfish projects respectively. Mr. Jim Birkenshaw moves into management of advanced projects.

Three new project leaders are Mr. Gerry Sanders—Sting Ray, Mr. Graeme Morris—Spearfish and Mr. Mike Walker—Advanced Projects.

IND

En route to Accounts for the best of three falls, one submission or a knockout with the Cashier or Wages you walk between a modest collection of huts, the home of Inertial Navigation Division. IND was formed in the late fifties to develop and manufacture the navigation system for the Blue Steel stand-off weapon which at one time armed the RAF's V bombers.

The division then turned to the development of aircraft IN systems and produced the E3 platform and its ancillary units for the Nimrod MKI and Nav/Wass, based on the E3R platform, for the Jaguar. 136 Nimrod platforms were produced and to date 542 Jaguar platforms have been delivered. These are still in production and Nav/Wass is used by the air forces of four countries with delivery to a fifth due to commence shortly. RAF pilots have achieved many successes in NATO navigation and weapon delivery competitions using the system.

In the course of developing and manufacturing these two systems the Engineering, Production and Quality Assurance departments gained (the hard way) considerable insights into the unique problems of inertial navigation technology, mostly summed up in one word—gyroscopes. Nav/Wass also introduced the division to software and the application of digital technology to avionic systems. This has grown from small beginnings to the point where it now forms a very significant part of the Engineering Department work load. Two projects, TRAIN and the Brough Rig are almost entirely software.



TRAIN (Terrain Referenced Autonomous Integrated Navigation to its friends and admirers) is a system for the integration of information from navigation systems installed in an aircraft with the aim of enhancing the accuracy achievable by any one of them. The Brough Rig, so called

ISD HOSTS YOUNG ENTERPRISE GROUP

On Friday, 11th February 1983 a group from the Young Enterprise Company DELTA visited Marconi Avionics. After being welcomed by Don Short of the Training Department the visitors spent the morning in Instrument Systems Division. Under the guidance of Mick Porter and Mick Fillon-Payoux, advisers to DELTA, all aspects of the business of a Product Division were seen and explained. ISD personnel including Doug Morris—Marketing Engineer, Dave Silsbey—Project Manager, Bill McCutcheon—Chief Design Engineer, John Clover—Production Manager and Fred Wickham—Production Superintendent hosted the group in their respective departments. The visit was concluded by a general question time and an introduction into the training opportunities available at Marconi Avionics.

The Young Enterprise Scheme introduces youngsters between the ages of 15 to 19 into the real world of business over an eight month period. Each company operates under the same conditions as any limited company, it has a Board of Directors and finance is raised by the sale of Shares and profit on the product. The product is subject to the same controls found in any manufacturing environment i.e. marketing, production organisation and sales. DELTA is one of the Young Enterprise companies sponsored by Marconi Avionics and the groups' visit enabled them to have a better understanding on how a large company utilizes the skills they are learning under the Young Enterprise Scheme.

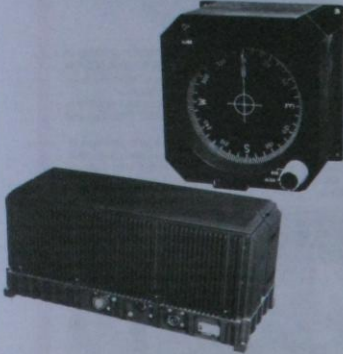
The group from DELTA were greatly appreciative of the time given to them by Instrument Systems Division and thanked Mick Porter and Mick Fillon-Payoux for a very interesting and informative visit.



CAC LIVEWIRE—T

1. The team they are a motley crew, there's two Kens, Chip and Little Stu. Adrian, Andy and Andy U Andy Hayes and Plug plays too.
2. In defence is Little Trevor, hair greased back, he's very clever.
3. On the wing there's Nifty Ken, skinny legs looking like a hen. He's very fast it would appear, it's a shame that he's a little queer.
4. Andy 'D' is another's name, a hard kick and throw shot him to fame. It's a pity he can't play the game.
5. I almost forgot about Andy U, he can't kick a ball, and he's got cramp too. He runs onto the pitch all proud and brave, and ten minutes later, his legs don't behave.





because BAe Brough are coordinating the activity, is a design tool for the avionics system of a future, as yet unspecified, military aircraft. IND's share is the simulation of twin IN systems combined with other navs.

In parallel with the Nav/Wass project IN undertook the development and manufacture of the Naval Compass Stabiliser (NCS) for the Royal Navy. The system is used in warships down to fast patrol boat size and provides outputs of heading and attitude to which all the vessel's weapon systems are referenced. Popular features of the equipment are its reliability and maintainability. It is in service with the RN and the navies of two other nations. A further extension to its use is now in prospect. In October 1982 a contract was placed by MOD to give the system a high-accuracy navigation capability by interfacing it with a twin-axis doppler log. The necessary hardware and software changes were designed, produced and incorporated in the system which was delivered for installation in a trials ship in January. A shakedown trial took place in March. During the trial one minor hiccup necessitated a high speed dash by Company aircraft, hired car and ship's boat by the Project Manager and a Programmer to the ship, conveniently located at sea 300 miles from Rochester. Apart from this the trial was a great success and the results exceeded expectations. It is worth noting that the PDS system used in the trial had already accumulated 30,000 hours running and performed faultlessly. Further trials are due in April.

IN put its expertise in navigation and software to good use when the division was selected to develop and manufacture the Central Tactical System (CTS) for the Nimrod's avionics update. CTS receives and integrates information from the tactical sensors and the navigation system and displays the tactical situation for the crew. As a by-product of CTS the division has produced the Interface Unit for the Central Navigation System of the Nimrod AEW aircraft.

Another IN by-product is the 920 Emulator. The original 920M computer used in Nav/Wass went out of production whilst orders for Nav/Wass were still coming in. Disaster was averted by designing, proving and putting into production in record time the Emulator. It looks like a 920M. It fits in the same hole as a 920M and uses the same software as a 920M. The differences are that it is much lighter has four times the memory. Apart from saving the day for Nav/Wass it has also been bought by the Navy as a 920M replacement.

Casting about for new products and using its experience of over 25 years in the inertial navigation business, IND decided to solve the problem of the armoured vehicle operators who would dearly like to know in which direction they are traveling when operating tanks, armoured personnel carriers and other such vehicles across country. Systems used to date have proved unsatisfactory because they have been based on a magnetic sensor to give the vehicles heading and to surround a magnetic compass with a metal case is not the way to determine the direction of travel with any great accuracy. Because of the large number of armoured vehicles on the inventory of any modern army, low cost is of prime importance in having such a system adopted. Simplicity of installation and particularly of operation are other important factors. The IND solution, the MAVHRS—Marconi Avionics Heading Reference System—is now well advanced in its development. The very first development model is on trial in the USA with the US Army at Fort Monmouth. Five more advanced development models will soon be available for trial by potential customers of whom there are many—Australia, America, Brazil, Egypt and of course the British Army to name but a few. The system has aroused great interest because of its low cost, simplicity of operation, small size and accuracy and also because of its potential development into a full navigation system when integrated with a doppler, odometer or satellite navigator. The target is for production to commence in 1984.

Let the words 'modest collection of huts' should convey a false impression it must be said that they are really quite comfortable to work in since WES gave them a major facelift two years ago. Particular beneficiaries were the Drawing and Design Offices who emerged blinking into the sunlight from an air-conditioned windowless cavern situated in the geometrical centre of the factory.

WORKS ENGINEERING SERVICES

Although Works Engineering is sometimes regarded as a non-productive department, the essential service it provides in the form of supplies, maintenance, transport, communications, energy management, and new developments is important to the production divisions for the successful operation of their business.

For this reason, and in addition to its specific responsibilities, the department is on call for emergencies throughout the 24 hour day, 365 days a year.

The departments responsibilities for the maintenance of land, buildings and plant apply to an area exceeding 150 acres on which we have over a million square feet of office and workshop accommodation.

The electrical and mechanical plant and equipment necessary to supply the energy for the manufacture of our products demands and enjoys the expertise of our labour force to ensure that breakdowns are non-existent or kept to a minimum.

The tons of waste and refuse which accumulates on our sites every day have to be disposed of, and the daily cleaning and servicing of areas used jointly by the occupying divisions are necessary for the welfare of the employees. These two operations come within the disciplines of the cleaning section.

The responsibilities of the Inwards Goods, Transport and Despatch Departments commence with the receipt of thousands of items which eventually find their way back to them in some other form ready for despatch to the customers. In conjunction with this service there is the need to maintain the Company's fleet of vehicles and ensure that all goods being transported are adequately covered by insurance against loss or damage in transit.

The importance of providing a telecommunication link between the Company and its customers or suppliers is emphasised by the demands placed on our staff in the Telephone and Telex Exchange.

The millions of calls efficiently dealt with each year confirm the vital role that this department plays in the Company's business.

With the need to convey the written document to and from the Company a service is provided through our Mailing Department. With no less importance than any of the other services provided by Works Engineering, this department's efforts are a major contribution to the Company's administrative system.

In addition to providing a land, buildings and plant maintenance service, the departments are also currently engaged on a number of new construction projects involving electrical, mechanical and civil engineering operations. These projects include the construction of the Falcon Building which is scheduled to be designed and built in nine months ready to hand over in May 1983. Despite its very tight construction schedule, all work programme dates are being held.

Other projects include the expansion and upgrading of the MASD SDF computer room which is nearing completion with the final stages of the air conditioning system being tested and commissioned. A new computer room of approximately 1,700 sq. ft. is being prepared for ADD to accommodate a VAX 11/780 and PDP 11/44 with all its associated equipment. This project involved the complete stripping out of the Fisher Controls Ltd. old tool store and a major refurbishment.

An additional area is being prepared at Gads Hill, Gillingham, to enable CQD to expand its EMC facility, and a layout of its existing area at the Flying School Works will allow it to offer a greater service to its customers.

Because of the increased demand for services from the Reprographic Department, Works Engineering are adding the final touches to a new area which has been built in Hut 19. This will assist the Reprographic Department in meeting the increased demand.

Work for FARL at New Road Avenue has also been included in the work programme with the preparation of an area to accommodate a new VAX 11/780 DEC computing system and graphics processing facility. Progress on this project has been very encouraging.

Following the transfer of ATE Division from Hangar No. 1 into the refurbished Thorn 'A' building, Works Engineering has reached the closing stages of setting up an RST facility in part of the vacated area for ISO. This project included the transfer of the ISO RST facility from the Main Works to the Flying School Works.

As part of the programme to re-allocate space to provide better utilisation of the areas, the section of AS&R Division who were accommodated in New Road Avenue have been transferred to the Flying School Works. This involved a major relayout of the division, and although this has been a comparatively slow programme, the final outcome has proved very satisfactory.

The Accounts Department has received the benefit of some improvements to part of their working area and further work is scheduled during the next financial year.

Another service department which has benefitted from a relayout is EDP. This relayout enabled them to accommodate a second ICL 2904/50 computer with its associated equipment. This additional computer, will assist them to further meet the demands for their services.

The most suitable site chosen for the construction of the Falcon Building meant that we had to demolish the comparatively new Security Post. Fortunately it was possible to make use of the majority of the materials from the demolished building, including the timber upper structure for other jobs. The important one being to build a new control tower for the Airport, which was reported in the last issue of this paper.

Work on re-designing and replacing the gutter along the east elevation of Hangars No. 1 and No. 2 was a long overdue project, and the completion of the work must be a relief to all the occupiers who have suffered the ingress of rain water for the past two decades.

With some extensive roof works carried out during 1982-83 we have at least a guarantee that part of the 21 acres of roof area which we maintain should be watertight for a few years to come.

THE TEAM

There's Kenny Dorrel, sa likeable lad, though his playings a little sad, picking up now aren't we glad.

Now there's Little Stu, anchor man, looks a bit like Desperate Dan.

He's quite a good player or so it seems, when he scores, has a smile that beams.

Along comes Plug now he's the killer, and then, like a pillar.

Some people say that he's a snake, lie through the grass, like a rake.

Andy Hayes well there's a chap, and the pitch, reads a map, who's the Manager of today, to the lads he shouts, play.

12. At the back of the pitch the goalie stands, hat on head and gloves on hands. In the goal is little Chip, very neat looking in his strip.

13. Alone he stands, tall and true, The question is, will he let one through?

14. Side to side, he dives at the ball, but alas not all.

15. That concludes the team, this week, Although the weather, looks very bleak.

16. I write this with, a tear in my eye, Because I've been dropped! so I'll say 'bye bye'...

Written and produced by B. Downey, INC.

The Quadrathlon, announced in the last issue of MAV News, has caught the public's imagination in a big way. To date, 135 persons have applied to take part, including one Australian and two Americans.

Marconi Avionics will be represented by Steve Upton of ATED who is already using a heavy training programme. Among his self imposed tasks, he is out running at 3.30am, then cycles from Rainham to Dartford, and back, before coming in to work. After work he swims, or walks, rides or runs. He is fortunate in that his wife of 6 months fully supports his routine and determination to do well.

Several well known newspapers will be adding to the information regarding the event, in the near future. 'The Sun' will give centre page coverage to one female entrant, (who completed the Hawaiian Trail) and 'The Times' colour supplement is planning an exclusive on the event.

Will you respond to this Appeal?

The story below appeared in the Maidstone edition of 'The Kent Messenger' and we reprint as published by kind permission.

Jane Mayhew's father, Roger Mayhew, an On Site Engineer, attached to ATE Division says:

"Help me to save little Jane's life"

A Maidstone mother is appealing for funds for a hospital machine which could save her daughter's life.

Susan Mayhew, 34, of Charlton Lane, West Farleigh, is slaying 24 hours a day at Great Ormond Street Hospital, London, where her daughter Jane, six, has had a brain tumour removed.

Jane had the operation four weeks ago and, apart from a few sentences immediately afterwards, has only spoken two words since. She has had intensive and painful treatment since the operation to drain fluid from her brain and had a further operation on Wednesday.

She now has to endure a further course of unpleasant

treatment which will make her very sick and make her hair fall out.

Mrs Mayhew said, "If the hospital had had a new machine called a Cavitron, Jane could possibly have been spared all she has gone through.

Fragments

"I am grateful for Jane's treatment but I realise that the tumour could flare up in the future and the machine might be able to help her then.

"I am urging everybody I meet to help collect funds for it, for the sake of Jane and all other children here who have tumours."

Norman Grant, a consultant neurosurgeon at Great Ormond Street Hospital, explained: "The Cavitron is a

machine capable of breaking up the tumour tissue into very fine fragments which are then removed by suction.

"The effect is to make brain and spinal operations safer, more effective and shorter.

"But the cost of the equipment is £75,000 and there is no prospect of our receiving this from the hospital funds.

The amount raised so far by the appeal is more than £1,500.

Jane's grandparents, Joan and Phil Dunk, of Culpepper Road, Cuxham, have been sending money collected by their friends, neighbours and local organisations—a total of nearly £800.

Mr Dunk said: "People who have heard about the appeal

are only too willing to help. We are very grateful to them."

Money for the appeal can be sent to Cavitron Appeal, Hospital for Sick Children, Great Ormond Street, London WC1N 3JH.

The Company has given permission for an opportunity for all the workforce to take part in the appeal. For that purpose, a Company wide collection for the 'Cavitron Appeal', will be made during the week commencing Monday April 25th. Collecting tins will be available in all Divisions and should be returned to:

Mr. Jim Collin's Office, Rochester canteen

Please support the Appeal generously.

RETIREMENTS

With the retirement of **Sqd. Ldr. Bryan Hitchings**, Gyro Division has lost one of its most informed members.

Bryan, known to everyone as 'The Winco' was presented with a toaster and toast rack by Technical Manager Ian Cooper on his last day with the Company, February 18th 1983.

Son of a Master Mariner he served in the Second World War as a fighter pilot in Hurricanes, Spitfires, Beaufighters and Mosquitoes. A spell of 4 years as a South African Airways Captain followed by a return to the Royal Air Force where he converted to jets, took him into the mid 1960's. Various other flying appointments both at home and overseas ended in his first retirement in 1971.

Bryan joined Marconi as a Logistics Engineer and spent his whole time with the Company in Gyro Division. He leaves to continue writing his memoirs — eagerly awaited by all who know him.



A link with the Company will remain however, one of Bryan's many committee posts is with the Medway Branch of the Royal Aeronautical Society.

Born in Bombay in 1919, he first came to England in 1925 for a holiday, returning in 1929 to attend a public school. Upon leaving college in 1938, he joined the RAF on a short service commission and served throughout the war years, at home and overseas.

The Photograph shows Bryan in his South African days (a more detailed account of his remarkable career will appear in the next issue).

Recently retired from service with the Company is **Len Calloway**, of CMS Estimating.

Len has asked us to convey his sincere thanks to the many friends, colleagues and associates, who contributed to his farewell gift of a Kodak Instamatic Camera

Starting his industrial life with Short Bros as an apprentice, he was transferred to Feltham during the war years. Returning to Rochester he became a Planner with Short Bros, at the Airport (Flying School) after which he joined Elliott Bros in the Tool Room, under Harold Poper and Dave Marvel. From there he moved to MAC in the Tool Drawing Office and on to CMS TDO's before leaving tooling and taking up Estimating.



Mr. Len Calloway (CMS), (A)

Len is a man of many parts, and he is remembered in the locality as an entertainer and MC.

His hobbies include DIY, gardening and music. His wife Jessie, retired from the Mailing Dept, but returns occasionally to help out when difficulties arise.

Mr. P. J. Burrows, Production Manager of CMS made the presentation.

Mr. S.W. Kent an Inspector IN Division was first appointed in 1937-8 as Trainee Radio and Transmitter Apprentice with GEC in Madras, India, under Mr. Cutting, Manager and Mr. Nottley, Assistant Manager. In January 1939 he was appointed as Apprentice Signal & Telecommunication Inspector in the Great Indian Peninsula Railway, Bombay.

Upon completion of his apprenticeship he was promoted to Assistant Signal and Telecommunication Inspector.

During the war he was responsible for the safe carriage of troops to the war zones of Burma and North Africa in his capacity of Signal and Telecommunication Inspector.



Mr. S.W. Kent and Mr. D.H. Harries. (A)

The prevailing unsettled conditions following the granting of Independence in 1947 prompted him to leave the post of Chief Signal and Telecommunications Inspector Control Railway, Bombay and move to a new life in England in 1960.

He commenced work at Elliotts, employed as an Inspector in MAC, working on Auto-pilot, Buccaneer, Harrier, Phantom and Concorde.

In September 1971 he transferred to IN Division and was involved with PMD's, FEU, PSU, CTS and associated equipment. He is married, with 9 children — 5 girls and 4 boys (all now married except for 2 boys) and his hobbies include music and photography.



Mr. Kent surrounded by his IN colleagues on the occasion of his retirement. (A)

Apology



We offer our sincere apologies for the error we made in issue 49 — 25 Years Service.

We wrongly attributed the picture and text to Nancy Bullock when it should have been Mrs. Blunden of MASD.

Here is a picture of Mrs Blunden, surrounded by colleagues of MASD. (C)

25 YEARS' SERVICE

On 25th February 1983 Mr. R. Ruggles the Divisional Manager of IND presented a clock to Mrs V. Rudd to mark her 25 years service with the Company. Mrs Rudd joined Elliotts on 27th February 1958 as a Wirewoman working in Gyro Division. About 18 months later she joined Inertial Navigation as a Library Clerk looking after the production drawings. As the Division enlarged 'Vi' as she is known to all built up the Production Library with the help of her 'Girls', becoming Drawing Librarian in 1974.

Mrs. Rudd soon started organising office parties, for the Production Area, the first being held at the Old Bridge Hotel in Strood, then later at the Social Club in Featherby Road. These she held twice a year for which there was always a waiting list of people wishing to attend. For many years Vi arranged the Divisional Dinner Dances every January, firstly at the Central Hotel, then the 'Conniston Hotel' in Sittingbourne and lastly at the



Vi Rudd and Mr. Ruggles. (A)

Corn Exchange in Rochester. Vi was always the one in the Production Area to make collections for persons leaving, getting married etc. and making sure they got a gift and/or flowers and a card.

Apart from all the work Vi put in for the Division, she helped on the Social Club Committee for several years, has always helped with wrapping the Childrens Christmas Gifts and used her car to bring spastic people to the Company Pantomimes for many years. Gradually over the last few years Vi has found, much to her own disappointment, she has had to slow down and give up many of these activities.

Vi's husband Vic is also in the Long Service Association currently working in IN Division in the Machine Shop. They have 2 daughters and 2 granddaughters, Kelly and Toni who love spending weekends with their nan.

'OUR VI'

*Hut 10 is a happy place,
life plods on, no hectic race,
but the noisiest place, it must be said,
is where Vi Rudd reigns, at its head.*

*For twenty five years, she has toiled,
attempts to subdue her constantly toiled,
to keep her quiet, it could never be done,
try that and she'll soon have you on the run.*

*She rules her office with a rod of iron,
her 'poetic vocabulary' would embarrass Byron,
of her the apprentices live in dread,
one look from her could strike you dead.*

*But underneath she has a heart of gold,
she's really not so bad, or so I've been told,
but I wouldn't cross her, not on your life,
we've more than enough troubles without that strife.*

*But really Vi we love you dearly,
you're just like a mum or very nearly,
for the twenty five years you've been here,
you've been known by many, and held very dear,
so we hope you'll be here for a long time to come
and it's a shame there's not more where you come from*

OBITUARY



Friends of Eric Kilbey were saddened to learn of Eric's untimely death in early February, just a few weeks after retiring from the Company. Eric worked at Thom's for twenty years and joined AS&R Division as Assistant Cost and Budget Officer in 1976. He spent two years with AS&RD and in October 1978 moved to Powerplant Systems Division as Cost and Budget Officer.

Eric was a well-known member of PSD. His responsibilities included Divisional Administration and in that role he successfully handled the removal of PSD to New Road and to Tower 1 during 1982. He retired from PSD at Christmas.

The funeral ceremony was held at Medway Crematorium. His colleagues donated a wreath and made a contribution towards Balmoral Lodge Benevolent Fund, a charity with which Eric had been associated in the past.

Safety pays!

Once again the safety consciousness of all employees is reflected in the British Safety Council National Safety Award for 1982, which has been received by the Company.

This award is won by achieving a lower accident incidence rate than the national average for the relevant industry, and only 1000 out of the 1,689,700 companies registered in Britain have qualified for the award in 1982.

This is the 17th consecutive award and also entitles the Company to receive a further 10 year award, which, when received will be the third such award to have been handed to the Company.

Receiving these awards, proves that the co-operation of management, security and safety staff and all grades of employees is succeeding and worthwhile making our environment a safe one.

It should be noted that accidents account for 2½% loss of the gross national product, and any contribution to reducing this figure is of value. The watchword must always be—Be Watchful, Be Vigilant, Be SAFE!

TO EAT OR NOT?



Before preparing plans for having "a day out away from it all," and deciding how and where to eat, spare a little time to digest the item below — "My favourite Bite" by Michael Jackson, (author of "The English Pub" and other books), and to act on the advice of arming yourself with a copy of the ETB's "A Taste of England Guide" now read on.

MY FAVOURITE BITE by Michael Jackson

The happy realisation began to dawn some time ago that, if it was chic to each quiche, it could hardly be unsmart to enjoy bacon-and-egg flan. The same culinary opinion-formers who long ago introduced us to pizza now talk longingly of such old English savoury snacks as devils-on-horseback. If peasant foods from the Continent are worth a second bite, they argue, what about English country specialities?

Though enthusiasm for this notion has been growing apace, the problem has remained, where to find traditional English foods? An easy answer has just been put to that question in a newly-available, handy booklet costing only 95p and listing more than 100 shops, street markets and farms; a calendar of annual events for food-hunters; and more than 500 places to eat, including not only restaurants and hotels but also tea-rooms and pubs. In case the reader remains hungry after all that, the booklet

also lists nearly 20 recipes for English dishes, ranging from Sussex smokies to Staffordshire steaks.

There have been books on English food shops before, and on restaurants, but this inexpensive little guide, *English Food and Drink*, provides information on both in a pocketable, easy-to-use, up-to-date form.

In the age of the motorway, it's easy to forget that every county in England, and most towns, have their own culinary specialities. They may be items of produce, like Colchester oysters or Pershore plums, or prepared foods, like Oxford sausages or Banbury cakes, or recipes, like Lancashire hotpot or Sussex pond pudding.

Some may be humble and commonplace, others offbeat and rare, but to travel without sampling the local foods is like being unaware of the scenery or the buildings. Even if it is available in your own neighbourhood, a Melton Mowbray pie or Silton cheese arouses a greater appetite if it is bought in Leicestershire.

Faithful to its title, *English Food and Drink* also concerns itself with the bibulous. The burgeoning English wine industry is recognized, with locations of vineyards provided. For the more rustically-minded, there's a recommendation on fruit wine. You can see scrumpy being made at Bradford-on-Avon, or go to a cider festival in Hereford. Each region is credited with a good few

interesting brewery names, though there isn't space for comprehensive lists. It might have been more helpful to identify samples of classic regional styles: dry bitters in the South-East, sweeter ones in the West Midlands, a yeasty pale ale from Burton, and so on. It is gratifying, though, to see attention drawn to esoteric drinks like Yorkshire black beer and West Country cordials such as shrub and lovenge. Spirit drinkers are hardly likely to be unaware of Scotland's claims in this respect but what about England's own distillate? Yes, gin is in the book. You can see that being made too, at the Plymouth Gin distillery. Ascetics and abstainers would no doubt prefer Derbyshire's Ashbourne Water, whose bottlers sponsored the book, though it is produced, with all of its useful maps, addresses and phone numbers, by the English Tourist Board. The frequently eccentric spelling of (sweet) trolley suggests that someone was overtaken by the excitement of the annual ever-eating contest at Frapton on Severn, or perhaps overwhelmed at Widescombe Fair (famous for its gingerbread), but a great deal of ground is none the less well covered.

How pleased the researchers must have been to discover names to conjure with like Woodhall's of Wabertwaite, purveyors of Cumberland sausages, hams and Herdwick lamb. Or events like the Egremont Crab Fair (which turns out to be concerned with apples), also in

Cumbria. Although every part of England is covered, Cumbria illustrates just how much one county can offer, with food products ranging from fish like Morecambe Bay shrimps, flukes and Windermere char, to Cumberland sauce, and sweet items like Grasmere gingerbread and Kendal mint cake. Purists will also want to visit two traditional flour mills which are open to the public in that part of the county.

Among the restaurants listed as offering Windermere char is Ambleside's Rothay Manor, one of the posher places in the book. At Ullswater, the famous Sharrow Bay, once the greatest pioneer of regional French cuisine in Britain, has also begun to stress English dishes, and to anglicize its menu. Could anything better illustrate the success of the Taste of England scheme, which met with more than a soupçon of cynicism when it was introduced a few years ago by the Tourist Board?

Cuisine nouvelle enthusiasts might also note with interest the assertion in the book that raspberry vinegar was originally served on Yorkshire pudding. There are one or two imprecise claims ("Without doubt, the East Midlands is possibly one of the greatest regions in England for cheese") but others I believe without question. When a hotel in Lytham St Annes says it offers "giant chip butties", I think that's probably true.

ETB Activity and Hobby Holidays in England 1983

The Activity and Hobby Holidays in England 1983 offers a wide range of holidays for all sorts of people.

Comprehensive information on over 500 establishments is listed in the guide, ranging from activities such as beekeeping in a cottage nestled in the Dales, to a potholing weekend based in a windswept haunted house in Cumbria

— together with details of prices you can expect to pay.

The length of holidays are an important factor for most people and you will find that some are for single days, whilst others run for a week.

The holidays appeal to all ages and cater for unaccompanied children, groups, single people and families.

Activity and Hobby Holidays in England 1983, price £1.25 from Tourist Information Centres, or with 25p postage from ETB, Admail 14, London SW1W 0YE.



Stop for tea

'Stop for Tea' published by the English Tourist Board as part of its Taste of England campaign, is now available.

The guide contains details of more than 300 hotels, tea shops, museums and historic houses which serve traditional English afternoon teas.

The places listed offer a wide ranging bill of fare. A west country cream tea is a perennial favourite, yet other local specialities such as Lymeswold cheese and Cumbrian oatcakes, Yorkshire rarebit with ham, Frome bobbins and East Anglia passion cake can add a little extra interest and spice to tea-taking in the regions of England.

The tea rooms themselves are often located in unusual — and romantic settings, for example the tea guide

features an Oast house in Kent, an eighteenth century cotton mill in Cheshire and a working farm museum in the Heart of England.

There are also recipes, facts about the origins and traditions of tea drinking and useful information on the many different blends and flavours.

'Stop for Tea' is co-sponsored by the British Sugar Bureau and Ridgways Tea. The British Sugar Bureau is to distribute 30,000 copies as a special offer on 10 million packets of Silver Spoon Sugar.

The guide is also available from the English Tourist Board at 4 Grosvenor Gardens and from local Tourist Information Centres price 75p (+ 25p postage and packing).

Personality



Gary Gallagher, is a Sportsman of no mean talent, and a fellow employee extraordinaire.

As a worker, Gary has been employed by the company for 5 years, and is currently a Design Draughtsman in ADD Drawing Office. A married man, at 27 years of age, and is resident at Sittingbourne.

An athlete, who specialises in the Triple Jump event, he was the UK Champion in 1981, which title he won in Northern Ireland. He is now in the International Arena for the sport; having progressed since he was 15 years old, when he began Triple Jumping.

In January 1983, he was placed 3rd in the National Indoor Championships, held at RAF Cosford, with a distance of 15.49m. This was a personal best. He took part in the International Athletics match against West Germany, in Dortmund, in February, coming 4th with a Jump of 15.43m. This was followed, the next week by performing against the Soviet Union, when, again placed 4th with a Jump of 15.12m.

His inclusion in the England team came as a surprise for it was only at lunch time on Friday 18th February that he was called to be at Heathrow Airport and join the team, as one of the two Triple Jumpers was ill and could not travel.

Dedicated to his beloved sport, it is reflected in his complete adherence to everything he undertakes. For relaxation he enjoys wine making and photography.

IN LIGHTER VEIN WINE ON A BUDGET

To try to start an article on wine struck me as being as difficult as entering a maze with a hundred doors. So wide is the variety and so different the flavours, each a matter of personal taste and opinion that the writer can never be correct in any one person's view — or wrong in his own. The following thoughts barely scratch the surface of such a vast subject.

Wine drinking has become more popular in Britain in the last few years, it seems at the expense of spirits — wine bars proliferate, the wine often being the patron's profit and allowing him to serve very good value food.

Three things should be done with wine before you drink it — you should sample the bouquet, regard the clarity and taste it — just a little run around your tongue is sufficient. It is so sad to see good wine transferred from bottle to glass to throat to stomach almost in one movement. I'm sure it doesn't 'touch the sides' and the drinker can have no idea whether he is drinking vin du table or a decent chateau bottled wine.

France has long been accepted as the world's premier wine growing country. It has the advantage of an almost perfect climate. In the south, heavily cropping vines ripen in the hot Mediterranean sunshine whilst further north, the slightly cooler weather means that the grapes ripen more slowly but that probably gives the wine a better balance.

Most of us are governed in choice by the amount we can afford to pay. When it comes to obtaining reasonable and consistent quality at a modest price go for a wine with the wording 'Appellation contrôlée' somewhere on the label for example Appellation Côtes du Rhône Contrôlée; although an individual grower's name often suggests a better quality than an area name which is most likely a wine from a négociante (or co-op of growers).

Côtes du Rhône wines come from the southern end of the Rhône Valley between Lyons and Avignon are of a fairly consistent quality

at a sensible price. One to keep an eye open for is 'Villages', a good red wine of slightly better quality. Further up market Rhône wine is Chateau Neuf du Pape - a good vintage is well worth keeping for up to ten years, and is one of my favourites.

The Bordeaux area also produces a large variety of very good red wines, St Emilion and Madoc being well recommended. Whites include Bordeaux Blanc and Sauternes, both a trifle bland and good value again, Entre Deux Mers, from the region between the rivers Dordogne and Garonne.

Beaujolais is the subject of an annual 'race' to get the first bottles of this light fruity wine of the new vintage into the UK so that dealers may sell it at inflated prices. I try not to help and make it a rule never to drink Beaujolais Nouveau until after Christmas.

The Loire produces many dozens of wines over its length. We tend to think of it as a northern river but in fact it turns south and flows within 30 miles of the Rhône near Lyons.

The valley is not noted for its reds which can vary in quality quite dramatically but value for money Rosé and whites are produced. In the lower price range a very dry Muscadet can really improve a meal. Medium dry Rosé wines from the area in order of my preference are Rosé de Loire, Rosé d'Anjou and the best of the three, and perhaps slightly dearer, Cabernet Rosé d'Anjou. Champagne — what can one say about this overpriced, overated effervescent wine from France's most northerly vineyards. Drunk at the right time in the right company it is supreme.

A final word on serving. I am not a subscriber to the hard fast rule of 'red with meat and white with fish.' If you like something — drink it when it pleases you although I do like my whites and rosé to be chilled and reds at about room temperature and preferably the bottle to be open an hour or so before serving.

J.B.

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Sports and social club round up

'65 Club

The February meeting was not as well attended as is usual, due to many being indisposed. However, the evening went well and everyone present had the usual happy convivial and enjoyable time.

The entertainment on this evening was a solo cabaret act, in the person of Mr. Lee Mannering, who followed the George Formby pattern, complete with Banjo. He soon had the audience joining in, and a delighted audience indulged in old time songs. The allotted time went all too quickly.

At the March meeting, 10 new members were welcomed, and a large attendance of members were treated to a feast of thought, as they shared the experiences of Cecil Rhodes (Vice-Chairman) who presented a series of slides depicting scenes taken during his recent holiday in the Canary Islands.

Greetings were also extended to 5 couples, who celebrate Wedding Anniversaries during the month.

They are:-

Cecil and Ruby Rhodes	19 years
George and Betty Homewood (Silver)	25 years
Bert and Joan Brisley	29 years
Dave and Edith Clark	43 years
Eddie and Effie Wellard	43 years

AN INVITATION

One of the ways in which people can help the Visually Handicapped, is to ensure they are treated as normal people. They themselves do much to help them act and live normally, including sports. To this end, there is a MEDWAY SPORTS CLUB FOR THE VISUALLY HANDICAPPED who endeavour to organise matches for their members. An invitation is extended to any Division, to arrange a match date in any of the following sports. Darts, Cards, Dominoes, Cricket etc.

For full information and details

Please phone Bill O'Hara on Medway 407709

Table Tennis

A Table Tennis Tournament will be held at the MA/VP Social Club, Hoo, on the 1st May 1983 and all social club members are invited to participate.

It is proposed to Handicap all competitors between +10 points for an inexperienced player to -15 points for a player of Medway Premier Division standard. A match will be the best of three legs each leg to 21 points. This could mean that in a match played between the players referred to above the better player would have to get 36 points to win and his opponent would only need 11 points.

The closing date for entries is the 15th April and entry forms can be obtained from the Social Club at Hoo or the following personnel.

R. Sheridan	MASD	QA	2788 internal
R. Sands	Fisher	Contracts	2578 internal
E. Hasker	BP		278395 (Medway)
E. Papworth	Personnel		2217 internal

An entry fee of 20p has been levied so that suitable prizes can be awarded. The style of the competition - i.e. group competitions followed by a Knockout Tournament or just a straight Knockout Tournament - will be decided when the number of competitors is known.

TABLE TENNIS TOURNAMENT (Handicap)

At MA/VP Social Club, Hoo

On 1st May 1983 from 10am

Entry Form (20p per Entry) Closing Date 15 April 1983

Name

Social Club No

Division (MA/VP)

Table Tennis Experience

Present Club/s

Team

League

Division

Past (If No Present Record)

Club/s

Team

League

Division

No Previous League Experience Tick Here

Last Year Played

Diary Dates

Social Club Hall, Four Wents, Hoo

22nd April 1983. 7-10pm

Children's Disco with 'The AA Disco'

Admission 25p at the door

23rd April 1983. 8pm

Parlour Derby, Betting Units 20p

26th April 1983. 7.30pm

Table Tennis Section AGM

1st May 1983. 10am - 6pm

Table Tennis Tournament

8th May 1983. 8-11pm

Social Evening with the trio 'Midax'

Tickets 25p from Club Bar or int. 2217

13th May 1983. 7-10pm

Children's Discotheque with 'Vapourisation'

Admission 25p at the door

20th May 1983. 8-11pm

Cards & Darts Presentation night with

demonstration of Darts, by Eric Bristow

4th June 1983. 8-11pm

Discotheque with 'Tip Top Sounds'

Admission 25p at the door

11th June 1983. 8pm

Parlour Derby 8 races. Betting Units 20p

8th August 1983. 8-11pm

Discotheque with the 'Dae Kay Road Show'

Admission 25p at the door

13th August 1983. 7.45-11.45pm

Social Evening with 'Mescalero'

Tickets 25p from Club Bar or int 2217

Squash Section

This section has now gone into competitive playing, and held a friendly match at the Black Lion Sports Centre, against Black Lion 'B' team.

The final score, which MA/VP Kent won by 4-2 disguises the closeness of games. The result was in the balance until the final two games.

	MA/VP	Results	Black Lion
B. Wilkinson	2		Tony Welland 3
Graham Garthfied	3		Colin Goodman 2
Martin Pearson	3		Brian Hughes 2
John Cruse	2		Ray Reid 3
Jim Ramaguez	3		Derek Parsons 0
John Hollands	3		Terry Midwinter 0

This is a good start to the section's activities, and augurs well for more success and pleasure.

Sailing

It has been confirmed that the Annual Sailing Section Visit to Marconi Sailing Club will take place 3rd - 5th June 1983.

The organiser for the trip is Eric Fosberry, and the Dinghy match is on Saturday 4th June. Other events will take place during the week-end.

POOL NEWS

SWIMMING POOL OPEN ON

BANK HOLIDAY MONDAY

May 2nd. May 30th. August 29th

Answer to Brain Teaser - page 8

Joe met Ena on a Piano (P and O) liner. She looked marvellous in an Accordion pleated skirt with a bunch of Violas at her waist. Joe, hearing her Flute like voice, rushed to meet her falling over a Drum of oil on the deck. He said "would you like to come to the Concertina (Concert Ena)?" But she said "No! I would rather hear the Banjo (Band Joe)."

Before they went, Joe said if he did not have a Bassoon (Bass soon) he would get a chill in his Bones. They decided to play cards, but Ena said "when you should play a high card, why do you always Piccolo (pick a low), (or Trumpet)?" Joe said "you are a Lyre" to which she replied "Fiddlesticks." So they packed in and had an ice-cream Comet. He kissed her as a Cymbal (symbol) of his affection. She, however, hit him on a prominent Organ. So he went and had a Double Bass. He lit a Pipe and watched the sailors Castanet(s) (cast their nets) whilst he idled away his time leaning over the rails.

Ode to Chime Watch Owners

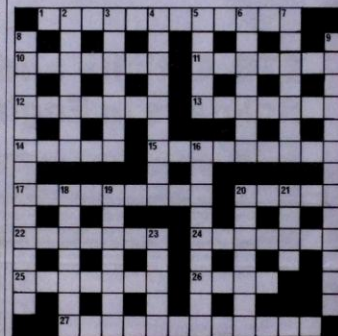
Could it be than I am mad
Or is it all the rest?
Beeps and buzzes from my watch
Brand me as a pest.
Only I can stand the noise,
Lovely though it be,
Distractions do not bother me,
I let my mind drift free.
Some people hate my beeper
And wish I'd turn it off
When every hour it buzzes
And makes them all quite cross!
Never mind, I say to them,
Keep your hopes up high
Eventually the batteries
Run right out and die.

ANON



IT'S COMPANY POLICY NOT TO
REPLACE ANYONE WHO LEAVES.

CROSSWORD No. 50



ACROSS

- In which generators work. (5-7)
- An absolute whole. (7)
- To keep hen fruit warm. (3-4)
- Given authority to act. (7)
- A record of work etc, not diarist. (7)
- A girls best friend, I'm told. (7)
- Girls name. (5)
- A possibility of success. (3-5)
- A continent down under. (9)
- Irrefutable evidence provided. (5)
- A Lifeguardman perhaps. (7)
- Things that rouse to activity. (7)
- A Berkshire town. (7)
- Running after going wild. (4)
- Sovereigns and Presidents alike. (5-2-5)

DOWN

- Having a total of eight. (7)
- To keep hen fruit warm. (3-4)
- North sea drillers hope to. (6-3)
- Alter ways or repair. (5)
- Cross self, with a blush of charm. (7)
- The stuff a hay-fever sufferer avoids. (3-4)
- It's blue and chinese original for table wars. (6-7)
- Chilterns, North Downs or Pennines perhaps. (1-5-2-5)
- It allows the banner to be aloft. (9)
- Where digestion goes on, and soldiers march on. (7)
- A copycat in every detail. (7)
- It becomes the debt on statement. (4-3)
- The germ cell. (4)
- Having royal associations. (5)

Solution to Crossword No. 49

ACROSS

- Newmarket; 6. Islam; 9. Merit; 10. Inundated; 11. Excerpt; 12. Hygiene; 14. Postscript; 15. Brat; 18. Also; 19. Boiling Pan; 24. America; 25. Hogboilin; 26. Tramp; 27. Barga; 28. Partridge

DOWN

- Number plate; 2. Worm casts; 3. Asterisk; 4. Knitter; 5. Touch-up; 6. Indigo; 7. Lathe; 8. Mod; 13. Eating Apple; 16. Reprimand; 17. Ancestor; 20. Overlap; 21. Learner; 22. Ignore; 23. Ember; 25. Hub.

Photographs taken by the Staff Photographers are acknowledged in the following way: (A) Alan Raine; (C) Nancy Bullock; (D) Alan Marshall

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