

CHELMSFORD

# NEWS AND VIEWS

**Marconi**  
Radar Systems

Produced for the Chelmsford employees of Marconi Radar and Control Systems Ltd  
Issue No 48 March 1992

## Quality success

WE have received a recommendation for another three-year Defence Quality Assurance Board Registration as a result of a successful assessment of our Quality Management System against the AQAP standards.

In future, MoD will increasingly rely upon third-party assessments for their major contractors and suppliers, and these will be performed to BS5750 or ISO9000 standards, which are similar to the AQAP requirements, but with different emphasis on certain points.

Our quality system, which is designed to satisfy the appropriate standards, but

## System adapting to MoD changes

primarily exists to meet the needs of our business, will, in future, increasingly be measured and audited against the alternative standards as well as those of the familiar AQAPs.

This will inevitably involve progressive and controlled changes to our system, and provoke new approaches in some areas — all part of a healthy, self-critical attitude to promoting quality improvement.

# HONOURED

## Design Office manager is awarded the BEM



**RAY BROWN, Design Office manager, is to receive a BEM in recognition of his work on the company's radar defence projects.**

The award, announced in the New Year Honours List, will be presented by the Queen's representative — probably the Lord Lieutenant of Essex — later this year.

'The letter from Number 10 came as a tremendous surprise,' said Ray. 'In fact, I thought it was the lads in the office winding me up!'

'I find it impossible to accept that the award is in any way personal. It's a well-deserved tribute to the hard graft that everyone in the Design Office has put in over the years. But there's only one medal,

so I guess it goes to me because I'm the one in the manager's seat.'

Oviously Ray does not take into account what may have been a strong contributory factor in his selection for the honour — the hours that he has devoted to voluntary work in the St John Ambulance Brigade, both as a teacher of first aid and as an ambulance driver.

**Father's footsteps**  
His wife, Rita, who will accompany him to the award ceremony, is an auxiliary nurse in the Brigade.

Ray is one of our long-serving Marconi men. He left the Mid-Essex Technical school in 1953 at the age of 16 and followed his father's footsteps into Marconi's Wireless Telegraph Company, bagging the City and Guilds Full Technological Certificate and Higher National

Certificates in both mechanical and production engineering in the course of his five-year apprenticeship.

In 1966, having laid the foundations of his career in the Airborne DO at Writtle and the TID and the Research DO at Baddow, he transferred to the Radar Division DO, devoting himself to a side of Marconi's activities that was to engage him to the present-day.

Following DO responsibility for the 'L' band transmitter of the S600 Series, Ray was made up to mechanical designer and spent several years working on the X,Y and Z models of the GWS25 'L' band transmitter.

In the early seventies he formed a small DO group specialising in microwave, r.f. and receiver units and equipment.

His next step up the ladder came in 1982 when he was made chief designer of the Receiver and Processing DO. Among projects he worked on were *Martello*

S713A, S713B, S723, OCTAVE, ARUP and RONDO.

In 1986 he was made chief designer of the Naval DO, of which he subsequently became manager.

When Airspace Control Division, Naval Division and Technical Services Design Office amalgamated in 1989, he was appointed to his present position of Design Office administration manager.

### Rivalled

Ray's extra-mural interest in the St John Ambulance Brigade was closely rivalled, until a couple of years ago, when age and weight overtook him, by his interest in table tennis.

He has represented both the Southend and Burnham table tennis leagues and is gratified to have passed on his aptitude and enthusiasm to his eldest daughter, who is in the top 50 of the England rank ratings and has been a county player for the last 14 years.

The company is proud to have yet another of its members selected for inclusion in the nation's roll of honour, and adds its congratulations to those already received by Ray from Downing Street, the Ministry of Defence, Lord Prior, Lord Weinstock, Dr Ian MacBean, Dr Martin Read, Brian Loader and Barry Pettican.

# HONOURED

## Trio pass OU exams in style

**THREE** colleagues have recently gained Open University Honours degrees.

The dedication, self-discipline and sheer hard graft required to achieve OU degrees are daunting and these graduates deserve our congratulations.

Shirley Harden, having completed an English degree to assist her work (the production of proposals/bids and software documentation) became interested in history. She continued after her BA to study for an Honours degree based on history — especially the history of technology — and social history.

'Devoting sufficient time to studying wasn't easy because my job involves a lot of overtime and weekend working,' she said.

'My family were very supportive, but household chores still had to be done. This meant that most assignments were completed at three in the morning!'

'But the nine years have been worthwhile, and I now intend to have a short breather to enable me to catch up on the gardening and decorating, then continue studying, possibly 19th century social history and technology.'



Left to right Don Bacon, Shirley Harden and Dave Green

Don Bacon, a senior draughtsman, has gained an Honours degree in engineering design, which, of course, is of direct relevance to his work.

'I am expecting that the degree will improve my career prospects and that it will enable me to register with

the Engineering Council as a chartered engineer (CEng) Stage I,' said Don.

'It took me seven years to complete the course and, naturally, it was a hard slog. Like other hopefuls, I was sponsored by the company, and

their contribution was of great help in covering the costs of the courses and summer schools.'

Don managed throughout the long haul to find time to indulge his interests and hobbies, which include

● Turn to page 2

INSIDE: JORN... NOT JUST ANOTHER CONTRACT — centre pages



# TRAINEES PUT IN THE FIRST LINE



Gavin Cowlard (left) with delegates — (left to right) David Spiceley, section leader Development Engineering; Tim Dawson, section leader Signal Processing; John Paggi, supervisor Metrology Inspection; Andy Stevenson, section leader, Signal

Processing; Rhodri Morgan, software consultant/section leader; Kevin Bishop, principal systems engineer ISE; Karen King purchasing controller; Mandy Savage, team leader Signal Processing; Mike Ballard, chief supplies QA

## IN January, 14 intrepid individuals started out on Marconi Radar's First-Line Management Training Programme, which will run for 18 months.

The programme, which took a year to develop, was devised by a working party consisting of David Campton, Peter Debank, Kim Caulfield, Julian Ryley, Bob Bonnington and myself. We circulated a questionnaire to first-line, and a cross-section of middle and senior, managers in order to find out what training they thought was needed to enable first-line managers to do their job more effectively.

Armed with their responses and our

### By Gavin Cowlard, Staff Development Officer

own experience, we were able to put together a programme designed to impart the skills and knowledge necessary for the further development of potential, newly-appointed and existing first-line managers.

The programme fulfils a training need originally identified through the appraisal scheme.

Delegates will attend a series of half-day to two-day courses on a range of subjects, including leadership, motivation and team-building; managing performance; quality; problem-solving;

finance; health and safety and managing change.

These subjects will be encapsulated in 16 modules, and there will be a work-based project to complete.

Throughout the programme delegates will be required to apply what they have learned to their workplaces, and at the beginning of each module will have to report on the results of putting the previous module's training into practice.

To help them do this, mentors have been appointed — either their manager or another manager within their area.

The mentor gives local support, guidance and encouragement through regular meetings, at which progress and the implementation of the delegate's learning are discussed.

The programme has been validated by the Institute of Supervisory Management and leads to the Institute's certificate in supervisory management studies — a nationally-recognised qualification, whose importance is recognised by organisations that include Rolls Royce, British Aerospace, Britvic, Glaxo, BAT, Jaguar, the Police and the MoD.

To gain the qualification, delegates will have to be assessed on their completed assignments, the course manual they have produced and the results and presentation of their projects to managers and the Institute.

Delegates have been drawn from across the company. They all have slightly different expectations, and their comments vary from '...consolidate previous management experience', '...improve skills as a leader' to '...advance career.'

One expectation they all share is to be awarded the ISM certificate.

## Trio pass exams with honours

● From page one computer programming, reading — mostly sci-fi — spectator sports and collecting neck-ties.

Dave Green is an ATE programmer/test engineer whose BA(Hons) in mathematics includes computers and software engineering.

'It took me four years to get the degree, and I some-

times wonder why full-time students, with no other job to do, need that amount of time to achieve the same ends!' he said.

'I hope the degree will help towards my aim of becoming a software engineer.'

Dave has got the bit between his teeth and is thinking of taking a Masters

degree in the near future.

With a wife, Diane, who is halfway through a combined technologies Honours degree course, three children, a one-eyed dog and hobbies that include reading, running, weight-training, cryptic crosswords and other mind-expanders, David has plenty of commitments outside the world of Academe!

## Ash bash cash . . .



**FORMER** inveterate smokers Paul Lundman, manager Spares and Repairs Department, and Tony Davies, manager Material Control, have cracked it!

Taking up the challenge to give up smoking, their determination has been crowned with success. On the way Paul raised £227.50, and Tony £125, sponsorship money for charity.

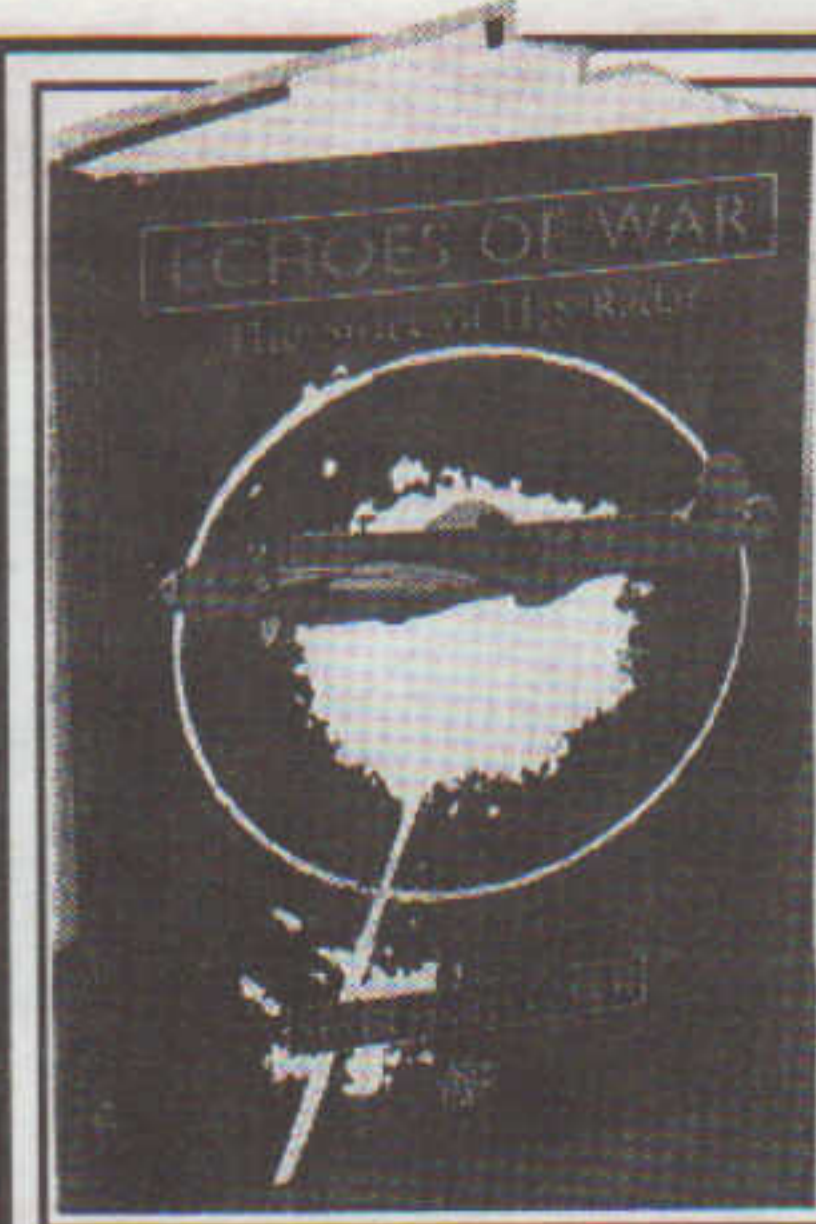
Now these sums have been matched pound for pound by the company.

When asked how he had stuck to his non-smoking guns, Paul said: 'I put it down to the passive smoking I did when at meetings with Steve Smith and Kevin Andrews!' Two more

candidates for a future non-smoking campaign?

In our picture Bill Campbell, production director, is presenting cheques for £455 to Margaret Olsen, of Edith Borthwick School, and £250 to George Harris, Chelmsford Hospice fund-raiser.

Paul and Tony, who are looking over Bill's right and left shoulders respectively, were supported by sponsorship organisers Ron Stone and Kevin Shaughnessy who, in turn, were helped by Clare Smith and Shirley Partridge. Also pictured are John Baker, deputy head of Edith Borthwick School, Sister Florence Newland and Les Hobbs, welfare officer.



## BOOK REVIEW A cosmic miss is radar's gain

*Echoes of War — The Story of H2S Radar* by Sir Bernard Lovell — reviewed by H.W.Cole

READERS may remember from the last issue of *News and Views* a reference in the review of *Boffin*, by Hambury-Brown, to the policy of recruiting physicists, biologists, geologists and such like into radar and allied work in the run-up to the Second World War; little importance being paid to requirements for a knowledge of engineering.

Bernard Lovell was one such. He was recruited by PMS Blackett from the initiative of the Tizard Committee responsible for such work.

Blackett ran the physics department at Manchester University at that time and Lovell was a bright staff lecturer.

### Summoned

On 10 July, 1939, Lovell recounts 'I was summoned by Blackett, who, looking like death, was waiting to see me. He told me I was to report to Bawdsey Manor on 14 August to help with work at a secret station of the Air Ministry'.

Like most other recruits he was told nothing more than this.

Lovell's qualification for inclusion in the small and august number of later luminaries was his work on cosmic ray phenomena. This surprise commission ruined his plans to drive a van-load of cosmic ray measuring equipment across France to the Pyrenees.

Like Hambury-Brown, he encountered many inefficiencies, failures of communication and unnecessary rigours in working conditions. Reading such first-hand accounts makes one wonder how we managed to win the war. I can only suppose that our enemy had similar scenarios, and I intend to find this out.

This is an extraordinary book. Its source material rests in Lovell's own notes made at the time, coupled with extensive quotations (are they partial?) from existing contemporary memoranda, papers and reports.

The manner of presentation makes for difficult reading, since report extracts are interleaved with his own text in different type-face and this impedes the word-flow.

The detail gives the impression of scrupulous attention. Doubtless historians will find it of enormous value but it doesn't entertain the lay reader. No, this is a specialist's book and doesn't pretend otherwise. A knowledge of radar technique is assumed, as is a broad knowledge of the history of the times.

However, there are good instances of the way things were, including an endearing, middle-class view of the domestic life of an itinerant engineer's family by his patient wife. I was sharply reminded by this of how different we were in those days and it made me strangely unquiet, wondering if we could still live successfully through such times again.

A recurrent thread in the book is the number of incidences of the personal back-biting and sometimes downright bitchiness of prominent people towards each other. Again, I'm sure that must also have been true of our enemy.

### Important

I was pleasantly surprised to learn how important a role was played by Dr Bernard O'Kane, at one time managing director of GEC-Marconi Avionics. He figures often and large in Lovell's account.

During the later years of the war I worked as a lab assistant at Cossors. A great deal of H2S and Air-to-Surface Vessel (ASV) radar work was done there but receives no mention in the book. This goes to show how written history can never be completely balanced and will ever be a source of new work.

In summary, if you don't mind reading what looks like a court case brief and have (as I have) an abiding interest in radar matters, this book is rewarding, well produced and copiously referenced.

## Paddy's been everywhere (well almost)

● Patrick (Paddy) McNamee, born in County Kilkenny, Ireland, started travelling very early and didn't stop until Christmas 1991, when he decided to take early retirement. Even then he was on assignment in Oman.

● His skills as a mechanical engineer took him to nearly all of the static radar installations at overseas sites, in the period 1950-1970. Overall, in 38 years of field work, the first three with Plessey Radar, Paddy worked on sites in Norway, Germany, Italy, Greece, Cyprus, Turkey, Jordan, Iran, Oman, Bahrain, Zambia, South Africa and Australia, not to mention UK mainland sites. The one notable exception appears to be Saudi Arabia.

● Paddy has now decided to settle down in retirement at home in Tenterden, Kent, with wife Miriam, indulging his love of gardening, would you believe!



Grant Stewart, right, manager Marconi Radar Projects, Oman presents Paddy with one of his farewell gifts.



# Working party starts homing in



ABOVE: The Baddow development Working Party — (left to right) Andrea Peters, Clive Gildersleeves, Allen White, Geoff Edensor, Ian Maxwell, Alan Thorogood, Ray Willis, Anne Scarr and John Parr.



### THE BADDOW MOVE



RIGHT: Allen White has a word with Don Ketley, who is bringing CAD techniques to the interior design of the new building.

HAVE you moved your family to a new property recently?

There's the upheaval, the trauma and, dare we say it, the arguments (the newly-purchased freezer that will fit nowhere except in the bathroom, the antique, treasured wardrobes that won't go round the top of the stairs; 'Mum my bedroom is far too small, why can't I have Johnny's room?'; 'Dad, I've nowhere to put my video games!')

Now amplify your family's problems by 1,300, for that is the number of people the Baddow Development Working Party has to move from Writtle Road to Baddow.

#### Representative

The Working Party, being representative departmentally in the initial planning stages of the development, consists of:

- ALAN THOROGOOD, Site Management
- ALLEN WHITE, Co-ordinator
- ANNE SCARR, Health and Safety
- ANDREA PETERS, Personnel
- IAN MAXWELL, Finance and Commercial
- JOHN PARR, Sales and Marketing
- CLIVE GILDERSLEEVES, Engineering
- RAY WILLIS, Projects
- GEOFF EDENSOR, Information Technology

#### Waiting

Local planning permission was granted for the new building in mid-December.

However, owing to the fact that the proposal is in a Green Belt area, additional authorisation must be sought from the Secretary of State for the Environment. This final approval is currently being eagerly waited upon.

With the formidable task ahead, the Working Party, formed in January, is progressing swiftly with the internal planning of the new building, aided by Don Ketley, Plant Engineers and his architectural CAD equipment.

Each member of the working party is striving to produce a 21st century working environment for his or her personnel.

#### Friendly

Considerable thought and planning are being put into all aspects of individual needs at work, from network computer facilities to snack bars — all with the added intention of making the new building as environment- and disablement-friendly as possible, with the provision of special toilets, ramps, lifts, etc.

It must, however, be observed that in our nationwide economic climate although we may have the technology, considerable financial constraints have to be recognised. What we would like and what we actually need may be in conflict. Let us hope that these two poles may at the end of the day indeed be not too far apart.

Regular progress updates will be provided as things develop. So continue to watch this space . . .

# DRIVE TO CAPTURE EXTRA ATM WORK

MARCONI Radar and Control Systems has taken the lead in establishing a new business centre for air traffic management systems.

The new group is called G-MATS, which stands for GEC-Marconi Air Traffic Systems.

The air traffic management (ATM) market is exceptionally large, probably about £30,000 million over the next decade. Currently, GEC has a very small share of this market. G-MATS is designed to change that and will lead the GEC-Marconi group to increase its market share substantially over the next few years.

This drive into the ATM market is an essential part of the MRCSL diversification into civil products that will reduce dependence on the military market, which is tending to shrink because peace is "breaking out all over".

G-MATS customers will typically be airport and civil aviation authorities around the world. These customers are increasingly expecting to pass total turnkey responsibility for complete systems to a contractor. G-MATS has, therefore, been established specifically to provide a total systems response to customer requirements.

Typical systems include not only radar and display systems, with which we are very familiar at Chelmsford, but also communications, navigation aids, etc. Airport systems have an even wider scope and include security, passenger information, baggage handling, and even fast transit railways!

## New group aims at the civil market

Through a network of collaborators with GEC and with external specialist contractors, G-MATS will provide the breadth of expertise to allow all classes of

business to be undertaken.

G-MATS will have the capability to provide:

- A complete turnkey systems capability
- An integrated product portfolio
- Project management
- Project finance

All types of air traffic management projects will be catered for, from complete airports on green field sites down to small installations of radar and navigation aids.

G-MATS is already representing GEC on a consortium of four companies that has been established to build the new airport at Kuala Lumpur in Malaysia. This is a major green field airport project and will involve new roads, railways and infrastructure works apart from the airport itself.

The consortium has bid for and won a contract involving a Masterplan Study which will fully define all the buildings and systems needed.

A wide variety of products is available from GEC for G-MATS to incorporate into complete systems. However, G-MATS is to operate as a total systems supplier, with the freedom to choose the most appropriate product for any airport application. This ensures that the best solution at the lowest cost is achieved, essential qualities in the highly competitive world of airport operations.

G-MATS organisation will be split across the MRCSL



Colin Shead



Barry France



Graeme Thompson



Andy Emberton

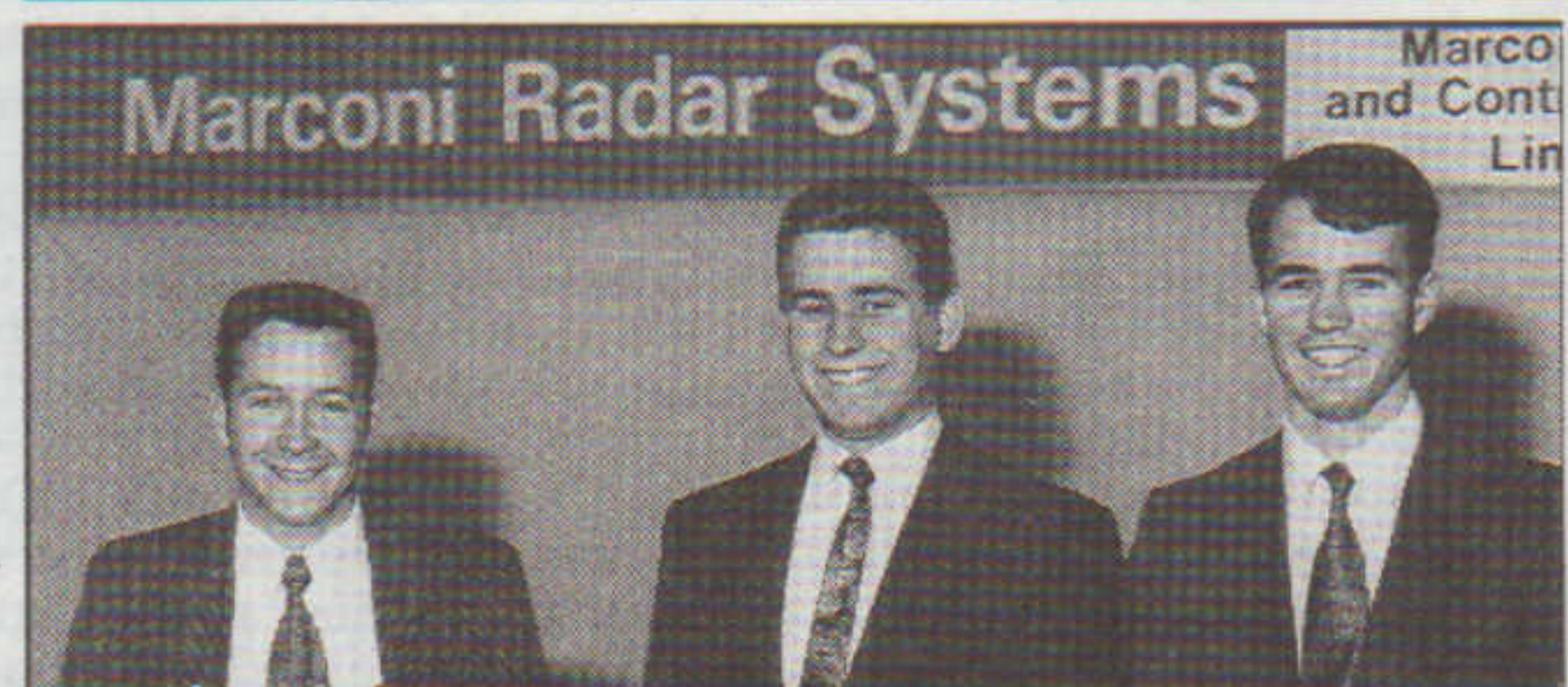


Michael Smith



John Lancaster

## Careers taking off



BILL MYATT, John Davies and Martin Huet (left to right above) are officer cadets of the Royal Australian Air Force.

Having completed three years of an electrical and electronic engineering degree at the Australian Defense Force Academy in Canberra, they have streamed into radar and guided weapons for their fourth and final year.

They are at present spending six weeks of a 10-week vacation in this country, undertaking work experience — three weeks with British Aerospace and three weeks with Marconi Radar.

Before leaving Marconi, Bill Myatt said: "During our visit we spent time with Future Systems, Manufacturing and looking over the JORN project, which is of particular relevance to us. As well as acquiring considerable knowledge of the technical operation of practical radar systems, we have also been given an excellent opportunity to see first-hand how a civilian company operates.

"The experience we have gained with Marconi will prove invaluable to us in our future RAAF careers."





Pat Kilroy, senior systems analyst



Richard Morris, contracts officer



Dave Pickford, JORN system administrator

# Cost/Schedule Control System METHOD THAT CAN A WORLD OF OPTI

By SHEILA RIGBY

**TO achieve perfection in human accomplishment is impossible if reliance were merely placed upon individual impulse and instinct.**

At all times, man has relied upon the fine balance between strategic accomplishment and tactical feasibility; commerce in industry and commerce understand that success or failure, profit or loss, depend upon well-managed and planned endeavour; nations compete to have the highest level of protection and security for their people.

All these endeavours, and many more, require a specified objective, a timetable or schedule and a resource budget. Such undertakings are referred to as projects, and bringing these aspects together and controlling them is called project management.

There is, however, an increasing awareness that projects in the high-technology, fast-response industries may best be managed by separating out the functions of enabler, client provider and contractor provider, and planning them in a way most capable of meeting the defined objectives.

The engineer's role is to specify performance criteria.

The client provider's task is to undertake the technical management of the project to meet the criteria.

And the contract provider's role is to develop, produce and deliver the end-products.

All these three functional needs must be co-ordinated and inter-related by the application of special techniques which measure control through the project life-cycle.

- These techniques include:
- Design management
  - Work breakdown analysis
  - Team selection and building
  - Task responsibility
  - Time scheduling and Cost control
  - Contract administration
  - Performance measurement

As a consequence, a means

IN A not-so-quiet office, deep in one corner of 'M' building, an energetic and enthusiastic team of men and women, led by the indomitable Sheila Rigby, is nearing the final stages of implementing a new concept in project control procedures. This does not mean that past experience will be swept aside, indeed, wherever possible well-proven and established procedures have been incorporated.

This technological "technique" was introduced to us through Australia's JORN project and is called Cost Schedule Control System Criteria. This is rapidly becoming an internatio-

nally accepted set of rules for project control.

Why the mounting excitement as we approach the Ides of March?

Well, it will not be to witness the same fate as Julius Caesar! On the contrary, it will see Marconi in possession of a pass-key to worldwide contract bids, and that, most certainly, will include the very lucrative and hitherto inaccessible marketplace of the United States.

In the ensuing article, *Sheila Rigby*, UK performance measurement manager, describes what it's all about and *Dave Pickford* introduces us to her team.

of management control was introduced called Cost/Schedule Control System Criteria (C/SCSC) and is used by many defence departments worldwide.

The objectives are:

□ For contractors to use effective internal cost and schedule management control systems.

□ For the customer to be able to rely on timely and auditable data produced by those systems for determining contract status.

C/SCSC is not a system. It is a set of criteria designed to define an adequate contractor and schedule management control system. The criteria do not purport to address all the contractor's needs for day-to-day internal control. The basic purpose is to enable the contractor to assure the customer that he has in place, and uses, adequate control systems providing reliable status at the frequency required.

The criteria divide into five logical groups.

## Organisation

To define the contractual effort with the use of a work breakdown structure, assign responsibilities for the performance of the work and accomplish all this with the use of an integrated management control system.

## Planning and Budgeting

To establish and maintain a performance baseline for control of the work.

## Accountancy

To accumulate cost of work and materials in a manner which allows for comparison of earned value.

## Analysis

To measure earned value, to analyse resources of both costs and schedules and develops reliable estimates of cost at completion.

## Revisions and Access to Data

To incorporate changes to the controlled baseline as required and allow appropriate access to contract data for determining criteria compliance.

As performance measurement manager 'JORN', I am responsible for making sure that Marconi Radar, GEC-Marconi Communications and GEC-Marconi Systems understand what performance measurement is all about.

First of all there are the acronyms such as ACWP, BCWP, BCWS, EAC, EVT. Once you understand that

ACWP (actual cost of work performed) equates to tab 76, that BCWS means exactly how you plan to do the job, and that BCWP means you're only going to get paid for what you have achieved — not what you hoped, not what you think, but what you have actually 'earned' — then you are almost all the way to understanding this wonderful American project management theory called Cost/Schedule Control.

Sounds simple doesn't it? Firstly, you have to go through an IV (implementation visit) to those not accustomed to the use of acronyms. Remember, you are not a cost scheduler if you can't remember them.

What is an IV? You spend four days convincing the customer you know exactly what you are doing. You put accountants, engineers, network controllers, IT personnel and managers on the stand to talk about performance measurement, only six weeks after signing the contract.

We didn't get top marks for our IV but we got praise.

Then I took another 22,000 mile round trip to Australia to go on a course to learn more about Cost/Schedule Control. Now I am considered an expert: I start to believe it myself! I get more staff, and we start to



Sheila Rigby, UK performance measurement manager

produce system descriptions, cost account manager handbooks, storyboards, analysis reports, performance reports, analysis reports . . . the list of things we can do is unending.

Six months after signing the contract we are ready! Yes, you've got it, another visit from the customer, our RR (readiness review) is to take place.

At this point we take on an American consultant, namely Hugh Dyer. He has come in to round off the edges and explain exactly what to expect at any RR, and train cost account managers to understand all the forms and procedures that are now becoming the norm in the Performance Measurement Group.

All CAMs (cost account managers) — they are the brave personnel that decide the BCWS and the BCWP — are interviewed personally to make sure they understand cost/schedule control.

Functional managers are also interviewed to make sure they understand what the CAMs are doing.

Traces are carried out on all the accounting systems to

make sure the data we are using is coming from, and going to, the right people, places, machines and anywhere else that information may be required.

After seven days' talking, promising, pleading and promising, our RR is over.

We did a lot better this time; we were actually able to tell the customer where we knew we hadn't got it right! I think that deserves nine out of ten for initiative.

Now all we have to do is wait for our demonstration visit. As it says, we will demonstrate to the customer our complete system, linking our two sites — the UK one and the one in Oz — and that we know exactly what we're doing, all ways up.

To conclude, and now being very serious, this is an amazingly good project management system. You are in control of your project every hour of the day, through the use of networks linked to cost processors.

I hope for my staff and myself, together with all the staff connected with the JORN contract, that we have a successful demonstration review and get our validation certificate as soon as possible.

Team

'This is an amazingly good project management technique — you

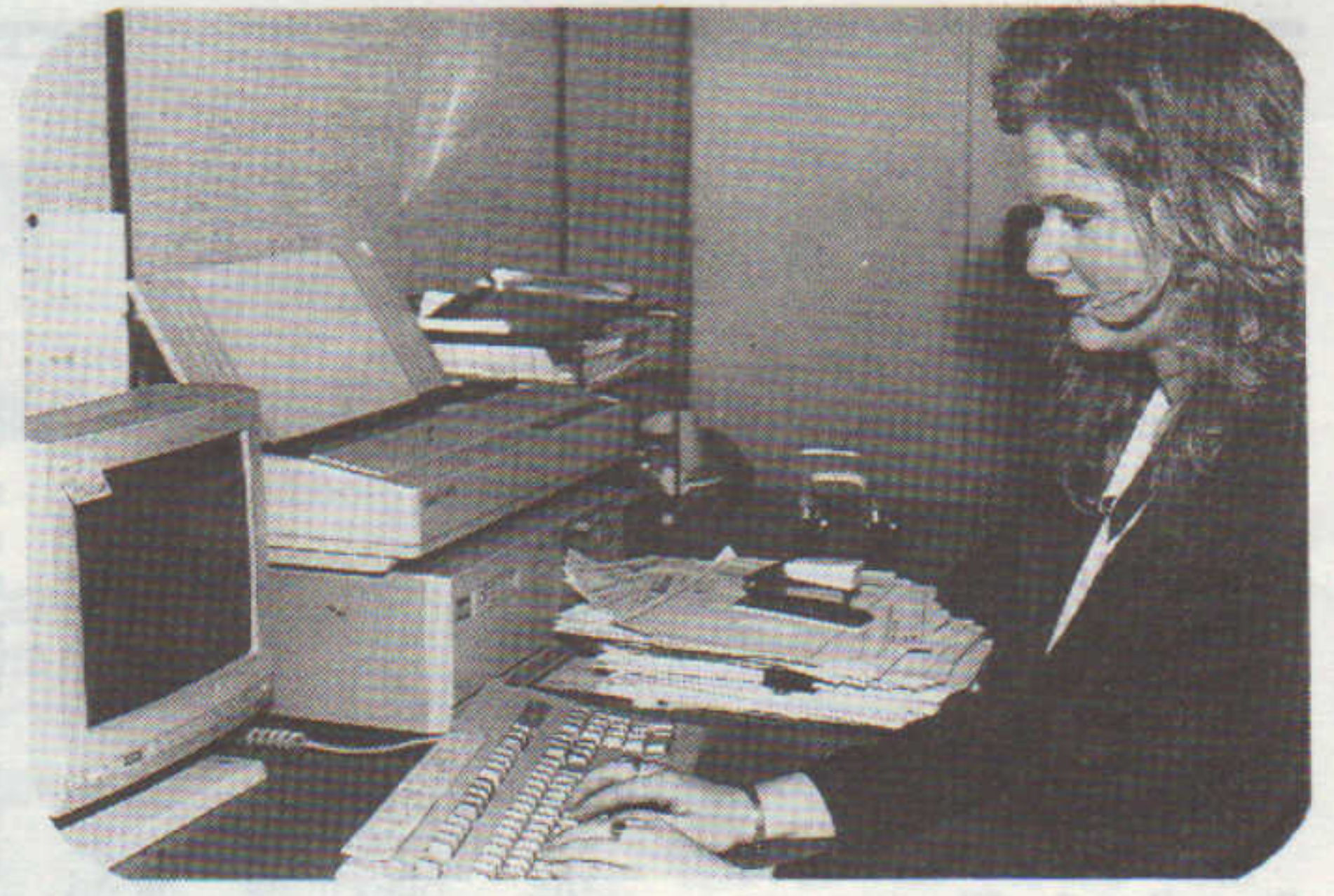




David Andrews, systems analyst



Lisa Ford, JORN system administration assistant



Elizabeth Tyler, JORN systems administration assistant

# em Criteria AN UNLOCK PORTUNITY

who are leading the way . . .

**★ Pat Kilroy**  
The first of the few, Pat initially helped Sheila to hammer and forge the framework of the contract and its C/SCSC implications. Now, at this much later date in the proceedings, Pat has the great responsibility of being on the receiving end of an enormous amount of monthly input (including that of our Marconi engineers in Oz), data-storing it, interpolat-

ing and then spewing it out as monthly reports to Telecom, our Australian customer.

**★ Richard Morris**  
Sanctions and MARCAS charge codes draw Dick into the grey divide 'twixt JORN and the other world of 'buckets' and 'cost+' (!). Remaining steadfastly untainted by this, our 'Old Man of the Sea' (much

to the envy of many, Dick has built his own sailing craft) joined the team during early October last year from *Seawolf*, and is now a very essential link between those on the 'sharp end' (we call them cost account managers) and those collecting the company's pocket money.

**★ Dave Pickford**  
In like manner to Dick Morris, I joined the JORN team early in October last year from *Seawolf* — moving closer to the car-park in consequence! Rashly calling myself an author, I was asked to write the Marconi (JORN) system description in words and pictures (literally) with the music supplied by the customer during the recent readiness review! My paper factory now appeases the voracious appetite of 40+ souls each and every month, here and in Oz. Hobbies? Growing pine trees!

**★ David Andrews**  
'I have a cunning plan', to quote from one particular, long-running TV series, and who better to ferret out all the relevant details to construct it than David? Stage two, JORN-wise, is for David and his colleagues to go into a huddle and discuss 'what-if' scenarios before studying and analysing the end-result network. A bit like BR really?

**★ Liza Ford, Allison Beaven and Elizabeth Tyler**  
These three are far from being the 'back-room' girls of JORN. Lisa and Liz, although still classed as apprentices, know more of JORN's intricate machinations than the average manager, and Allison's previous work experience, both at Writtle Road and outside, has fitted her well for the mantle of

general factotum to the team. 'Lord help the mister...' acts as a digital go-between 'twixt Pat Kilroy (COBRA data-base) and MARCAS — thus completing the formidable 'gang of three' JORN date-wise.

**★ John Joyce**  
John is our very experienced 'noughts and ones' man providing IT support to the JORN team; interfacing between data systems; providing reports; data extraction; training; trouble shooting and provisioning data equipment. There is no truth in the rumour that John leaves Writtle Road at night!

**★ Diane Stean**  
Right arm to John Joyce, Diane also provides Super Project data-base interfacing and training, as well as Fox-Pro data-base programming.

**★ Henry Wright**  
Working with John Joyce and Diane Stean, our 'Enery' also



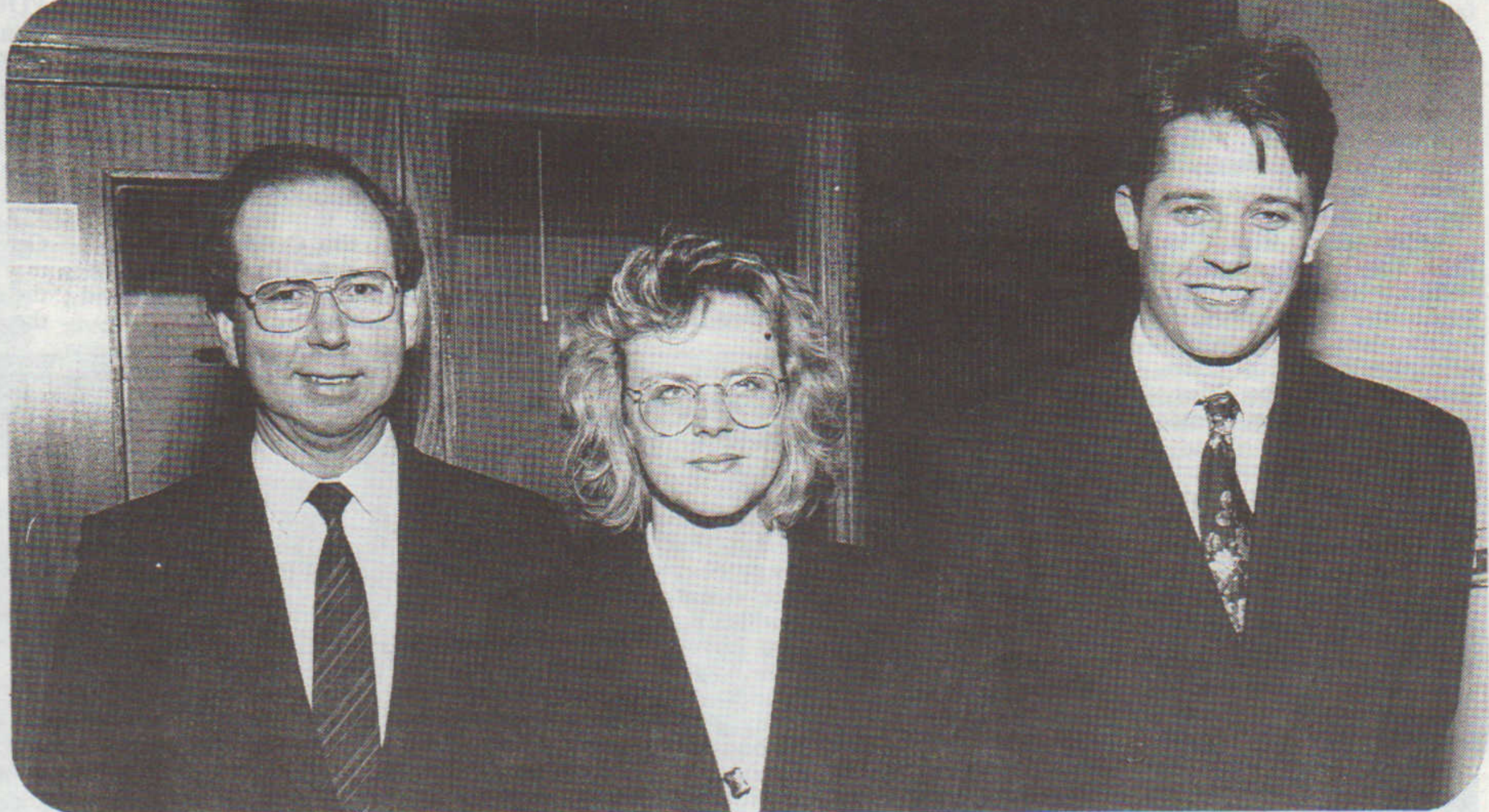
Allison Beaven, JORN system administration assistant



Margot Smith, network analyst



Vernon Finding, PERT engineer



John Joyce, IT senior systems analyst; Diane Stean, IT systems analyst; and Henry Wright, IT systems analyst

are in control of your project every hour of the day'



SUNDAY 1 December, 1991, was World AIDS Day. As part of the activity for that day, Marconi Radar Systems issued, along with the pay statements, an information sheet, *AIDS and Work*. We also distributed information in the canteen.

This article is the next step to attempt to inform and educate our employees about HIV/AIDS.

#### Spreading the Virus

The virus spreads through the exchange between two people of body fluids mainly blood, semen and vaginal fluids. The chief mechanisms are through:

i) intercourse — homosexual or heterosexual, man to

## AIDS: why we all need to know the facts

- man, man to or from woman.
- ii) receiving transfusions of infected blood or blood products.
  - iii) use by addicts of infected needles and syringes for injecting drugs.

- Two other mechanisms are:
- i) from an infected mother to her unborn baby through the placental blood supply.
  - ii) possibly, from an infected mother to her baby, through breast feeding.

#### How HIV is not spread

Various studies prove that the virus is not spread by everyday social exchanges.

In one study of 90 children of people with AIDS not one was infected with HIV, in spite of the fact that they had regularly hugged and kissed their parents and had shared kitchen and bathroom facilities. In another study of 150 health care workers in Britain who were known to have been exposed to the blood or body fluids of patients with HIV, not one developed HIV antibodies.

The disease cannot be transmitted through insect bites (eg from mosquitoes), touch, bodily contact, swimming pools, toilet seats, cups, cutlery and food or drinking from the same glass. In parti-

cular, the virus cannot be transmitted from saliva.

There are no cases of AIDS which can be traced to any cause other than those listed above!

A presentation on HIV/AIDS has been made to representatives of the Joint Staff Unions, Joint Negotiating Committee and the Staff Liaison Committee by Richard Gill, HIV/AIDS District Co-ordinator, Health Education Service.

You may wonder why we are publicizing HIV/AIDS information. From the statistics being supplied by Health Authorities it is virtually certain that at some stage in

the future a colleague at Marconi Radar will contract HIV/AIDS, and it is important that this subject is discussed and publicised in a calm atmosphere before such an occurrence.

All evidence indicates that colleagues need have no fear of working with an infected person.

A few useful telephone numbers are given below:

● **AIDS Helpline** 0245 490089

● **National AIDS Helpline** 0800 567 123

● **Mid-Essex Community Drug team** 0245 351441



David Andrews (left) and Keith Buckingham.

## The blood keeps on flowing...

BETWEEN them, assistant health and safety manager Keith Buckingham and system analyst David Andrews have given 12.5 gallons of blood to the country's life-saving blood banks.

In 1954, Keith donated the first of his 50-pint contribution, made over the years. A couple of years National Service caused no interruption to the flow, though when, after returning to the company, his work took him abroad, the continuity was disrupted. Now, travelling days behind him, Keith once again makes regular trips to the blood transfusion unit, which takes over the MASC Bowling Club building in Waterhouse Lane for three days a week, twice yearly.

David has a similar though not identical history, giving his first pint in 1961 while working at Crompton Parkinson's which, for those not in the know, occupied our very own Writtle Road site in those days.

Keith and Andrew have received silver-gilt badges (pictured) and letters of appreciation from the National Blood Transfusion Centre in recognition of their efforts, the importance of which is emphasised in the last paragraph.

'... You may rest assured that your splendid contribution over the years has helped many patients in hospital who needed blood transfusions when the availability of blood may have made the difference between life and death, and the blood products made from your donations have also been instrumental in assisting the health of long-term sufferers...'

# PORTRAIT OF THE YEAR

DECEMBER each year is the time for two key competitions at the MASC Camera Club. Six photographers, who have been awarded most points in the club competitions during the year, are invited to submit a portfolio of three

pictures to be considered for the 'Photographer of the Year' award. David Bailes was finally awarded the honour in a close-fought competition at a very high standard.

Judges Martin Reed (not Dr Martin Reed but Inspector Martin Reed, the Club's vice-president) and John Parr had the task of deciding the best portrait for the 'Marconi Radar Portrait' award. The very difficult task of choosing between two of the entries was eventually resolved by awarding second place to Don Clayden's portrait of Twig Willis, and the cup prize to David Dalton of the Test Department with his picture, seen here, of Karen Rootkin our bought ledger supervisor from Accounts.

The Camera Club is trying to attract more women to join in their club nights and on the left is an extract from its monthly newsletter Focal Point edited by Ernie Kench in TID ext 3002.



Above: David Dalton's award-winning portrait

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VOLUME 92 No 2. February 1992

EDITORIAL *Opposite Sexes*

This article is addressed to all ladies, women and girls who find themselves reading this issue of Focal Point, whether members of the Camera Club or not. I hope that, when you have read it, you will either write me a letter or, better still, come to the next meeting.

Some of the world's best photographers are women. Everybody has heard of Heather Angel, of course, but there are countless others. That being so, why is it that our meetings are so predominantly male? We aren't really such ogres or, if we are, we don't mean to be. Is it that you feel intimidated by the overwhelming masculinity of the atmosphere? Have you been subjected to sexual harassment? Are you offended by the occasional "pin-up" picture? Do you find our treatment of you (including this article) patronising or condescending?

I believe women have a special kind of creativity different from, but not worse or better than, that of men. A balanced club needs both kinds. So please share your creativity with us - there are a lot of things we can learn from you. Who knows, you might even be able to learn something from some of us.

PRESIDENT'S REQUEST

## Obituary — Ralph Hayes

IT WAS with shock and extreme sadness that we learned of the sudden death on 30 December 1991, of our colleague and friend, Ralph Edward Hayes.

Born at Birdbrook, near Haverhill, he moved with his family to Stambourne during his school years. In 1947 his family moved again, this time to Maldon, where his father, aged 87, and mother, aged 84, still live in the same house. He has a younger brother, Douglas.

Ralph worked on the land, fruit farming, as school caretaker at Maldon Primary School and, for the last 13 years, as a much respected, well liked member of the Site Security Section, latterly at Bushy Hill. Among other things, he was involved in the Essex Police Force in which he spent nine successful years as a Special.

Ralph met his wife, Connie, in 1950 and they married in 1954. They have one daughter, Sally. There are two grandchildren, Christopher aged three-and-a-half, and Sophie, aged 12 weeks and born on Ralph's 61st birthday. To say that Ralph adored his grandchildren would be an understatement, as anyone who was close to him would know.

Ralph was a great family man who, as well as enjoying home life was a shooting, fishing and golfing enthusiast and a keen gardener.



Ralph Hayes...family man.



Pictured against a backcloth of the Queen Elizabeth II Bridge are photographers (left to right) David Bailes, ex-EEV, Mike Livsey, Baddow Research, George Byrne and Don Clayden, both of Marconi Radar.

## Foursome boldy go where no camera club members have gone before

FOUR members of the Marconi Camera Club have sampled the views from under and on top of the Queen Elizabeth II Bridge, which spans the Thames between Thurrock and Dartford.

Mike Livsey, the Baddow Research purchasing manager, arranged the visit after ringing around the Essex and Kent County Councils, eventually making contact with the very cooperative Cementation site manager, Mike Emberley.

As a result, not long before the bridge was completed, George Byrne, Don Clayden, Dave Bailes and Mike Livsey met at the Cementation Portakabin village in the shadow of the over-powering new structure. Mike Emberley handed out the hard hats and drove them on to the bridge, allowing them an hour and a half to do their worst, with the proviso that they did not interrupt any of the workman.

#### Impossible

Unfortunately, the man with the orange cones had got there before them and these, along with the various machines, made it impossible to get an uncluttered view. Even so, some successful results were clocked up.

The bridge is the strongest in the world and bad weather is not expected to cause closure for more than 15 to 20 hours a year.

The intrepid adventurers are now eagerly thinking about their next photographic assignment.

## Mattress donation

A SPECIALLY designed mattress, costing approximately £3,750, is now bringing comfort to patients in Ward J7 of St John's Hospital, Chelmsford.

The money needed for its purchase was raised by the ward staff, and a topping-up donation of £1,260 from the Marconi Employees Charities Fund.

The mattress comes into its own in cases where patients are at risk of developing bed sores. It is essentially an air-bed and is special because it is made up of a series of independently inflated rib-sections. A computer at the foot of the bed continuously varies the level of inflation in each rib so that the pressure between the patient's body and the mattress is always changing.

Shown in the photograph are, (from left), Mr G Hatton representing the mattress manufacturers. Mrs F Moore, a member of the St John's staff; sister L Kendall, the Ward Sister; Charles Rand, chairman of the Marconi Employees



Charities Fund and assembly manager, Marconi Radar; Bob Whitlam, a Charities Fund committee member from Section F180, Marconi Radar; John Neate, another committee member and personnel manager, Chelmsford Central Services GEC-Marconi (Marconi College) and Mrs S Butcher of the St John's staff.



# FIGHT BACK WITH THE 'WAY OF PEACE'

**SUE HAMPSHIRE**, a karate black belt, works in the Technical Directorate secretariat. She writes here about the ancient art that has held her interest for the past 15 years.

**THE history of martial arts in Asia dates back as far as the Chou dynasty (1100-250BC) but probably only to the beginning of the century in Great Britain.**

There are numerous martial arts — also known as 'the warrior's religion' and by the Zen Buddhist word 'Bude' — practised in this country today.

After dabbling in judo and kung fu, I settled for karate, which I have been practising for the past 15 years. In 1988 I reached the grade of 3rd dan.

Karate is a form of unarmed combat ('kara' meaning 'empty' and te 'hand') and it employs a wide range of punching and kicking techniques — unlike judo, it does not include grappling or wrestling.

Karate is also divided into many styles, all having their own characteristics. I practise a traditional Japanese style called 'wado-ryu', meaning 'way of peace', which places emphasis on speed and power and is suited to competitions.

## Fitness

On joining a club, a beginner works on his general fitness and learns the basic techniques. At gradings, held every three months, the student can progress through the belt system by taking examinations. As lessons are conducted using the Japanese language, students must learn Japanese terminology as well!

Karateka (people who practise karate) wear a loose fitting, white suit with a belt (obi) indicating the grade of the wearer. In our association beginners wear a white belt and then progress through yellow, orange, green, blue, purple and three brown belt grades. These are known collectively as kyue grades.

From then on a student can advance to dan (black belt) grades, where intervals between grades are longer, normally one to two years.

Black belt grades are more difficult to achieve, as they take into account a student's ability to teach and referee/judge. Aspirants are usually assessed at the end of a course by a panel of judges and have to take a written exam.

When a student becomes more advanced in techniques, say green belt to 1st and 2nd dan, he has the option of entering tournaments, which are normally divided into two competition areas: kumite (fighting) bouts of two to three minutes, where winning depends on points awarded for precise scoring techniques, and kata, which are also known as patterns or sets and are a fixed sequence of defence and attacking techniques, performed rather like a dance or gymnastic routine. There are 15 of these sets to learn in our style!

If you are inspired to have a go and would like to join a reputable martial arts club, contact me on extension 3175.

On a completely separate note, I am hoping to run the New York Marathon in November and would be grateful for sponsorship. I shall be coming round with sponsor forms at a later date

## Have a ball

THE Modern Dance Section of the MASC continues to thrive and offers professional tuition to beginners, improvers and the more advanced dancers.

Membership is a mere £2 a year and there is a £2 admission fee for the Thursday evening tuition sessions.

On at least one Saturday evening in the month a dance to live music is held in the Club. Music will be provided on 29 February by Bernard Williams, 28 March by Geoff Evans, 8 April by the Mosaics, 16 May by Len Ebbage and 13 June by Helen.

These monthly dances are open not only to members of the Dance Section but also to any MASC or non-MASC members.

For further information contact David Pipe, EEV ext 3517, Eddie Porter, Chelmsford 287298, or the MASC.

## More take to the road

THE Marconi Caravan and Camping Club continues to roll along its merry way.

Last year it attracted six more couples to its ranks — a notable achievement when so many clubs are becoming smaller.

This year the Club starts at Towerlands Equestrian Centre in Braintree, where show-jumping will be taking place and the bowls green will be available for use.

Later on, there will be a repeat of the successful visit to Barleylands at the time of the steam rally. And last but not least, there will be a rally at Priory Vineyards, Dunmow, at grape-picking time.

If any readers have a tent, trailer tent or caravan and feel like coming along for a weekend, the club will make them most welcome.

Details can be obtained from Roy Lucking, ext 2259, or John Pyner at EEV, ext 3419

## Challenging

● Remember parachuting, well-diving Jacqui Allen was looking for a fund-raising challenge (*News and Views*, September)? She has now decided that bungee-jumping or aircraft wing-walking may satisfy her yearning for adventure. But she's a bit light on information. If you can fill her in on details please give her a call on ext 2578.



## COMPETITION WINNERS



Alan Beard, Malcolm Johns, Julie Bentley, Andrew Beard, Graham Joliffe

THE first correct solutions to the Christmas puzzles to be drawn out of the hat meant £15 prize money for each of:

- Alan Beard, manufacturing engineering (Spot the Difference)
- Malcolm Johns, administration (Dingbats)
- Julie Bentley, weapon systems (Word Game)
- Andrew Beard, accounts (Sports Quiz)
- Graham Joliffe, T511 (Crossword).

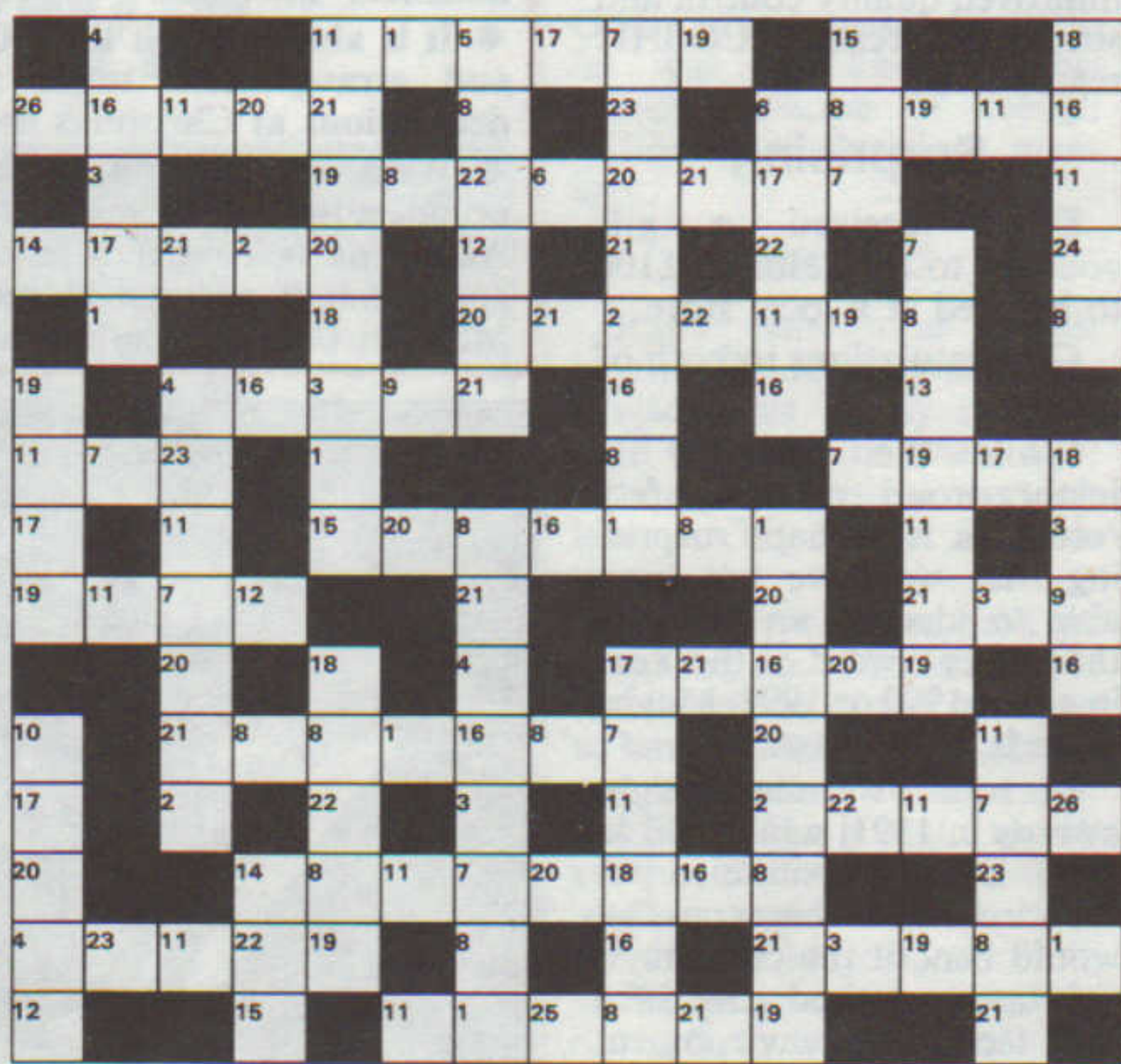
Solutions can be inspected in Publicity Department (D40).

## WORD POSER

HAVE a go at winning £15 by solving our latest word poser — first out of the hat wins.

All you have to do is match up each letter of the alphabet to a number on the grid to complete the puzzle. We've already given you three letters, so fill them in on the grid and take it from there.

Send in your entries (to arrive by first post on 10 April 1992) to the Editor, *News and Views*, publicity.



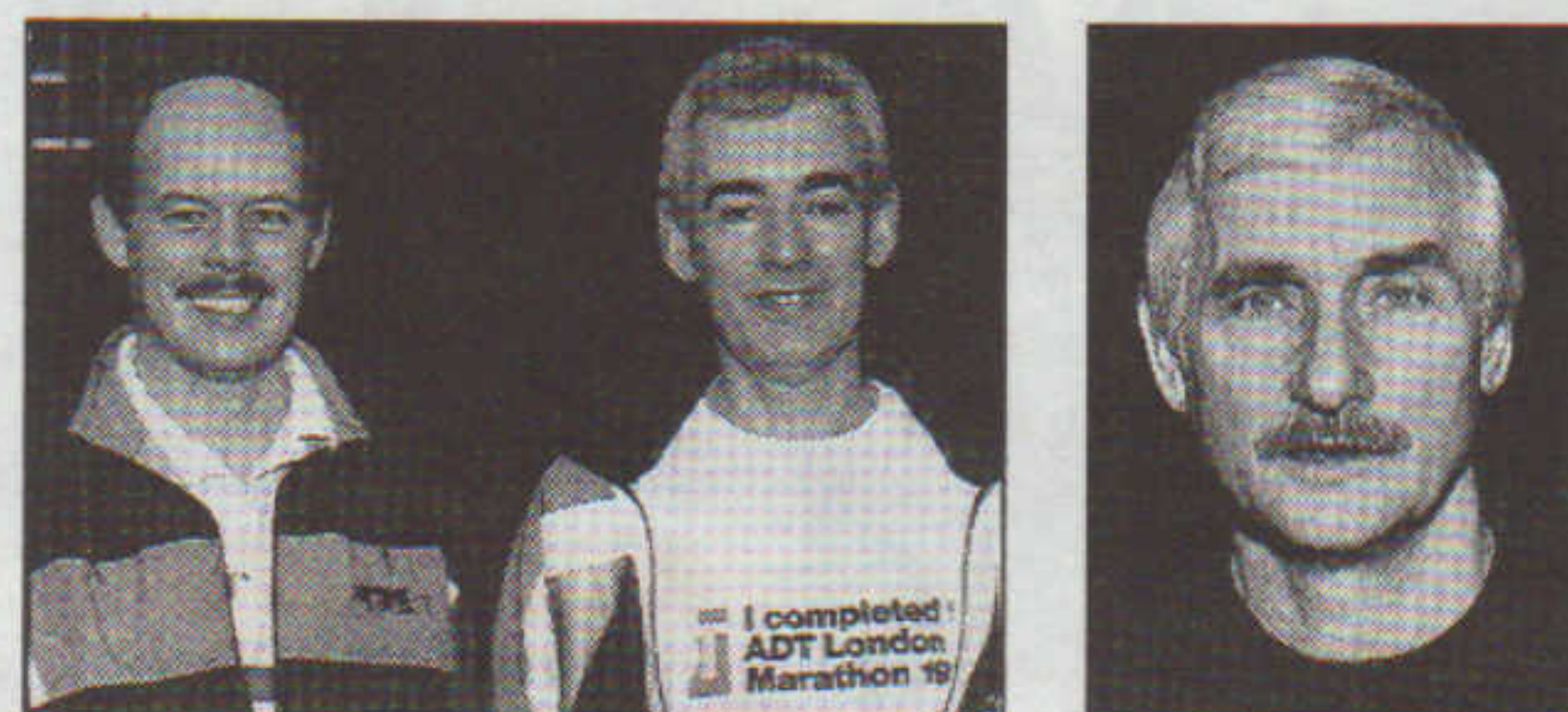
1	2	3	4	5	6	7	S	8	9	10	11	12	13
14	15	16	L	17	18	19	20	21	22	23	24	25	26

Name .....

Phone .....

Department .....

## Capital effort for Tim



Tim Bell (left) with Bill Wilsher and (right) Reg Foster

FOR the first time, Tim Bell has been lucky enough to be selected for the London Marathon.

This year he will take his place alongside Bill Wilsher, on his fifth run, and veteran (in marathon terms) Reg Foster, who will be participating for the sixth time.

All three hope to raise money for charity through their efforts. Tim in is M building, Bill in E building and Reg, who is hoping to top the £1,251 he raised last year, is in D building. Please sponsor them if you possibly can.

## Stumped for action?

NOW is the time for the budding cricketer to press his whites in readiness for the forthcoming season, which starts in early May.

If you are interested in playing in the weekend and/or midweek inter-depart-

mental games, you should contact Andrew Oakley at EEV, ext 3311.

Indoor net practice is currently being held on Thursday evenings between 7 and 8pm at the County Ground, Chelmsford.

## You can bowl along . . .

A NEW ten-pin bowling alley is now open on the Widford Industrial Estate.

The Superbowl has 36 lanes, a bar and a fast-food restaurant.

If you could get a team together, the league secretary will suggest one of a number of leagues you can join to suit your level of com-

petence. League members, of course, are sure of good, regular games in reserved lanes.

The Superbowl has a club whose members enjoy various benefits and discounts.

Ken Laundon on ext 3038 or the Superbowl on Chelmsford 355249 will provide further details.

## Then there's aikido . . .

AIKIDO, a martial art from Japan, was originated by Morihei Veshiba after many years of research, practice and development.

As suggested by its name, which means 'the way of spiritual harmony,' aikido is the art of coming to unity with nature.

It is a weaponless system designed solely for self-defence. It is essentially non-violent and, as conceived by its creator, non-competitive.

Force is never opposed by force. By means of circular movement, an attacker's force is diverted and turned back on himself.

When the continuity of such circular motion is maintained, the grace and rhythm unique to aikido appears. A variety of techniques may be applied to the attacker's wrists, shoulders, neck, knees etc, but although these can be extremely painful and induce immediate submission, they are not aimed at causing injury.

Since the techniques do not call for physical strength, aikido is practised by men and women of all ages and builds. And because it is based on full and natural body movement, it exercises every limb and joint. Flexibility, muscle tone, co-ordination and quick reaction are all developed.

Aikido is an excellent way of restoring and preserving a supple, healthy body.

Further details are obtainable from Eric Grillet on ext 2041.



## Sky-high readership!

Is there no limit to the devotion of our readership? Mark Stenhouse, systems analyst in IT Department, takes time to scan the pages of *News and Views* while

suspended by a thread halfway up a mountain. The picture was taken by personnel officer Andrea Peters during a week's break in El Chorro, Analucia

# TOP IDEAS BRING REWARDS

## *But what about safety!*

**TWO awards have been made recently under the Ideas and Improvements Scheme.**

The Managing Director's Award of the Year for 1991 was presented to Ken Sims, of section 180, by Brian Loader, while the award for the best Quality idea was presented to Dave Smith, of section F120, by the director responsible for quality, Barry Pettican.

Unfortunately, there was no award for the best safety idea, since no qualifying ideas were received.

Ken's suggestion was prompted by the need for a large number of connections to be made using IDC connectors. Using a standard tool was awkward and tiring, since some of the connections were overhead in cabins and had to be terminated in position.

Ken designed and made a hand-tool for the job in his own workshop. Further tools have been made by the company.

His special award consists of a weekend away for two, anywhere in the UK.

Dave's suggestion has tackled the very real problem concerning the control of shelf life items, the monitoring of which has for some time demanded a considerable amount of QA effort. His suggested control procedures are being introduced in a modified form and will result in several benefits, including cost-saving, greatly improved quality control and stricter adherence to COSHH regulations.

### Surprising

Dave received a gift voucher to the value of £100 to be used at a local store.

Congratulations to both of them!

While the company is justly proud of its safety record, it is perhaps surprising that we have not been able to identify an idea for the Safety Award of the Year in either 1990 or 1991. Maybe there is a challenge here . . .

In total, we made eight awards in 1991, against 13 in 1990. Do not hesitate to put forward ideas that you feel would benefit the company.

It is recognised that in a high-technology environment such as ours, it is part of many people's jobs to have ideas. Nevertheless, there is plenty of scope for improving the way we do things, producing higher quality products, making them safer for our customers and making our surroundings safer for ourselves.

## President Alan Site manager heads up commerce group

ALAN Thorogood, Marconi Radar site manager, was recently elected president of the Chelmsford Chamber of Commerce, Trade and Industry, thus taking his place among Chelmsford's leading citizens.

- Some 300 organisations in the town are members of the CCTI, and it is not difficult to identify the practical benefits they derive from membership.

- One of the major services they are provided with is a constant up-date on relevant legislation.

- They are also assured that their views are known to the local council, with whom the CCTI board of directors liaise in such matters as the pedestrianisation of the High Street, the establishing of bus routes and other matters that have a direct bearing on members' interests.

- It is also through the CCTI that agreement is reached and arrangements made when such things as street decorations at Christmas need to be decided on.

- We are proud to have the president of this prestigious organisation in our midst, though it will not be for long. Alan departs from Writtle Road in April to take up his new appointment as general manager site services in GEC-Marconi Communications at New Street.



## 40 years strong . . .

ELEVEN more members of the company recently joined the ranks of those who have served Marconi for 40 years. Presentation of the awards was made by Brian Loader at a dinner held in the Pontlands Park Country Hotel. Those concerned are Patrick Black, John Coker, Tony Collins, Cliff Crane, Cyril Eves, Brian Kendon, Roy Lucking, Tony Manson, Peter Moulton, Pat Nicholls and Robin Reynolds.



Left to right are Barry Pettican, award winners Dave Smith and Ken Sims, head of Quality Peter Matthews and Brian Loader.

CHELMSFORD  
**NEWS AND VIEWS**  
Marconi

### Next issue:

Copy date for inclusion of material in issue number 49 of *News and Views* will be 16 April 1992 and the newspaper will be distributed on 8 May 1992.

Published by  
**Marconi Radar Systems, Writtle Road, Chelmsford.**  
Edited and produced by the Publicity Department.

Tel: Chelmsford 267111 ext 3112.

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The opinions expressed in the publication are those of the author(s) and are not necessarily those of the company.

Designed, typeset and produced by  
AB Consultants Ltd,  
120 Wootton Street,  
London SE1 8LY.  
Tel: 071 928 1424