

CHELMSFORD

# NEWS AND VIEWS

**Marconi**  
Radar Systems

ISSUE 5

APRIL 1983

OROE.

## HOW ARE WE DOING?

ORDERS received this financial year now total £80 million and our order book now stands at £220 million.

Sales for the year so far are £50 million and are expected to reach £65 million.

Although our order book is high, it covers long term contracts which have trading spread over a number of years. We are, however, hoping to gain new contracts in the next few

months which will fully take up our manufacturing capacity.

Engineering recruitment is beginning to improve slowly, in order to provide additional effort to meet our heavy development programmes.

**Hands off our phones ET...**

Following the plea in the last issue of News and Views, for all readers to be economical with the telephone, British Telecom have fought back with further incentives and price freezes to encourage us to use the 'phone more.

I also see that they have also enlisted the aid of extra-terrestrial creatures in their campaign to push their profits even higher.

E.T. phone home indeed! Not on our phones you don't!

Rod Challis,  
Chief Accountant.

# OPEN FOR ALL!

## FLASHBACK TO PREVIOUS MARCONI RADAR OPEN DAYS



## JUNE 25 IS THE BIG DAY

FOR THE first time since 1978, the gates of Writtle Road are to be thrown open to the public. On June 25th we will be holding an open day for your families and friends, so that they can come and see just what we do here at Writtle Road works.

The organisers of the open day tell us that they hope to have displays of finished equipment, visits to some of the machine shops and assembly areas and exhibitions of models and photographs of company products, together with films and other attractions.

They are, however, still investigating numerous ways to make it an enjoyable visit for all concerned and would like to hear from you if you have any bright ideas on how to make the open day a great success.

Perhaps you would like to participate? Many guides and other forms of assistance will be required.

If you have any ideas or wish to help, please contact Brian Edwards the Personnel Manager who is in charge of the organisation of the open day.

His address is:  
Brian Edwards, Personnel Manager, 'B' Building, Writtle Road. Telephone extension: 2101.



## It's the James Bond connection

THE company is frequently asked if it can provide photographs and suchlike for use in textbooks, exhibitions, and also other firm's promotional literature.

Generally the answer is yes — provided that we are satisfied that the request is bona-

fide!

Recently we had a rather "out-of-the-ordinary" request. We were approached by an Elstree film company asking for help in providing specialist radar pictures for use in a film that is currently being made. The film in question being "Never Say Never Again", the latest James Bond epic.

The request was at very short notice, the organisation which had previously promised assistance withdrawing at the very last moment. Luckily — for the film makers, that is! — we were in a position to help, having suitable equipment available.

The requirement was for a series of shots (note the use of technical language!) showing a PPI display tube with tracks of an approaching aircraft. Our display room E515 is highly suitable for this sort of purpose, as it includes an air traffic control complete with PPI display.

The film people duly arrived at about 11am on Wednesday the 11th of January, three of them, complete with equip-

ment, packed inside a Range Rover. The three were Brendan Alimo, the technical advisor, together with Rob Dickinson and Ira Coleman, who did the actual filming.

On arrival in Room 515, the trio got down to work, ably helped by Peter Jefferies and three of his men, Richard Austin, Steve Castle and Robin Searle. The camera used was a video type, apparently ideal for the intended purpose. The sequence lasted pretty well all afternoon, the Elstree people departing after 5pm.

Ah! You ask — that's all very well — but what does Marconi Radar gain from all this? Nothing concrete, of course, but on the Public Relations side, our "image" gains a boost and we also gain the possibility of a reciprocal favour if we should need one. Also, several of our people were invited down to Elstree to see the film being made. Another advantage is that we get some of our equipment featured in a major film — which can't be bad!

## Jumping for St John

FOUR brave and foolhardy members of Marconi Radar have volunteered to make their first parachute jump to help to raise funds for the Marconi Division of St John's Ambulance.

The four prospective parachutists are Steve Traynor, an analyst programmer from Data Systems Division, Michael Turner and Simon Pearson, both electronics engineers in G building and Colin

Brown, a production engineer in A building.

The four will join 21 others on the sponsored jump, which will be made from a height of 2,000 feet above Ipswich Airport on a Saturday or Sunday late in March.

### TRAINING

The jump will not be made completely 'cold', as eight to ten hours training will be given before the event.

All will be looking for sponsors and it is hoped that friends and

colleagues will rally round to support the good cause.

The Marconi Division of St John's Ambulance undertakes a large number of entirely voluntary first aid, ambulance and nursing duties at a wide range of events such as motorcycle grass track meetings, horse shows, etc., in addition to providing cover at the Writtle Road works.

The Division bought and also maintains the ambulance that is based at Writtle Road.

This costs a great deal of money and the Division is grateful for all the help it can obtain in fund raising.

### ORGANISER

The organiser of the sponsored jump is Peter Weathersby of Data Systems Division, extension 2348. Peter will be pleased to hear from anyone interested in "jumping for St John" and who can obtain their own sponsorship, for another jump being planned for May.

The essential equipment for a surveillance radar comprises a transmitter, an aerial (usually common to transmitter and receiver), a receiver, some form of signal processor and finally a display on which the radar information is presented to the operator. The display is thus the final link in a chain of electronic equipment and to use fashionable jargon is the main "man/machine interface".

Figure 1 shows an early range display as used on the pre-war CH stations where radar echoes were presented as downward vertical deflections from a horizontal trace calibrated in miles. Such displays were based on the already established circuit techniques for using cathode ray tubes in television (remember, in 1936 we were the very first country in the World to have a public high-definition television service).

Although it was necessary to view the CH radar screens under dim lighting the trace was very finely focused and permitted experienced operators to assess the number of aircraft flying in a formation — a feature which is hardly possible even with modern radar. However, bearing had to be found for each echo by manual operation of direction finding control (Goniometer) so the overall process was somewhat slow.

### ECHOES

In the early war years the first plan position indicators (PPI's) went into service; these, as the name implies, give a total presentation of the area surveyed by a radar. Echoes appeared as bright-up

# The final link in the chain

by  
Colin  
Latham

## The story of Radar D. for display

marks on a trace rotated about the centre (like the hand of a clock) by deflection coils behind the screen, placed around the neck of the cathode ray tube and mechanically driven from the rotating radar aerial (see Figure 2). Later the deflecting coils were rotated by electro-mechanical links (old hands will recall the "Selsyn" system), until in the early 1950's work commenced in Marconi Research on development of the so-called "fixed coil" display.

This enabled a rotating trace to be produced by suitable electrical waveforms applied to non-rotating coils and opened the way for the presentation of additional information and symbols on the radar screen such as identification markers, area maps, etc.

From this moment radar displays became altogether more effective for air defence

and ATC operations, it became easier to link together several displays and to improve the co-operative working between a team of operators.

In the early fixed coil display installations the "back-up" equipment which generated deflection waveforms and symbols used valve circuits and far exceeded in bulk the displays themselves, but in recent years advances in transistor technology and miniaturised circuits have enabled much, if not all, of the "back-up" to be built inside a table-top display, such units being known as "autonomous displays".

### SUPREME

Despite many improvements, the principal component is still the cathode ray tube and although there have been ideas for other forms of display (e.g. plasma and electro-luminescent) it still reigns supreme and appears likely to do so for the rest of this century at least. A lonely thermionic survivor in a solid state age!

Most radar displays, whether they operate directly from received radar signals or

from synthetic digital signals formed by plot extractors are "stroke written" i.e. the electronic beam is moved directly to trace out the shape to be presented to the viewer. Nevertheless there is now increasing interest in "raster" displays where, as in television, the spot traces out a standard background of lines on which the picture is imposed. This system has some advantages, particularly where a colour display is required under conditions of high ambient lighting and the essential problems of storing vast quantities of picture elements (pixels) are being overcome by employing modern digital computer techniques. No doubt we shall see an increase in the use of raster displays for radar in the next few years.

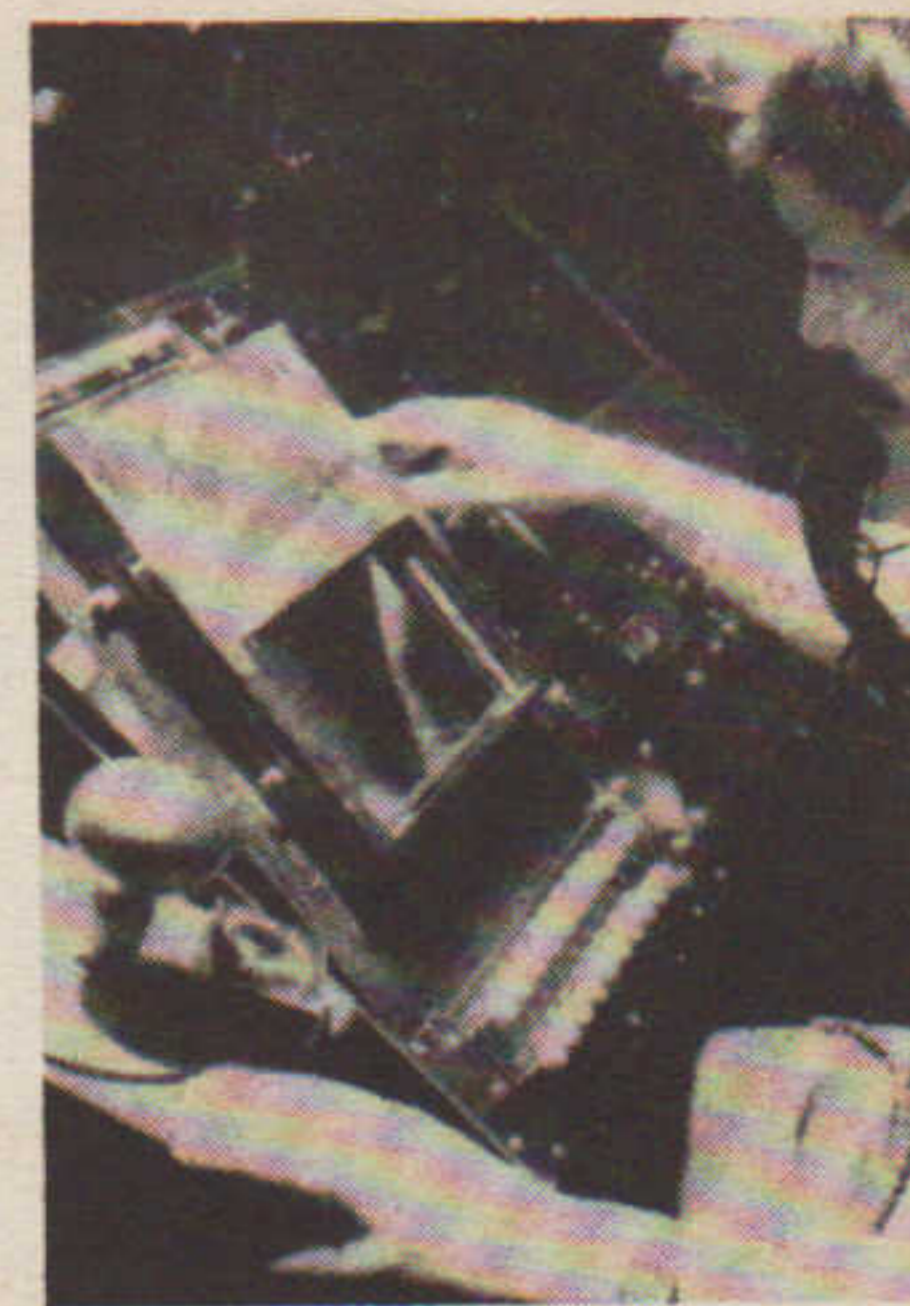
### COLOUR

Stroke and raster displays are available in monochrome or colour but, somewhat surprisingly, both civilian and military authorities have not shown themselves to be quick in exploring the possible operational advantages of colour.

Our Company has a long

history of radar display design and an excellent reputation for reliability and performance. Figure 3 shows one of our large multiple display installations (e.g.) Scottish Air Traffic Control Centre).

At the present time development work is in hand to complete the design of the very successful Astrid display system which has been on demonstration at Rivenhall throughout the past year; it has been ordered in quantity by the Ministry of Defence, and will be the principal display system to be offered with the new S511 Airfield Surveillance Radar.



More developed form of CH display used throughout the war. (Figure 2)



Range display in operation at experimental CH station just before the war. (Figure 1)



Scottish Air Traffic Control Centre. (Figure 3)

# OBOE hit right note

by  
Bruce  
Neale

MUCH has been written about the German wartime navigational "beams": "Knickebein", X Gerät, Y Gerät. What is not generally known is that the British, always reluctant 'heroes', had a precision, blind-bombing system in operation from 1942 until the end of the war that was far superior to anything the Germans had achieved.

### THE PROBLEM

Air navigation at the beginning

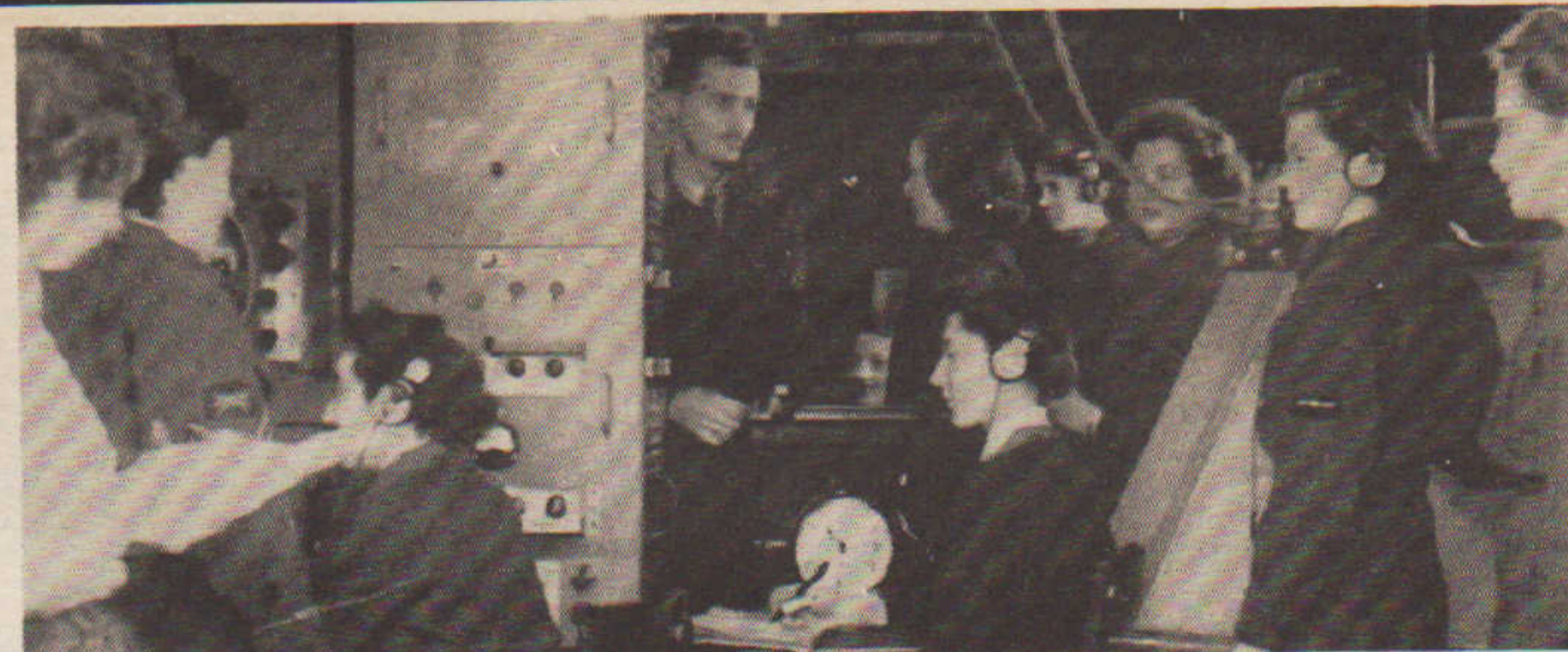
of WW2 was primitive to say the least; relying on the stars, dead-reckoning, visual sightings and some elementary radio aids. Analysis of 'bombing effectiveness' over the first two years of the war makes depressing reading; for example, less than 10% of all bombs dropped on the Ruhr fell within a five mile radius of the aiming point and probably less than 50% within 25 miles, many on the wrong target! Because of the industrial haze that normally enshrouds the Ruhr Valley, Essen, the armament centre of Germany, including the giant Krupps Works, emerged virtually

unscathed despite the regular attention of Bomber Command.

In the early war years, bombing was considered by Churchill to be the only practical way of striking back hard at Germany, land invasion being out of the question at that time. However, without an effective means of all-weather night-and-day target location, plus precision bomb aiming, the enormous expenditure in lives and hardware would be in vain.

### THE SOLUTION

In 1942-3, thanks to the timely emergence of three groups of



Target for tonight: Essen 1943. WAAFs setting up the target with Bruce Neale in the background.

elegant hardware, plus the courage, skill and dedication of the airmen, the bombing offensive against Germany assumed a new and devastating role and Bomber Command became the most potent instrument of war ever conceived up to that time.

Whatever its armchair critics — and there are many of them — say today with the benefit of hindsight — (an exact science) — Bomber Command was the major contri-

butor to the ultimate defeat of Germany.

The major groups of hardware were:-

1. Radar Navigational Aids: GEE (7K) OBOE (9K) H<sub>2</sub>S
2. Aircraft: Mosquito, Lancaster
3. Target Indicators (Precision Ballistics): Ground Markers, Sky Markers.

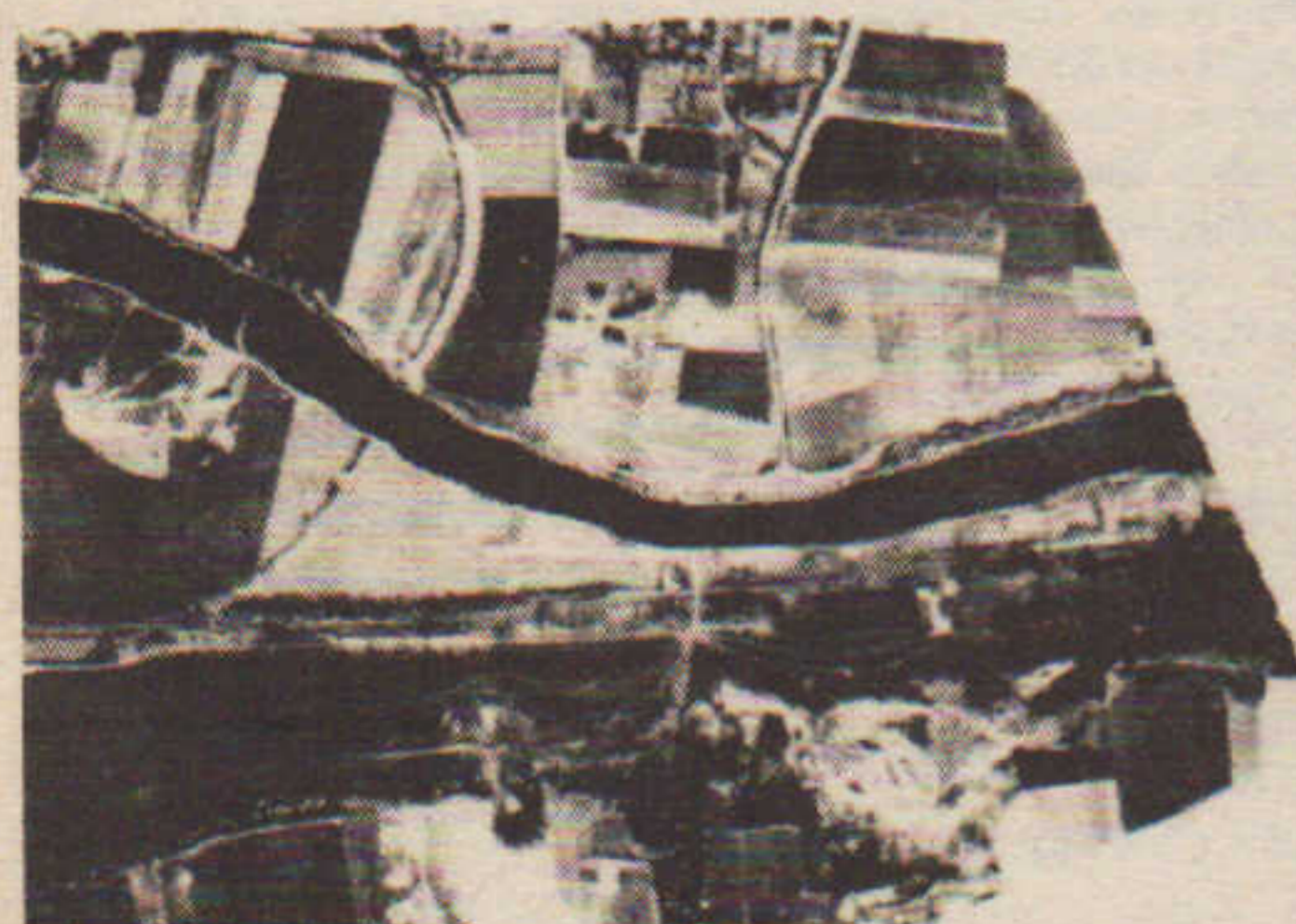
plus, on the operational side, the formation of the Pathfinder Force,

an elite, specialised group of aircrew and ground staff under the powerful leadership of Air Vice Marshal Don Bennett.

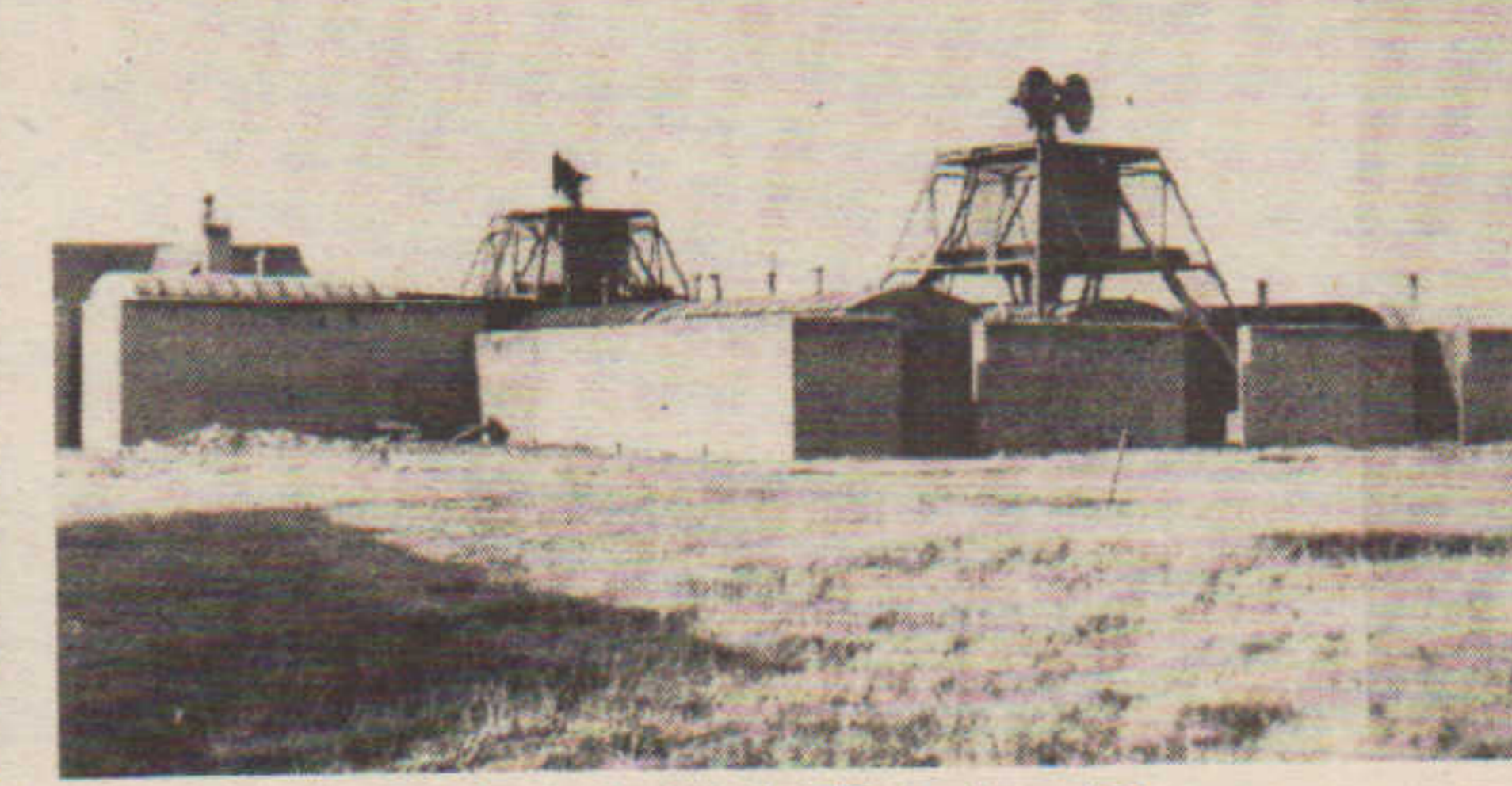
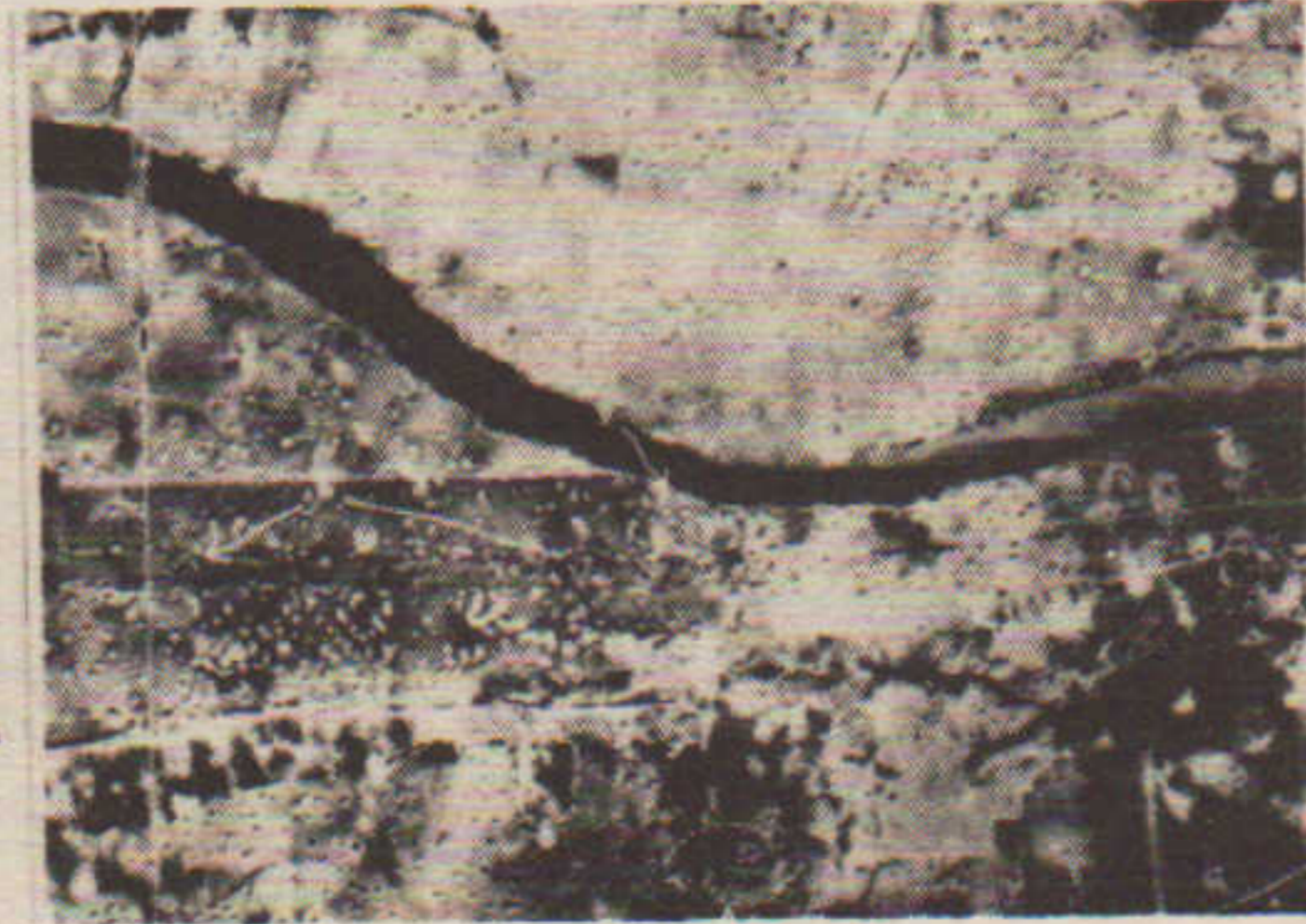
Oboe was a target marking system, ground controlled from the U.K. It had a minimum theoretical error (assuming that all other error contributions, viz: Met, ballistics, target data, were zero) of  $\pm 17$  yards when the target indicator was dropped from a height of over 32,000 feet out to a range of over 250 miles from the U.K. ground stations; the range limit being just beyond the ground station radar horizon.

The target indicators laid by Oboe Mosquitoes achieved consistent accuracies of between 50 and 100 yards and, in many cases, were within 30 yards of the aiming point, in  $\frac{1}{10}$ ths cloud, enabling the 'heavies' to follow up with 4,000 lb. 'Cookies', 12,000 lb. 'Tallboys' and 22,000 lb. 'Grand Slams' with deadly consequences.

The next issue of "News and Views" will attempt to describe the inner workings of this truly remarkable system.



The supply dump at St. Lea D'Esserent before and after an OBOE raid, 1944.



OBOE — quiet but deadly! (Winterton IV).

Over the years, it has seemed to me, our local council has adopted a somewhat negative attitude towards motorists. As a town, Chelmsford has not a great number of public car parks, compared, for instance, with the neighbouring town of Colchester. And while Colchester seems to be always increasing the number of its car parks, Chelmsford's parking facilities have remained static for many years.

The council also has a habit of banning parking on streets where it was previously allowed, and of allowing parking on portions of a street — and, for no obvious reason, banning it on the rest. This, of course, makes life very frustrating for the distraught motorist. Also, there are now a very great number of parking places for the disabled around the town — some of them in places rather a long way from the shopping areas! This may be a calculated plan, of course — if the disabled don't use the places, no one else can!

Many places seem to regard motorists as a positive pest — and a pest that will probably go away if life is made difficult for it. Unfortunately this is not so. Motorists are now a very necessary evil,

# VIEWPOINT

for with all the out of town shopping estates and the lack of public transport, motor cars are — at this time — indispensable. In the future things may change, but at the present time, we are lumbered with the expensive and smelly automobile.

Recently, the council made threatening noises about the so called 'rat-running' in roads adjacent to Moulsham Street and how they had plans to make certain of the streets into one way only to stop this. This was to stop folk from taking short cuts — and taking the load from the main streets. Apparently it was not fair to the inhabitants of dwellings

along these 'rat-runs'.

But what about the people who live along Moulsham Street, along New London Road, and along other main arteries around and about Chelmsford? Don't they also deserve some relief from the rush hour traffic? Why just a few side roads adjacent to Moulsham Street?

By the way, who is it who has taken to calling us motorists 'rats', anyway?

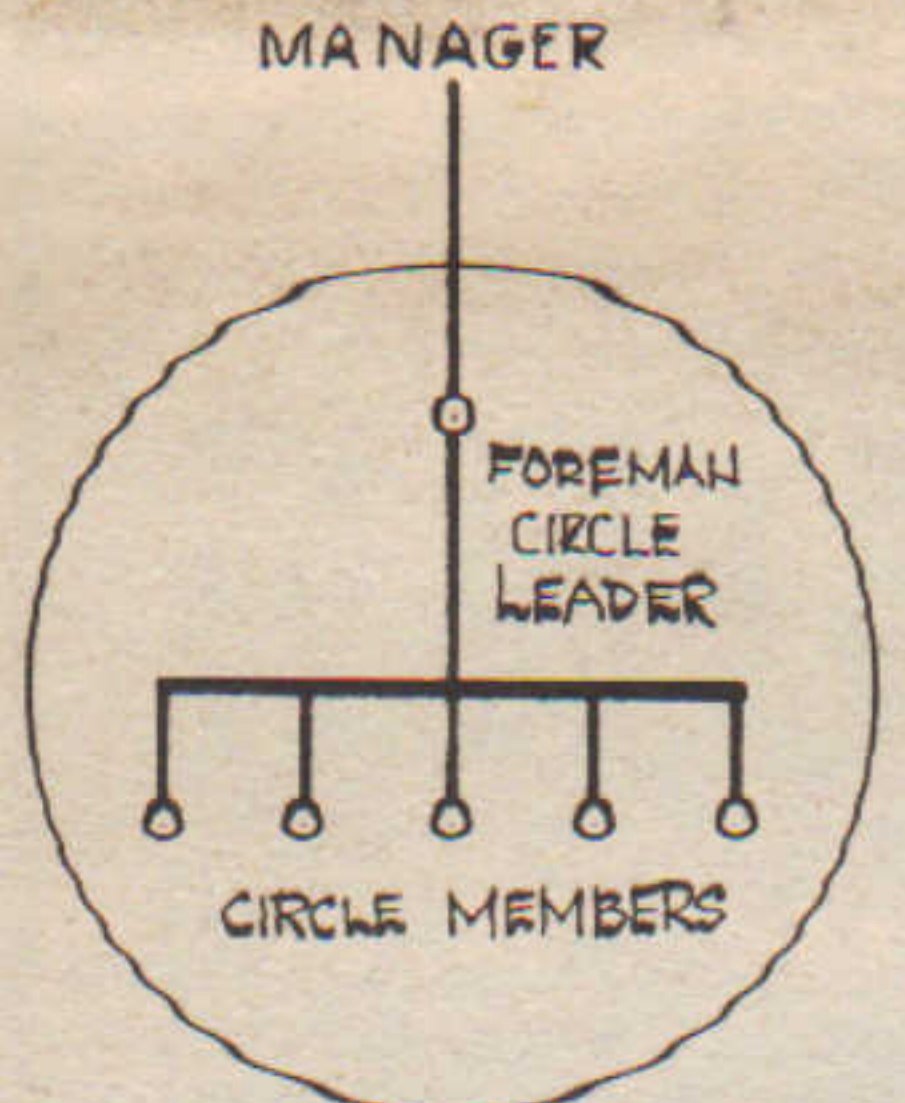
Concerning the ever changing parking facilities around the town, have you ever stopped to think just why some streets become no parking areas — while other mysteriously revert to parking? I believe that the reason was adequately covered by Professor Parkinson in one of his penetrating books on the strange habits of the bureaucrats.

The Professor defined it very well. Apparently a bureaucratic official can never stand still — to justify his position he must for ever go on making changes. New regulations must be defined and promulgated. No matter if a lot of them only make things worse. For, if the perfect solution is ever found, the official is no longer necessary.

# A CIRCLE OF QUALITY

Since my article in the previous issue of News & Views a number of people have asked for more information on the Circles and the way they fit into our activities at Writtle Road.

Let us start off by looking at a chart of the organisation of Quality Circles:



So far it looks quite simple. A Circle consisting of people doing a similar function under their Foreman or Supervisor. The

members during their working time noting inadequacies which if changed would improve the efficiency of our factory, the reliability of our equipment, the meeting of our delivery dates, the ability to perform to the agreed specification, the keeping of costs to a minimum, in fact, all those things which when we purchase an item ourselves we expect our Supplier to meet.

The circle itself sifts and debates proposed changes until it is satisfied it has the best possible answer to a problem. It then proposes the solution to its Manager.

The Manager will then consider the proposal and if sound and beneficial he will agree and implementation takes place.

The Circle activity does not end there the final requirement being for the circle to monitor the effect to ensure the gains that were expected are realised.

Nothing there to change the world you might think, but look just a little deeper.

The old method of trying to get improvements made was with groups or parties etc., meeting Management and passing over complaints and moans and expecting something to be done quickly.

This was not always possible and as the list of complaints increased so the groups became more and more disillusioned. Just as bad, action could be taken quickly in the hope of clearing a complaint only to find the cause had not been correctly diagnosed and the problem remained.

With Quality Circles we have people at the grass roots looking at the difficulties experienced by themselves and their section and after careful consideration suggesting ways of making improvements. All the circle members learn a little more about the running of their section while the initial complaint has been changed into a well considered proposal.

The Foreman or Supervisor in leading his circle is carrying out his duties in the best possible way. To achieve the best result the Leader must guide the circle as they come to snags and difficulties. At the same time the Leader keeps in contact with his Manager who then becomes aware of problems under discussion and can give any relevant information to the circle on the subject.

Managers are only too glad to see a well considered improvement presented by the circle. It does not matter that the suggestion may only produce a slight improvement. Each implemented proposal is one less problem to cause delays and frustrations, and, as we are finding out ourselves, often what is considered to be a large insurmountable problem turns out to be a large number of small problems.

Finally a word of congratulations to the Wiring & Assembly Circle who have been awarded the Top Circle Award, which will be held on a three-monthly basis. The implementation of their suggestions to locate a store area for tools in "E" Building, to avoid the time-wasting walk to "A" Building, plus the location of commonly used items on the shopfloor has resulted in considerable benefits.

Thanks to all the other circles who all came forward with worthwhile suggestions. The competition for the award will be greater next time as circles from the Test Area plus Planning and Order Control join the five others already operating.

F. G. Perry  
Quality Circle Co-ordinator

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Quality Circle Co-ordinator

# The way to sickness pay

You are, no doubt, weary of hearing that, as from 6 April 1983, payment of Statutory Sick Pay (SSP) by the Company will for the vast majority of employees replace the present state sickness benefit system for the first 8 weeks of sickness in a tax year. It will be paid as part of your salary if (as almost all MRSL employees are) you are entitled to be paid your salary while you are off sick.

If you are being paid SSP, you will not be able to claim State Benefit and there will therefore be no Giro cheques to hand in to the Company.

If you are excluded from entitlement to SSP (or have exhausted your 8 weeks' entitlement for the year) you will need to claim State Sickness Benefit as you do now for any periods of sickness lasting more than 3 days and hand any benefit you receive into the Company.

If you are not entitled to SSP, you will be informed of the fact through your manager by the Payroll department.

When you return to work, you must complete one of the following:-

- A Flexible Working Hours Adjustment form (if you are on Flexible Working Hours)
- An Absence Advice form (if you are on "traditional staff" but not on Flexible Working Hours)

OR

A Shop Floor Self Certification form (if you are a Shop Floor employee) — please note that this is not a requirement for Shop Floor employees if the period of illness has been 3 days or less.

If you are Not Entitled to SSP

You must also:-

- Claim State Benefit, using the form which will be supplied by the Payroll department
- Hand in any benefit you receive to the Company, as at present.

Two Important Points

Married women who have opted to pay reduced rate National Insurance contributions will be entitled to be paid SSP by their employers, although they will continue to be ineligible for State Sickness Benefit.

Industrial Injuries

Industrial Injury Benefit will, after 6 April 1983, no longer exist separately from normal Sickness Benefit. SSP, where it is payable, will cover both.

It is, however, important that you report to the Company Safety Manager, Mr Ken Gamblin, any sickness which you believe to be due to an injury while working, or to be prescribed industrial disease.

# Industrial service



Each year an invitation is extended from the local parish church at Widford, to local industry in the area to join together for a lunch time Carol Service. Marconi Radar, Marconi Marine and English Electric Valve are among the main supporters as well as others from the Widford Industrial Estate; you may therefore find some familiar faces in part of the congregation shown here.

Representatives from the main industries participate in the service which is conducted by the rector the Rev. John Carr who, with his predecessor has been instrumental in arranging this annual service, which is very much appreciated.

The celebration here of the Christmas story is a remembrance of an historical fact, however its full

meaning and significance involves faith. Marconi himself recognised that man is more than body and mind, but is also spirit, which involves faith. To quote his own personal testimony "Every scientist knows that there are mysteries which science will never be able to solve, but Faith alone.

Faith in the supreme Being whose rule we must obey, can help us to face with courage and strength the great mystery of life. It is a mistake to believe that faith and science can never exist together. Science cannot kill faith, the two stand side by side, for there are boundaries beyond which faith alone can sustain and compact us. I am proud of saying I am a Christian and a believer. I believe in the power of prayer". (Christian Herald).



Mr. R. J. Scott is shown presenting the Top Circle Award to "Twig" Willis — Leader of the winning circle from the Wiring and Assembly Area Section 182B. Others in the picture from left to right are M. Digby — B. Hunt — J. Clayden — T. Harris — N. Frosdick, all Circle members and G. Cooper — Storeman. K. Sims and D. Skingley also Circle members, were unable to be at the presentation.

This is the first time the award has been given and Section 182B are to be congratulated on their winning proposal to extend their small store area in "E" Building to include a wide variety of commonly used tools. This has resulted in considerable savings by eliminating the six minute walk involved when previously obtaining tools from "A" Building store.

Although not a member of the Circle team G. Cooper was included in the presentation photograph at the suggestion of Mr. Scott for the excellent organisation and running of the store area involved.

The award will be held for three months when section 182B will have to overcome opposition for six other Circles if they wish to keep their hands on the trophy.

Well done!

# MANAGEMENT OF MANUFACTURE

OVER THE next few issues of "News and Views" we in the Works will attempt to explain the mechanics of a division of some 900 people — how it functions — who does what — its information needs — and show you some of the products.

In general terms, we rely upon data from other areas. Specifications from Engineering — cost and delivery targets from Project Managers — contract and quality conditions from the R.O.A. meeting and, before we can start production, raw materials from Supplies. We have our own Planning, Production, Production Engineering, Inspection and Test. Each area supported by Material Handling, Stores, Maintenance, etc. Within these general areas there are specialist activities like encapsulation, test jig manufacture, fibre glass moulding and chemical analysis all contributing towards an integrated, responsive and capable manu-

BY ALAN SHELLEY, WORKS MANAGER

facturing facility.

The management of manufacture has to recognise the different needs of established designs and development in parallel. Knowing whom to contact is probably half way towards the solution of any problem. It is claimed that the close liaison of a development workshop, where engineers can evaluate their designs, is lost in a factory where known faces are diluted by unknown. The system is blamed for many deficiencies. "Cappac" in "G" building is almost a swear word.

The adjacent family tree shows the departmental management structure of the factory. In a series of articles by these managers we hope to introduce you to people, put names to faces and job titles, explain the "system" and outline the needs of production, such that decisions taken in "G" building do not appear unilateral to those trying to implement them. Better understanding and closer integration is our aim.

These managers and their staff apply project management techniques into the manufacturing areas with the twin aims of meeting targets of cost and delivery. Their activities in meeting these aims, bring them into contact with many other departments. It is these relationships which have to be nurtured and the results will determine to a large degree the success or otherwise of the production operation.

To describe precisely the role of project management is akin to the proverbial piece of string. They have a responsibility across all manufacture, to collate priorities, ensure that design data is available, assess the impact of changes, review the plan when outside influences indicate imminent collapse and generally "oil the wheels". But whatever their activity, it is towards those twin aims of meeting cost and delivery that their efforts are directed.

Further articles by my colleagues in this series, will show the progress of contracts through the manufacturing phases. It is certain that there will be reference to the P.P.D. and its impact upon the management of manufacture.



Alan Shelley  
Works Manager



John Arrowsmith  
Industrial Engineering  
Manager



Tom Burke  
Production Programme  
Manager



Alan Thorogood  
Quality  
Manager



Alan Adams  
Works  
Accountant



Eric Elliott  
Material Control  
Manager



George Mott  
Production  
Manager

# CONTROL OF MANUFACTURE

IN THIS, the first of a series, I would like to introduce you to the various activities that make up the Production Programme Department (P.P.D.) and how these activities all inter relate with other departments both within and without the factory.

The P.P.D. consists of three major groups: Estimating, Project Management and Planning, and in the ensuing article I will attempt to illustrate how they, together with others, control manufacture.

Although, for practical purposes, the responsibility for the control of manufacture is vested

in the P.P.D., in reality, control is applied by all the Works Departmental Managers and collectively they encompass all aspects from planning through to final test, packing and despatch.

The P.P.D. becomes involved very early on at the tendering stage of a contract through the Estimating Group managed by Les Biggs. These are the people who have the unenviable task of putting a price to the cost of making the Company's many and varied products.

The estimators examine all aspects of equipment manufacture irrespective of complexity, size or quantity and calculate the works cost price of labour and material.

The importance of this activity can be highlighted by remembering that our final selling price to the customer is a derivative of these figures. Our accuracy and

BY TOM BURKE

judgement at this activity will have a significant bearing on our competitiveness in world markets.

Estimators have to be aware of a variety of different aspects including projected annual inflation rate, variation of price clauses, contract conditions, manufacturing technology, etc. They are closely involved with Purchasing, Planning, Production Engineering and Design.

Often an estimate, disguised under the term "budgetry" is nothing more than a guess based on some engineers' conceptual ideas still in the embryo stage of his thought processes. Quantities have a major impact upon works prices. Set-up or "prep" time is

frequently the same for one off as it is for 50.

The material content of our prices is heavily influenced by Purchasing's ability to squeeze the suppliers with larger orders. These and other factors, have to be weighed before committing the works cost price to paper. The lines of communication between engineering, purchasing and production, improved by the move from Baddow, need to get closer.

Our competitive edge is initially sharpened by the estimating activity and we need to be constantly honing it for better prices by all means at our disposal.

In the scheme of things, the Planning Department, led by John Benbow, is triggered by a Work Requisition. These documents, outline the quantities of equipment to be manufactured and the target delivery date.

This data forms two of the four key pieces needed before planning can commence. Production Engineering with the operation sequences and time cycles plus Engineering with the drawing and item lists complete the other 2 essentials. These four pieces of data are the life blood of "Cappac" (Computer Aided Planning Production and control) Cappac can be likened to a typewriter with a memory.

It needs the target delivery date and then works backwards, sub-tracing all the operation times allocated by production engineering. It prints out purchase demands and work tickets and will finally tell when to commence manufacture to meet the delivery requirement, with the minimum of W.I.P. Investment. Obviously this is a complex activity but contrary to popular belief, it is flexible and can be

manipulated to reschedule when priorities change, it can handle design changes and prints out Work-To-Lists which factory supervision use for progressing work.

A by product of its capability is that it will add-up all the ticket times for sections, departments and factories and enable management to judge the capacity needs to meet the work load. However, all this still needs the initial four pieces of key data of which by far the most important are the design drawings and item lists. Without these, or reasonable facsimiles, planning is restricted, purchasing difficult and production constrained.

Planning is very conscious of the various projects passing through the works. But having set up the plan, produced the tickets and informed purchasing of the needs, the third major group in the P.P.D. then take this plan and progress it. To imply that this activity is sequential would be totally wrong, for this third group, Production Project management, have been closely involved with all projects since the estimating stage.

There are three Production Project Managers, namely Bill Cameron, Tony Corfield, and Ken Hurst. Bill has the responsibility for Naval Division, Tony, Airspace Control and Ken for Support Division and various other contracts including those placed on Writtle Road by Leicester.



Les Biggs  
Works Commercial  
Services Manager



Bill Cameron, Tony Corfield and Ken Hurst, Project Managers



John Benbow  
Planning Manager

# Then and now – food for thought

# Scientific mentality

We have two examples of 'then and now' in this issue. The first, taken from a booklet supplied by one of the printers that we use, shows typical prices of food – taken from 1973 let me say! Don't expect to get food at these prices these days... as if you didn't know!

The second picture, provided by Ray Smith of Accounts, 'N' building, shows three of the famous people associated with industry in Chelmsford. The photograph, taken on the occasion of Colonel Crompton's retirement,



shows Colonel Crompton on the left, Mr. Parkinson, (Colonel Crompton's successor as Managing Director) centre and, of course Guglielmo Marconi himself, on the right.

To those who read this article, I hurry to make clear that I don't mean that scientists are mental (at least, not all of 'em). What this article is about is the rather dogmatic views of some of the scientific fraternity.

I have a fairly wide range of interests, among which are History, Archaeology and Palaeontology, the latter 'ology' being the study of ancient life forms.

Now the study of ancient life forms I find quite fascinating. (For one thing, they don't bite). But probably just as interesting is the study of the actual palaeontologists themselves.

What makes this final study so interesting is the fact that scientists are pretty predictable. You find them starting off as 'Young Turks' (that is, Bright young men and women, with sometimes revolutionary ideas), who attempt to stand the scientific establishment on its head with radical new theories.

They fight and fight and (very occasionally) sometimes succeed in getting their new ideas adopted. Unfortunately, what happens afterwards is pretty predictable. With age and acceptance a change occurs.

The bright young things change into the new establishment...

and off they go, defending their now established ideas against the new breed of Young Turks... and so it goes, like the rise and fall of the seas.

One of the theories that spurred me on to write this article, is the one that appeared about ten years ago, in which several young experts, quite independently, produced papers and books attempting to prove that our very old friends the Dinosaurs have been named in a completely wrong fashion.

These theories also appeared on television, always keen to air anything controversial. The heart of the theory is the suggestion that quite a large proportion of the family of Dinosaurs were warm blooded. Very strong facts and evidence have been supplied to back this new theory, by differing people.

And the business of the wrong name? Dinosaur actually means 'terrible lizard'. A lizard is 'cold blooded'. (That is, it needs its blood to be brought up to a working temperature by lying in the sun). Therefore the new theory makes some of the Dinosaurs not to be Dinosaurs at all...

It is a quite revolutionary idea. After all, Dinosaurs have been called Dinosaurs since the eight-

eenth century, so the name has acquired a certain solidarity.

All the 'giants' of palaeontology used the name. All the textbooks use it... So what do we still find? Even after ten years books are still being written trooping out all the old 'terrible lizard' theories... and, after all, the new evidence was pretty conclusive.

A large proportion of the Dinosaur family must have been warm blooded. A final proof? Their descendants are all about us. The birds. And the birds are even more warm blooded than we are.

This hasn't shaken the scientific establishment, however... Try to find a new textbook including the new theory. You'll only find it in the books written by the 'Young Turks' – and they are few and far between. So you can now see the proof of the pudding.

It is almost impossible to change a well established scientific theory, once it gets firmly into the establishment textbooks.

Of course, this is not always so. The newish 'moving plate theory' of how continents and seas are formed has been accepted by a majority of scientists.

But I bet there is still an old boy somewhere who mutters into his beard... moving continents... pish and phooey!

Bill Raistrick

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# Crossword solution

1	M	A	G	N	E	T	R	O	N	I	N	N
	T	11	N	E	O	L	I	T	12	H	I	C
14	I	T	E	M	15	L	E	E	16	T	H	I
17	R	E	C	E	I	V	E	R	19	I	S	H
21	A	N	T	22	23	O	C	25	A	L	E	26
27	D	N	A	28	S	T	A	R	30	T	I	C
	I	33	A	R	T	34	T	R	A	M	35	T
37	A	38	B	39	B	A	40	S	I	N	D	42
43	T	E	R	N	H	A	S	45	46	O	L	D
	E	47	R	A	B	I	T	A	L	I	A	N
49	I	N	S	U	L	T	50	C	51	L	A	R
53	Y	E	S	54	L	O	O	T	55	D	R	Y

● In the Christmas issue, we inserted a crossword puzzle, with the offer of a small prize for the first five correct entries. We weren't overwhelmed by the response . . . actually, no one submitted a solution at all . . . Well, anyway, it saved me the trouble of checking the answers! However, for those who possibly attempted the puzzle, here are the solutions.

Further to my article in 'News and Views' issue 2, I am advised by someone who joined his company as an apprentice in 1936 that the Colonel was not the guiding light.

Apparently one of his managers, Mr. Sowman — a most enthusiastic gardener — devised and planned the layout of a great part of the gardens on this site. Mr. Sowman also arranged for the Chelmsford Chrysanthemum Society to hold their annual shows in the Crompton Social Club, now known as 'Y Building'.

And . . . the tree about which I was uncertain turns out to be a clerodendrum after all.

Japanese Clerodendrum (or Harlequin Glory Bower) *clerodendrum trichotomum*. A busy deciduous shrub growing slow-

# Colonel Crompton's garden

ly to 15 feet and needing a sheltered position. White or pinkish star-shaped flowers in terminal panicles in late summer followed by beautiful tur-

quoise berries surrounded by persistent bright red calyces. Origin — Japan and East China; introduced into Britain in 1893. Christine Merrill

**"WE NEEDED MORE THAN JUST SHEER GENIUS TO CREATE A BRILLIANT NEW ALTERNATIVE TO THE INDUSTRIAL RAG."**

W. J. RAISTRICK?

**A BRAG by Kimberly-Clark.**

● This card was sent to me by a 'friend'. I intend to take it as a compliment. The Editor.

# Back Pain Association

Mike MacKenzie of our systems department, having some acquaintance with the above mentioned organisation, asked them for an article for News and Views. Unfortunately it turned out to be rather too long. However, as it appeared to have some interest, I have attempted to abridge it. Most of us, at some time or the other, have had acquaintance with the dreaded back trouble. . .

## THE GREATEST SINGLE CAUSE OF ABSENTEEISM?

Every working day, some 88,000 people are away from work due to back trouble of some form or the other. Every year, 26,400,000 working days are lost to British Industry, costing around £1000,000,000. All as a consequence of back pain.

Research shows that four out of five adults suffer from back pain at some time of their lives. This is not all that surprising when we consider the kind of lives that we lead today.

We slouch in easy chairs, sit for hours in car seats without any proper support for our backs; we bend, stoop, lift weights that are too heavy for us and in the wrong manner; much of the time our backs are under stress of some kind or the other.

Few people are taught to stand, sit, walk or run properly — and our long suffering backs have to carry our ever increasing weight with little or no support. No wonder that major or minor faults develop in the spine.

## OFFICE STAFF

Office staff often adopt bad postures, use unsuitable furniture and bend and reach up unnecessarily. As in the home, where correct furniture is all important, so in the office ergonomics should play a greater part. Working at a desk can easily cause strain, if the working level, the posture and the seating are wrong.

Even lifting heavy files and books can put strain on the back if done incorrectly . . . and employers who expect young typists to lift heavy typewriters are asking for trouble.

## MANUAL WORKERS

Up to one third of all accidents at work arise out of manual handling tasks.

While only 10-15% of back injuries may be serious initially, repeated injuries, minor in themselves, can lead to permanent damage. Incorrect lifting is one of the greatest causes of back pain. It is unfortunately very difficult to get a man to lift things correctly if he has spent his life lifting them incorrectly. Supervisors must always be on their guard against incorrect lifting techniques. Once a back has been damaged, the trouble will re-occur time after time. . .

## HOW CAN YOU HELP YOURSELF?

The Back Pain Association, formed in 1968 and registered as a charity to encourage research and treatment into the causes of back pain, has produced a number of pamphlets dealing with the subject.

These are 'Think Back', giving simple to apply rules with easily understood diagrams; Individual copies are free upon receipt of a large stamped addressed envelope. Other books are 'You and Your Back' at £1.20 a copy; 'Lifting' at 55p per copy; a 'Lifting Training Manual' at £2.00 per copy and also a series of 30p posters.

For people who are interested, the address is:

**Back Pain Association,  
Grundy House,  
31-33 Park Road,  
Teddington, Middlesex TW11 0AB.**

## EDITORS NOTE:

As I said at the start of this short article, few of us have avoided back trouble at some time or the other. The fact is, that as one gets older, the stomach muscles get slacker and slacker, thus throwing much greater strain on the back.

Therefore a sudden movement — often ages after any heavy lifting and twang! there goes a muscle — or even worse! There is one thing that all of us can do to alleviate serious back trouble and that is to do stomach strengthening exercises at intervals of one or two days.

Ahh! you say — I'll never find the time to exercise — and it's like having a diary . . . one never keeps it up . . . But, strangely enough, even as short an exercise period of 5 minutes a night — or even every two nights — can strengthen the muscles so that when you do strain your back, it is not so serious and it recovers quicker.

Bill Raistrick

## Doing as the Romans do . . .

Following the success (!) of my little piece on the Roman Army's boots in issue 4, I have had several requests to provide more of the same (thanks Mum).

General Staff, Rome.  
To: Field Headquarters, Camulodunum, Britannia.

Dear Ossius,

I am sending you, in a separate litter, our Emperor Hadrian's nephew. The Emperor thinks that it is time that he faced up to the tribulations of life in the field. Also the further away from Rome the better at the present time. The population of Rome is too high already . . .

I advise you to station him in some place where there are no females whatsoever — of all ages.

Rest of luck,  
Claudius.

Dear Claudius,

The Emperor Hadrian's nephew arrived last week. How long must I keep him? I have already had a deputation from the local tribesmen asking for protection for their mothers, wives and daughters — in that order. What on earth is wrong with the lad? What are you feeding them on these days? Goats milk? My wife says if you know, please send some along for me.

Ossius.

Dear Ossius,

Sorry, it isn't the food. Hadrian's brother's wife came from some overheated part of the Empire. Unfortunately she passed it along to her son — in good measure. Surely the cold climate in Britannia is helping?

Claudius.

Dear Claudius,

We have had warm weather since Hadrian's nephew arrived . . . in December! There is no justice. Can I transfer him to somewhere like Syria? They'll know how to treat him! I'm told that they keep specially sharpened knives for lads like him — and there is a good resale value for them afterwards.

Ossius.

Dear Ossius,

Come, come now, lad — remember who's nephew he is. If you keep on suggesting things like you did in your last letter, something like that could be happening to you! Then what would your wife do? I suggest that you think of something to distract him. How about climbing in the Caledonian Mountains — or route marches in Wales? Or get him to swim the Channel. Come, use your imagination.

Claudius.

Dear Claudius,

We now have tribal revolts in Scotland and Wales. And the Picts are utterly revolting, as always. I hear that the German armies are short of recruits. Can I send him there? Or how about a transfer to Egypt? I believe that the crocodiles perform a useful function there. I have even had a complaint from Boadicea . . . and you should see her!

Ossius.

Dear Ossius,

You have softened my heart. I have had a word or two with the Emperor and he sympathises with your predicament. Unfortunately he doesn't sympathise enough to have his nephew back here in Rome. The Vestal Virgins are still complaining. Send him off on an expedition! If you send him far enough, he may fall off the end of the world.

Claudius.

Dear Claudius,

Thank's for the suggestion. It was a good idea. At last I've seen the end of him! (I hope!) Two weeks ago I talked it over with one of those crafty Greek shipping magnates . . . and he had a perfectly wonderful idea. He has taken the lad off on an expedition to the land of the Amazons! Congratulate me!

Ossius.

# In praise of an engineer . . .

An engineer is a man (or woman) who can tell to the nearest cubic millimetre the contents of a jar of jam . . . but can't get the lid off.

After years of study our engineers are fully qualified to fill seven volumes with words and still say the square root of nothing.

People in sales never lie. They may avoid the truth or cloud the issue a little, but lie? — Never!

By Russ Davis  
NAVAL MARKETING

However, an engineer with the business acumen of a retarded cabbage will insist on telling the truth and this can be very embarrassing, particularly in front of the prospective customer.

After all, if the customer is happy, why tell him the photograph you are showing him is nothing more than an aerial shot of a replica of a cardboard cut out of a model we don't yet produce? An engineer will.

When we also tell the customer "of course we can deliver in nine months", the engineer should remain calm and passive, not fall off his chair laughing with

tears streaming down his face.

Having the utmost confidence in our engineers I'll promise the customer anything.

You can tell when I am in town by the cloud of steam over Baddow.

If you have one engineer you have a good one; two and you have an argument.

Lay all the engineers end to end and they still wouldn't reach a decision.

Engineers have a tremendous sense of humour. They have to have. It's the only thing that prevents our funny farms being over subscribed.

There are of course, exceptions. Here I refer to software engineers who will appear to be in training to

become undertakers. Part of their creed must be "thou shalt not smile or appear happy or the wrath of the memory banks shall ascend on thee."

Perhaps they live in constant fear of pressing the wrong knob and wiping out everything?

Engineers, by their own admission, are better looking than the average Greek God and suffer us mere mortals only because they use us.

Modesty is a word they don't understand. I told one engineer that his breed were people who drove steam engines.

Without a smile he said "yes — that's another of my talents."

Still, by penning these words I am in no danger. Engineers can only read what they themselves write.

Still, they're not a bad bunch are they?

## Bits and pieces

Reading through a press release from The Open Univeristy, I note that amongst the many interesting courses there is one entitled; 'Accounting For Managers'. Strange, I thought there was no accounting for managers.

By the way, if you are interested in courses at The Open University, the address is; ASCO, PO Box 76, Walton Hall, Milton Keynes, MK7 6AN. For details of management and other one-off courses. And PO Box 48 for Open University Degree courses.

It is very nice to see the days lengthening out and to be able to get up in the morning without the use of electric light. However, the improving days are spoilt for me by one disquieting point . . . it will soon be necessary to mow the lawn and weed the flower beds.

This winter I have been diverted by the antics and also the learning powers of the lowly sparrow. A year or two ago, I decided to hang out a container of nuts for the tits and similar small birds. At first, all went well and tits and finches were all that fed on the nuts. However, as time passed, it became obvious that the odd sparrow was able also to

land on the nut container.

The first year it was just two or so able to do this feat and emulate the tits. But the next year, at least a dozen sparrows could feed on the nuts . . . and this year it seems that every sparrow can land on the container. I wonder, is there an aerial training school somewhere for sparrows?

One thing is certain, in the struggle to survive, the sparrow has got a head start, being exceptionally versatile. Another bird well designed to succeed is the bouncy starling.

A horde of them descends on the garden somewhat like a collection of two legged vacuum cleaners!

The new British Leyland car has now been unveiled with a great flourish of trumpets . . . but what a strange shape! It looks rather like a steak and kidney pie. It appears that British Leyland have an obsession with rounded corners — at least, on their medium size cars.

All the newspapers made great play about the marvellous talking car, which tells you when you've left the lights on etc., etc.

It's only a gimmick though — if I acquired one (heaven forbid!) the first thing that I'd do would be to switch off the talking bit. All these fancy gimmicks are all

very well, but when the car gets old, how much more there is to go wrong.

□ □ □

While on the subject of cars, have any of you noticed how the small hatchbacks all look alike? The Mini-Metro is probably the only one to look different. But all the Japanese hatchbacks and quite a lot of the European ones look similar. I walked round a new one twice recently, being interested to find out what make it was. Second time round I found a small VW insignia on the back.

Otherwise it just looked like any other hatchback. Perhaps there is a maker of 'standard hatchback' bodies around, you know — 'I'll supply the body, you just put on the badge' sort of thing. Hatchbacks are, of course, a 'good idea' — but there is one disadvantage to the shape. Because of the cut off back, turbulence is set up and in wet weather, all the mud etc., is deposited on the back window and the rear of the car.

Much the same sort of thing happens to vans. That's why their back ends are always dirty — to the joy of small urchins who delight in scrawling messages in the dust. You'll notice that most of the hatchbacks these days come complete with rear wash-wipe systems.

Most essential.

# SAFETY NOTE

The use of cars for the transport of chemicals and hazardous substances or liquids can have very serious consequences — both for the driver and for others.

A recently reported M.R.S.L. situation related to a proposed journey using a Hatchback to transfer some drums of 'genklene' from one part of Chelmsford to another.

A relatively small spillage of this product in an unventilated car can cause it's occupant to become rapidly disoriented and then unconscious.

Due to vigilance, this particular journey did not take place but a fire insurance journal recorded a disaster in which an estate car driver lost his life.

He was carrying a container of acetone inside the car and it is thought that an escape of highly flammable vapour was ignited by the driver lighting a cigarette, or it may have been from a vehicle-related ignition source.

## HAZARDOUS

Whatever it was that set light to it is of academic interest — the chemicals were in the wrong place.

If you are someone who could in any way be involved in situations similar to these, where potentially hazardous substances are in use, make certain you know the commonsense as well as the more technical precautions relevant to them.

Just as importantly, your manager should make certain you know. Under no circumstances permit cars to be used for transporting dangerous chemicals or gases of any description.

Ken Gamblin

## Poet's Corner?

There has been a sudden outbreak of poet's disease among our contributors. I only hope that it's not catching! Could it be possible that the author of 'A C.A.'s Dream' has his tongue in his cheek? Surely not! — The Editor.

### A C.A.'s Dream?

The CA's job is quite worthwhile. The pay is even better, Congratulations from the boss, Often comes by letter.

He tells the Works and Purchasing, By means of requisition, What it is he needs to have, Then looks on with derision.

The Works, they slave to meet the time, The CA has requested, And finish up with days in hand, Complete and all inspected.

The CA tries to catch them out, He calls a progress meeting, But when the situation's known, All problems are retreating.

In Purchasing it's all a rush, To get the orders out, For if it's late, it never is, The man will rout and shout.

On Test at Riv things glide along, As steady as a rock, The odd component that's required, Is always there in stock.

And so across to Shipping, All shiny and complete, The paperwork was ready, All clean, correct and neat.

Now the job is finished, Six months ahead of time, Being paid for such an easy job, You'd almost call a crime.

B.H.

### Sandra's Little Problem

My Mummy Sandra, meek and mild, Left Marconi to have a child, And here I am for all to see, A tiny little babe, — that's me!

And though we are both fit and well, A sorry tale I have to tell, Boo Hoo! Hoo! Oh why? Oh why? Marconi's think I am a spy.

My mummy brought me to North Gate, A nice man said "You'll have to wait, Although you're just a little lass, To get in here you need a pass".

My mummy said almost in tears, "I've worked for the firm for twenty years, I only want to show my mates," The man said "You don't pass these gates."

"Rules are Rules" the Gateman said, "The secrets act you must have read?" My mummy said "I know this joint, I was a security handling point."

"We're both secure and truth to tell, My hubby once worked her as well, Do you think her daddy Tim, Would hide a camera in her nappie pin?"

The Gateman said: "Please don't be sad," "Strict orders from the top I've had, However Miss you've been so nice, I'll ring my boss and get advice."

Some moments later — a reply, My mum and I just had to cry, They can't untie this silly tangle, They're worried about the safety angle.

"I'm sorry Miss" that gateman cried, "Your Bona Fides I can't deride, But you must stay outside I fear, Your chums can see the babe out here."

So mum and I went sadly home, To Marconi again we will not roam, Security's so strong and true, Even a baby can't get through.

Kirsty Stubbings

## The party of the first part, divided by the party of the . . .

I HAVE been asked to include the following excerpt from an official letter to show just how difficult civil servants try to make their epistles.

Reading this sort of thing makes one understand why accountants have to be trained so rigorously . . .

"I trust that by now you will have received the pre-numbered proposal form for distribution to your employees. You will no doubt have already observed that the numbered forms do not run in strict numerical sequence. This is due to our use of the Modulus 11 check-digit system which has the effect of leaving gaps where the preceding 8 digits have been multiplied by the weighting factors. This may have given rise to some confusion in the use of some of our pre-numbered forms but your assistance would be appreciated in trying to keep the contract numbers, when allocated, in sequential progression."

It obviously takes a good deal of practice to be able to produce memoranda such as this. . .

THE Prime Minister, Margaret Thatcher, presented awards to 39 young professional engineers at a ceremony in London on February 14.

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.

Keith Olive is sponsored by Marconi Radar Systems Ltd and holds a B.Sc (Hons) degree in Physics from the University of Surrey. After graduating he spent two years in Sierra Leone with V.S.O. as Head of a school physics department and joined Marconi on his return as a graduate trainee. He came to the Fellowship from a position as a design and development engineer in a research division, for the Industrial Phase of his Fellowship at Marconi Radar, Chelmsford.

# Mrs Thatcher presents

His first task was a make-buy study, which was followed by a period as assistant foreman on an assembly line to gain man-management experience.

In January this year, after nine months of his Industrial Phase, he was promoted to the post of supplies service controller.

The Engineering Industry Training Board embarked on this 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 great-

ly 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.



The 1982 apprentice award winners line up for our photographer.

They are (from left to right), front row: Phillip Rogers, Clive Pinder, Michael Smale, Mark Aylward, Jackie Deards, Mr. Arthur Walsh, Jacquie Cole, Air Marshal Sir Alec Morris, Karen Orme.

Back row: Mr. Bob Scott, Mr. Keith Chittenden, Mr. James Harrison, Tim Salmon, Nigel Johnson, Craig Manning.

The awards were: Best Graduate Trainee Clive Pinder; Highly Commended Graduate Trainee Robin Ball; Best Student Apprentice Phillip Rogers; Highly Commended Student Apprentice Richard Parker; Best Technician Apprentice Nigel Johnson;

## The award winners

Highly Commended Technical Apprentice Mark Aylward; Andrew Adams Memorial Prize for Best Technician in Manufacturing Tim Salmon; Chris Bagguley Memorial Prize for Best Technician in Field Services Nigel Joslin.

Best Craft Apprentice Michael Smale; Highly Commended Craft Apprentice Craig Manning; Radar Shop Stewards Award Jackie Cole.

Best Clerical Trainee Jackie Deards; Highly Commended Clerical Trainee Karen Orme.

## Letters to the Editor

Answer to Rod Challis's 'Listen — who's using the phone?' in issue 4 of News and Views.

Dear Rod,

I have just read your statement in the Christmas issue of 'News and Views'. You said that 'each person on site spends 10 hours a year on outside calls'. I feel that you should have said on average each person. . .

The area where I work has only one external 'phone and there are only a few people who use it — and these mainly senior personnel.

I very much agree with your contradictory statement 'If you never use the 'phone, just think how many hours other people use it!'

As for trying to be brief on the 'phone — 'Oh, six Martellos — fantastic! — but could you phone back as our Chief Accountant is worried about the telephone bill!' doesn't sound very good! Perhaps you should try infiltrating the personal calls going out over the external lines.

H. Wilkinson

Dear Editor,

I really must protest at your policy of publishing a letter from a correspondent who attacks another department but does not have the courage to append his name to his views. If correspondents are permitted to hide behind a cloak of anonymity the paper will rapidly be brought into disrepute.

The library gives excellent service and has first class information retrieval facilities. In my experience, the ladies of our library do a first class job. They are entitled to their lunch break, their holidays and to enjoy the flexitime they must have earned by having the library open beyond the statutory 37 hours per week.

It should not be beyond the wit of your anonymous correspondent to organise his visit to the library during core times if he is worried that he might be confronted with a very rare occasion when the library might possibly be closed.

Ted Francis

Dear Editor,

I've never experienced any difficulty at any time (within reason) with the technical library but if I did have a justifiable complaint I should take it to the persons concerned and not hide behind News and Views.

Russ Davis

The Editor says:

The letter from our anonymous correspondent raised quite a bit of ire — not the least from the lady in charge of the library!

However, while the correspondent asked that he should remain anonymous to the readers of News and Views, he did append his name to the original letter, and only later requested that it should be withheld.

Perhaps we should define the policy of the paper. We do not publish anonymous letters. However, if a correspondent wishes to have his name withheld we will do so — with the proviso that the letter must be of general interest, must not be an attack on any individual — and certainly must not be scurrilous!

It is quite possible that a correspondent is very shy. . . and wishes 'to sing his song unheard' — or at least unknown!

## Marconi sport

### Here comes those lazy, hazy days!

#### Cricket

Roll on those lazy, hazy days of summer! Just mention the sun on your back to Jeff Harrington and it conjures up all the delights of that lovely game of cricket.

Jeff, who is Test Superintendent at Section 110 Writtle Road (Ext. 2194), is the enthusiastic chairman of the Marconi Cricket Section. He tells me they are anxious not to miss any new faces

who can play a bit.

Reasonable players are always in demand for the Saturday local league and for the fully booked Sunday fixtures which are friendlies. After only one season, the Marconi team are now in Division One of the Saturday league, so they must be a fair side indeed. Don't let that stop you applying if you really want to play.

In the summer evenings, there is the Inter-

Departmental Competition for all Marconi employees. Jeff says it is a fun competition for any department in the various Marconi companies to compete in with a handsome shield for the eventual winners. You don't need full cricket dress for it either.

So roll on those sunny days. . . and contact Jeff now.

Phil Champion

#### Angling

Twenty eager anglers tackled-up for the Marconi Angling Society Christmas Fayre Match on 19th December, the venue being the River Mid. Weather conditions deteriorated to such an extent that by 1.30 pm only six anglers weighed in, first place being taken by P. Collins, 4lb.4oz., second D. Fawcett, 4lb2oz., and third J. Porter, 1lb15oz.

Overall points positions:  
D. Fawcett..... 16  
D. Cawley..... 12  
P. Collins..... 10  
R. Taylor..... 10  
A. Bishop, Secretary

#### Soccer

Monday March 18, 1983 sees the commencement of this season's second session when Radar Software 'A' v E.E.V. 'A' on the E.E.V. ground. On the same evening at M.A.S.C., Computer Centre v Radar Workshops and Broadcasting v Machine Shop, New Street, are the matches that can be seen. This is followed by evening matches throughout the weeks culminating in the Jubilee Cup Final on Tuesday, May 10. Why now come across and see your Department play? The fresh air will do you good too!

Phil Champion