

Communicate

Issue 4

The Newsletter of GEC-Marconi Communications Limited

September 1997

NICE ONE NEBS

By The Course Personnel

New to the GMCL training prospectus in 1997, is the National Examining Board for Supervision and Management (NEBS) Introductory Award. The first NEBS course will be successfully completed in June 1997 by employees drawn from various units within GMCL. The course has been run to a flexible programme being both stimulating and demanding. The names Maslow, McGregor, Herzberg and Harvey Jones (and Harvey Smith !) may be heard rattling around the corridors in the future courtesy of the NEBS participants.

Each member of the course put in 10 evenings in the training classroom plus many additional hours in preparation for the presentation and the final written report. Learning followed an androgogical process, apparently, although none of the students can pronounce it even after five weeks trying.

Benefits of the course, both for the individuals and the company, will become evident in the way that the acquired skills are applied in the workplace.

So what does the Introductory Award cover ? Topics covered included; Meetings, Motivation, Cost Awareness, Interviews, Managing Stress and Change, Presentations and Report Writing.

One of the management theories covered during the course was that of Maslow's Hierarchy of Needs which deals with the way that people are motivated. The pinnacle of the Maslow Hierarchy was demonstrated perfectly one evening by Ian Pilling's

obvious elation at his new appointment as Personnel Director.

The presentation brief covered problems in the workplace which were varied and interesting such as the rearrangement of the street cabinet assembly area at MCD and the processing of MOD documentation.

The Personal Presentation to senior managers and ones peers was not supposed



The above photograph shows members of the pilot NEBS Management training course May/June 1997 at GMCL.

Back Row L to R

Steve Polden, Paul Gerard, Dave Cooper, John Hannah, Brian Smith

Front Row L to R

Tony Cuthbert, Andy Reed, Paul Butcher
Missing from picture Alison Stephens

to be stressful, merely challenging. Perhaps it would have been useful to have covered the stress module before the presentation.

The final module concerned stress in the workplace which is often seen as a negative condition. However the participants learnt that it can be good for you. It is called stretching to reach your potential.

The course threw up some interesting quotes:

As a manager/ supervisor you should "catch 'em doing something right"

"We all get butterflies before presenting, the trick is to get them flying in formation."



From a toilet attendant at NASA when asked what he did "I help to put men on the moon"

"A manager can manage but a leader must have followers."

"The person who never makes mistakes, is not taking enough risks."

"Only unfulfilled needs motivate"

From the trainers ten commandments "thou shalt offer no universal remedies nor expect miracles from others."

The initial participants (or guinea pigs) would like to thank Harvey Maule and the team for a splendid course.

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Articles for the next issue of "COMMUNICATE" should reach the Editor by early November 1997. Don't forget the e-mail system.
harvey.maule@gecm.com

General Manager's Profile Mr David Evans

David Evans is 40 years old and lives in Hatfield Peverel with his wife Lesley and two sons, Thomas who is 7 and Robert who is 5. The boys both attend school in Hatfield Peverel. David and Thomas both suffer from asthma so the family are not able to have dogs or cats as pets but they do keep tropical fish although David says no one else seems keen to clean the tank!!

Thomas has been interested in music for a number of years. He began playing the recorder at the age of 5 and passed his grade 2 last November. He plays in a band at the local church and has recently played at Ulting fete. Since Easter Thomas has begun learning the Clarinet and his brother Robert is about to embark on recorder lessons. Lesley is passionately fond of Opera and enjoys singing in church. David says he feels quite the odd one out in such a musical family. Having had a spell at home looking after the children Lesley is now training to be a psychodynamic counsellor. David admits to being addicted to his home PC and in any spare time he continues to build a remote controlled aeroplane.

David was born in Yorkshire and move to Essex at the age of 3. He attended a local secondary school and after "O" levels left to begin a technician apprenticeship with Marconi. David recalls he was in no doubt about his interest in electronics having been repairing TV's and radios for many years from a garden shed at home. After 2 years as an apprentice he was transferred onto a student apprenticeship and continued study for another 4 years gaining an honours degree in electronics. He was nominated student of the year by Marconi and also received an award from the IEE for the innovative electronic game project he undertook as part of his degree. He smiles

as he recalls that a lot of the design work was done during the summer vacation so as to lessen the stress during the final term. David recalls how everyone thought it amazing how much circuitry was designed and tested during a matter of weeks!!!

David began his career with Marconi Radar in the design laboratories at Baddow. He



was instrumental in the digital signal processor design for the radar which steers the Seawolf Missile and is now operational on a number of R.N. ships.

After some 5 years in design David decided to enter the commercial environment and moved to a role as Product Manager in Sales and

Marketing. He recalls enjoying this role very much because it gave him substantial opportunity to travel and meet people. He remembers having moved to a house where the kitchen was the only usable room, leaving for Saudi Arabia with his wife penned in the kitchen for 3 weeks. During the 2 years in Sales David was overseas more than 50% of the time as Marconi Radar strived to enhance its export business.

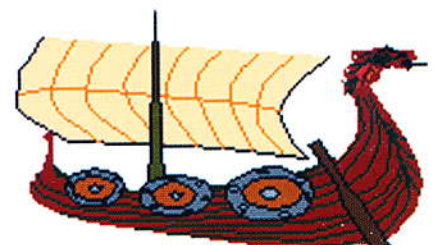
He then took over as Programme Manager for the MARSPIN project. David recalls that at the time of takeover the project was in a dreadful state. Design engineers crawling over ships in Korea having to develop the product in front of the customer. David remembers his first visit to Korea well. It was Christmas and he was resigned to the fact that in order to gain customer confidence he would be there for the whole of Christmas and New Year. His wife went with him on the visit and remembers being taken to a brothel as the only place selling decent food. Well she says that was Dave's

story anyway but food was not the only thing on the menu!! David successfully recovered the MARSPIN project to make a profit and the customer was sufficiently pleased that he placed repeat orders.

Following the MARSPIN success David took control of the R.N. Seawolf project and then Rapier managing staff in Frimley, Chelmsford and Leicester. He was running the Seawolf project during the Falklands campaign and remembers a lot of the extra support activities which went on. On one occasion we were laying plans of how we would get an engineer onto a ship and the only way was by Harrier. This certainly opened up new horizons for the person concerned but thankfully the issue was resolved without having to implement the plan. David is the first to recognise the major differences doing work for the MOD as opposed to overseas commercial companies. It was in his roles at Radar that he first worked with Barry Ellingham and then later Gavin Leatham. Prior to leaving Radar he managed the Marconi Radar's activities for the Future Frigate including the new 3D radar known as EMPAR.

In late 1993 David decided it was time for a change and began looking for a role outside the group which would move him away from large capital goods projects. He recollects it was time to gain new experiences and have new challenges. David joined Marine in January 1994 seeing it as a role which would satisfy his thirst to work in a faster moving product environment. Looking back on the last 3 years he confirms Marine is certainly that. The role was initially quite daunting being a completely new market area, new type of business and of course new people with which to work.

David believes there is a something special about Marine. Everyone's willing to help and we are all 100% behind giving the customer exactly what he asked for on time. Everyone works as part of the team. He remembers packing spares himself at 7pm in the evening to get them to the shipping agent so that they got to a dock side before the ship sailed.



Business News

Marine Win Major Ukrainian Order

Sales Manager Paul Durkin of Marine Division returned from Odessa on the 19th of May 1997 with an order for £750,000 worth of Global Maritime Distress and Safety and Distress Systems (GMDSS) equipment.

The order, achieved in the face of fierce competition, was signed with Ukmar Ukraine, the country's leading shipping management company. Installation of the GMDSS equipment on the company's fleet of bulk carriers will take place over the next year.

Sales Manager Paul is confident other orders will follow. He says "Under international maritime law all ships over 300 tonnes must be fitted with GMDSS equipment before the end of February 1999.

With Russian Type Approval already achieved Marconi Marine are confident they can secure a significant share of this lucrative market"

GMCL AT THE FOREFRONT OF FORESIGHT (An Update)

By Martin Parker

Against intense U.K. competition GMCL was notified last year that it was one of the intended recipients of the prestigious Foresight Challenge Awards through our participation in the Road Traffic Advisor Consortium.

The Technology Foresight Challenge Programme is a key policy initiative by the Government first announced in a white paper on Science, Engineering and Technology in 1993. It is co-ordinated by the Office of Science and Technology in the DTI and is designed to bring together industry and academic research to identify and develop opportunities in markets and technologies likely to emerge during the next 10 years.

After a hard years work of Contract Negotiation we are pleased to announce the signature of the final contract and the project start date of April 1st 1997.

The Road Traffic Advisor consortium is led by the Transport Research Laboratory and comprises inter-alia several Research Institutes, Government Offices and Agencies, the Department of Transport and Industry Leaders Jaguar, Rover, Lucas and Mira as well as GMCL.

The aim of the project are:

To create in the U.K. a new system of vehicle to roadside communications to improve transport efficiency, safety and traveller satisfaction.

To provide a high quality scientific base for future Transport Foresight products within a co-ordinated industrial/academic environment.

To provide a national test site for telematics technology which will be a showcase for new U.K. products and for academic research.

This project will verify essential Advanced Transport Telematics (ATT) systems concepts, by improving novel road and traffic information to drivers on a major public highway test site in England and Wales. It will utilise two-way short range micro-wave communication (supplied by GMCL) between vehicles and the roadside infrastructure. This will provide earlier market opportunities for world class customer-led products and services, for which there are unparalleled opportunities.

Considerable benefits will derive from the future opportunities created by research in this area.

These include:

For travellers: safer, quicker, cheaper journeys which are less stressful and more comfortable.

For industry: the creation of the first U.K. Test Site enabling collaborative research with other members of the EU; the rapid development of a wide range of new U.K. products and services; a slice of a massive world market; and jobs in the manufacturing and services sectors. The estimated size of the new market is £2.5b. For the nation: Exploitation of the results will enable road operators to introduce measures to increase network capacity and safety, reduce congestion, improve emissions and reduce fuel consumption.

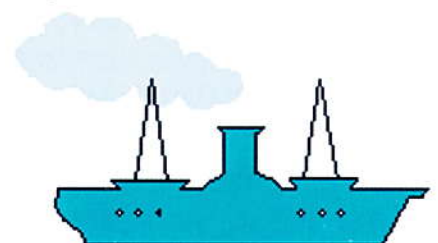
H.M.P. WEARE

By Anthony Whitworth

The Mobile Communications Business Unit of GEC-Marconi Communications Limited, Chelmsford has been awarded a contract by the Home Office to supply a UHF radio system for H.M. Prison Weare.

H.M.P. Weare is in fact a "ship" recently acquired from New York Department of Correction to help accommodate the growing prison population in the United Kingdom. The Resolution, as the ship was named on its completion, saw service with the Bibby line and then a spell providing dormitory accommodation in Port Stanley for the veterans of the Falklands conflict before being acquired by the New York City Department of Corrections to handle an acute shortage of prison places.

GMCL will supply, install and commission a system to allow two way communication between members of staff on the ship and the communications room using handportable radios.



MOBILE COMMUNICATIONS PMR MAINTENANCE CONTRACTS DOING WELL

By Alex McArthur

Scottish Telecom and Seeboard are the latest Regional Electricity Companies to extend their existing maintenance contracts for us to provide service on their PMR systems well into the next millennium.

Mobile Communications have been successful in signing up their Private Mobile Radio customers to maintenance contracts. To date of the 11 Regional Electricity Companies that have bought PMR systems from us, 10 have signed up to long term maintenance contracts. The eleventh company, has agreed to sign up very soon and so we will soon have a "full house". The two British Gas Companies and Scottish Telecom that bought PMR systems from us have also signed up. All in all the maintenance contracts have been worth over £5M to date and with the contract renewal of Scottish Telecom and Seeboard, this figure is set to increase.

The customers are pleased (they have told us this) with the prompt service they get through the 24 hour HELP LINE that Mobile Communications have set up. At any time day or night, software and system engineers are on call with facilities to log in and sort out problems from office or home, or to travel to site if necessary. Much thanks must go to the staff of Mobile Communications and Customer Services that have made the Maintenance Contracts such a success. Keep up the good work!

STANTAG 5066 CONTRACT

By Louise Digby

GEC-Marconi Communications Limited has won a contract to implement STANAG 5066 from NATO SHAPE NC3A (formally the SHAPE Technical Centre). This is an emerging technology that will allow Internet users to communicate over HF using TCP/IP. Until now there has been

no internationally recognised standard that allows HF systems to seamlessly integrate into global telecommunications systems. STANAG 5066 is a first progression to achieving this aim. To be first to the market place with an off-the-shelf STANAG 5066 compatible system will greatly enhance not only our reputation in the HF market place but also our chances of winning projects that involve HF managed networks in future.

Our main competitors also bidding for this contract were Harris, Rockwell Collins, Rhode and Schwartz.

Military Communications in India

By D E Seaburg

During virtually all of November 1996 and for most of December a team from the Military Communications Division spent an unforgettable period in India. A famous guide book describes India as "..... an intense experience, an assault on all the senses - a place you'll never forget".

That statement is all true and it doesn't take account of the challenges of having to do a job of work there too. So you can see why a visit to India can be described as an unforgettable experience.

The job of work that was on hand was to trial SCIMITAR radio equipment's in Indian Army, but Russian built T72 Tanks and also in BMP's and Jonga's. BMP, by the way, seems to be an acronym for Armoured Personnel Carrier, but in Russian, whereas Jonga is the Indian version of a Jeep.

During the whole of this trial period the team stayed at a small town called Jhansi. Jhansi is on a railway line from Delhi that passes through Agra, Gwalior and Bhopal. Agra is famous for being the home of the Taj Mahal and Bhopal for a much more modern, but unpleasant happening. It was very fortunate that Jhansi is served by a modern, relatively fast, electrically driven, air conditioned express train. It is also served by the more usual type of Indian train, but luckily it was possible to avoid

these and travel in a comfortable reserved seat.

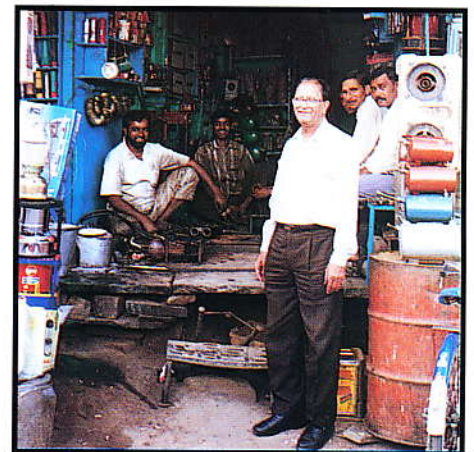
The name Jhansi as devotees of George Macdonald Fraser's Flashman, or students of the history of the British Raj will know, loomed large in the events of the Indian Mutiny. The Rani of Jhansi was a very famous lady in Indian history. She rode into battle against the British on her charger, with her child strapped to her back and was eventually killed in a battle that took place close to Gwalior.

Jhansi still has its Fort, its Rani's Palace and a statue of the Rani on horse back.

In more modern times, as far as Marconi staff are concerned, Jhansi's other claim to fame is that it is the nearest large town to an Army camp, at a place called Babina.

But here again, the British influence is all pervasive. Some of you may have relatives who served, during the Second World War, or during the period before it, at the British Army Base In Northern Asia. The acronym still survives as the name of a very large Indian Army Camp and also the name of the associated quite small town. Even the town of Babina had its part to play during this little overseas Marconi adventure.

We are uncertain as to whether the all pervasive British influence is to our advantage, or not. However, it appeared



Metalwork Shop in Babina

yet again, when we were told by the Manager of a Hotel at which we chose to stay for no more than a few minutes that "the Hotel was built by the British sir, in 1903". Our concern was that it seemed to

have changed very little since then!

Babina is some 25km from Jhansi, so that we were involved in a regular morning and evening drive between the Army camp and the hotel. For a number of reasons that are not very difficult to identify, it is not usual for Europeans to drive in rural India.

It is no exaggeration to say that travelling on Indian roads, even in rural India, is a terrifying experience, even though there are lots of interesting sights to see.

Bullock carts and (black) water buffalo have no lights at night! They are very difficult to see when they are being driven back to the village in the evening, along the road side in the dark.

The roads are very pitted and rutted, with quite large holes in places, so that most vehicles take a very devious course to minimise bumps. If you now bear in mind that the most important practical rule of the road in India is that "might is right" and every driver (or pedestrian) has to carefully keep out of the way of any larger vehicles, you can see why it can be a terrifying experience. There are also interesting sights, such as the groups of village women in brightly coloured saris, all with baskets or some other load on their heads, walking along the road. They might be going to work in the fields or to do the washing, on the rocks, in the river!

There are cattle everywhere, even in the towns, since to the Hindu, they are sacred animals that must not be killed. In the towns there is lots of poverty to be seen, lots of litter and mess and strange smells. But in the midst of all of this, the vegetables on sale, from shops or stalls, or barrows, or even a sheet on the ground are all beautifully clean and well presented - Hindus are vegetarians!

The roads can be equally bad in the smaller towns, or in any town, but is also incongruous to see the small three-wheeler taxis pop-popping along, loaded with perhaps ten or eleven school children. The vehicle will be careering along, over the ruts, with the children hanging on for dear life, but all immaculately dressed in their (western - style) school uniforms and with a good proportion of them "swatting up" their school books, while on their way to school.

We were very lucky in that during all our

work in India we were supported by a number of Indian organisations. To fit modern radio(s) in the space left by the removal of a very old fashioned Russian set is quite a difficult task - at long range. So that the preparation of the mounting hardware was the responsibility of one of our Indian associates.

But they didn't manage to make it 100% correctly either!

Thus, at very short notice and in a very short timescale, like on a Sunday, it was necessary to have some more simple metalwork made. Our agent found, in Babina, a metalwork shop who were able to do the work. We were also lucky that the owner was a Moslem since on this particular Sunday it was also Diwali, the important Hindu festival. It was also fortunate that our requirements were quite modest, since the only method of cutting the material to size was with a hammer and chisel, while holding the metal with his



Metalwork Shop with Estimator/Operator/Expiditer/Manager/Owner at his Work Place

toes!! It seemed vital that this event be recorded for posterity, so we have included some photographs taken while it was all happening!

I searched as tactfully as I could while I was there and I have subsequently examined the photographs in some detail, but I can find no sign of an ISO9000 certificate anywhere!!!

However, the initial manufacture was completed in time for a set of Indian technicians to help us to fit the radio sets into the vehicles. Before the trial was completed many visits were made to the

metalwork shop in Babina. It was very unusual for the local inhabitants to see white faces, so we were greeted with many stares when we arrived - but they were always friendly, curious stares.



We all learned very rapidly that the inside of a tank is very hard and unforgiving, as well as being very cramped. T72 Tank crews are chosen to be slim and

short. It is not hard to see why! Once the radio sets were fitted, then all sorts of manoeuvres and journeys took place to ensure that communication was always possible.

Bumps, cuts and grazes were the order of the day. After the Tanks, other types of vehicle were fitted, but all of this was accompanied by interminable delays and hitches, most of which, thankfully, were not of our making.

Along with the hitches came a number of technical problems, so that we all, that is Ken Harvey, John Yates, Keith Starkey, David Clarke and I all became familiar with the various problems that can be encountered when fitting radio equipment in an Armoured Fighting Vehicle.

However, after seven weeks the activity was complete and every one was released - at least it seemed like that. It was just like the completion of a sentence! Although for various reasons we did not all suffer the full sentence.

But then there was the train ride back to Delhi - Indian railway stations are something else!!!!

There are yet more trials to follow before the Indian Ministry of Defence make their final decision as to the supply of their next generation of Combat Net Radio.

However, we went in anticipation, hoping that these efforts have a successful fruition and that we are all better off, as a result of the Company having received a large contract.

GMCL Suggestion Scheme

By Harvey Maule



Our photograph shows Mr G McGowan from Cell 1 Manufacturing, receiving his award from Mr G Williams Operations Director.



Gary designed and produced a small test box to check the VF cable assemblies and wiring activity on the 30 channel Flexi-mux Street cabinet, to eliminate cable/wiring faults.

This was an extremely clever idea as nearly all the cabinets failed the functional test with 30% of all faults directly attributable to cable/wiring errors. Gary's idea was implemented immediately with significant benefits in cost, productivity and operator satisfaction.

Chartered Engineering Status

On behalf of all the readers of 'Communicate' I wish to extend our sincere congratulations to Mr John Dryden and Mr Graham Gilbert on the achievement of there professional recognition to the election of corporate membership of the IEE.

IEE



Mr Graham Gilbert
being congratulated by Mr Mike Steel and
looking on Mr Alan Heritage

Contribution Award Scheme

By Harvey Maule

Once again we report on individuals who have been recognised for a significant contribution to the business.

The photo shows Miss Tina McDonald receiving her award from Mr Gary Dawson General Manager, Telecoms & Control.



Tina received her award for exceptional individual effort and commitment during all phases of the Iceland frozen foods Star-Track System Development. This was exemplified by her sacrifice of Xmas and the New Year holiday period to achieve promised delivery date.

Congratulations Tina excellent work.



Apprentices receive NVQ Awards

in Engineering from the Managing Director Mr Ian McNamee with the Personnel Director Mr Ian Pilling looking on. The Apprentices are from left to right:

Mr Damian Turburville, Mr Danial Case and Mr Sturat Kaye

PLD / FPGA CONFERENCE & EXHIBITION

14th May 1997, Ascot Racecourse

By Chris Stichbury

I recently attended the 7th Annual Advanced PLD & FPGA Conference and Exhibition organised by Miller Freeman, the publishers of Electronics Times. This article covers the main themes to what was an interesting and eye opening day. Given the present rate of change of this technology, I believe that this is a very useful event which GMCL cannot afford to ignore.

Whilst the speed of programmable logic continues to increase, the most striking improvements are in the area of device size. The PLD/FPGA is making large inroads into what was previously the domain of ASICs. Altera is now shipping 100K gate devices and Xilinx has announced a device attaining a gate capacity of 130K. By mid 1998 this is likely to increase to devices with 500K gates. Actel is talking seriously about 1 million gates.



PLDs and FPGAs of this scale will require an entirely new design approach. Steve Collis from Mentor Graphics estimated that a 100K gate design would take 2 years using conventional gate level techniques.

If the above projections come true, development timescales could soon grow to nightmare proportions. In an effort to rectify this problem, large designs may now be quickly assembled using libraries of Intellectual Property (IP) available via the World Wide Web. Vendors such as Altera and Xilinx are already offering IP cores for bus interfaces, microcontrollers, UARTs and DSP functions. The amount of IP on offer is presently limited but growing rapidly.

Bigger chips will also mean that floorplanning a design becomes essential. In large designs it is routing resources which run out first before gate capacity.

The current explosion in device size is also having an effect on the tools used for synthesis and simulation. As the pressure on development timescales increases, the popularity of VHDL continues to rise at the expense of other methods such as schematic capture. The many features of VHDL allow it to be used for design specification, capture, simulation and configuration management. It is non-proprietary and allows design re-use.

Before we all rush to become VHDL experts you may wish to pause and look at a new tool from Mentor Graphics called Renoir. This is able to generate VHDL code from flowcharts and state transition diagrams. The central idea is that our primary sense is vision and that a design is therefore best represented graphically. The visual approach is maintained through to simulation where the state diagrams and flowcharts are animated.

One final observation. Looking at the computers used at the exhibition, it was immediately apparent that Windows 3.1, being 16 bit, is taking a back seat as far as PC CAD software is concerned. The new applications tend to be written for 32 bit environments i.e. PC's running Windows '95/NT or UNIX workstations. There were, however, no workstations on display!

A book of the complete proceedings, covering the sixteen lectures presented during the day, is available for loan. If you wish to borrow it then please contact Chris Stichbury in JORN Engineering on extension 3925.

Training in April 97/August 97

By Harvey Maule

GMCL staff have been on the following courses/training since the last edition of Communicate!



- Appraisal Trg
- Investors in People
- Teambuilding
- Verbal&Written Comms
- Presentation Skills
- NEBSM
- Report Writing
- High Pots W&E
- GEC-Challenge W&E
- NVQ in Business Planning
- Phase Review-Risk Management
- Intro to Computers
- Word6 Introduction
- Word6 Intermediate
- Excel
- Access
- PowerPoint
- Project
- Teamlinks P.C
- Dec-Mail X-Terms
- WP to Word6
- Typing Training
- Managing for Success
- ARS Administrator
- VAT on Inter Transactions
- Visual Basic
- GMDSS
- Electrical Maintenance
- First Aid at Work
- PCB Soldering
- Component Replacement
- Pers Development Prog
- Sales & Marketing
- Systems Analysis
- C Programming
- Software Radios
- Account Management
- Customer Management
- Autocad Foundation
- Microtec Fast Start
- Year 2000
- Export Credit Insurance

IS/IT News

By Carol Wilkinson

In this issue of Communicate, we want to focus on:

Network & Office Applications - issues and actions.

Upgrade of Engineering Tools
Computer Viruses

Network and Office Applications - Issues and Actions

Over the past few months we know that many of you have had cause to be frustrated with the performance of the Network and Office Applications systems.

The problems we have been experiencing cannot be attributed to a single factor but broadly fall into the following:

Network Capacity

Reliability of Office Application file servers

Problems with new versions of PC software products

Restrictions arising from Teamlinks usage of base memory

Network Capacity

We now have over 300 of each of PC's, X-terminals and Text based terminals, and 70 Workstations connected to the Network. Over recent months we have been adding an approximate average of 15 new PCs. Admittedly some of these are replacing old kit but we are seeing not only a net increase in numbers but they are being used to do increasingly sophisticated tasks - this creates extra demand on our already heavily burdened network. It's a bit like what would happen if an unexpected large number of heavy trucks all joined the M25 in the rush hour! So, what is being done about it! The network in SED was upgraded from 10MHz to 100MHz during the final quarter of 1996 and this made a great improvement. A similar exercise on the network serving the 1st floor Engineering Labs is in progress and will be completed by the end of June. This still leaves a number of areas to be addressed and these will be done progressively on a priority basis.

Reliability of Office Application File Servers

Some of the Office Application file servers which have been purchased over the past 12 months have been exhibiting a high frequency of unexplained problems, which have certainly had us scratching our heads! We are now pressing EASAMS, who in

turn are pressing the Suppliers and Manufacturers for a resolution.

We have started to record all system downtime and will be producing metrics to measure performance which we will publish on a regular basis.

Problems with new versions of PC software products

The standard software build for our desk top PCs consists of:

Windows 3.11 Operating System

PCNFS Network Software

MS Office 4.3 including WORD, EXCEL, POWERPOINT

Netscape Internet Browser
Teamlinks

With options as appropriate including

MS Access -MS Project

We recently started to use a new version of PCNFS because it addresses some of the base memory problems associated with Teamlinks. However, when people started to use the PCs in earnest we found new problems. Inability to embed objects from one MS Office Application into another. It proved particularly difficult and time consuming to determine the cause. A solution turned out to be to load PCNFS after MS Office, rather than before as we had done with the previous version.

PCs hanging when prints were submitted to network printers. We now have a fix from the supplier. It seems that everytime we use a new version of software to address one problem we find new ones.

Restrictions arising from Teamlinks usage of base memory

A number of people have found that when they have Teamlinks open along with MS Office Applications, they are prevented from doing certain things and the "insufficient memory" message is displayed. This problem has nothing to do with the amount of RAM on the PC but Teamlinks' poor base memory management. With the Windows 95 Operating System this does not occur.

We are currently developing plans to introduce Windows 95 which is GEC-Marconi Corporate Strategy. As this requires that we review our Network Server Strategy we are not in a position to do this immediately - it will require a significant

investment in both new hardware, software and resources to implement. As we wish to devote our efforts to developing the NT strategy we do not intend to roll out 95 across GMCL.

Upgrade of Engineering Tools:

CADDS5, used for Mechanical CAD, is being upgraded and standardised on Version 6.1.2 and will be completed by the end of June. This along with a concurrent initiative to standardise working practices in the use of CADD5 will allow greater flexibility of working in the Design Offices.

THEDA, used for PCB layout design, is being upgraded to Version 4 and will be completed by the end of July. This will bring us in-line with MSpA and will allow easier transfer of layouts to TID.

MENTOR, used for Schematic Design is soon to be upgraded to Version 8. MSpA are working on integrating the new version into Supervisor and as soon as they advise us that this is complete we will start the upgrade. Along with the new software we will be replacing the old Apollo terminals with new, more powerful and reliable workstations.

Computer Viruses

We have recently experienced a particularly nasty infestation of a strain known as NPAD. It was introduced to GMCL across the Wide Area Network in an attachment to an E-Mail message. Unfortunately, this is a new virus and our anti-virus protection was not able to prevent it spreading and reoccurring. The developers of one of our anti-virus products - Invincible - responded by sending a fix for it as quickly as possible but unfortunately this was not in time to prevent a lot of disruption and time spent dealing with it.

This incident emphasises the need for constant vigilance, the people who write viruses will always be one step ahead of the anti-virus developers. For our part, in IS, we are looking at tools to better detect and prevent viruses coming in across the WAN. For your part, please keep checking those diskettes! Many of you will have noticed the PC now located in Reception to enable visitors to virus check any diskettes they may be bringing in - yes it does stand out - it makes a very clear statement to anyone visiting the company that we in GMCL take this issue very seriously indeed! Our customers and suppliers should be reassured by this.

SCANDINAVIAN SEAWAYS

SAVE UP TO 50%

On A Special Offer 3 Day Minicruise To Denmark, Germany or Holland from only £69 per person. Only On Selected Sailings.

Get away from the pressures of everyday life and experience a relaxing 3 day minicruise with Scandinavian Seaways. Sailing from Harwich, in Essex to Hamburg and Esbjerg or Newcastle to Amsterdam (Ijmuiden) (subject to sailing schedule) onboard one of the Holiday liners. Aboard the ships are a variety of facilities, including live entertainment, bars, disco, sauna, casino and cinemas (depending on route) as well as a selection of restaurants; the Scandinavian Smorgasbord Dinner Buffet is an experience not to be missed!

Once you arrive in your chosen destination we will take you on a comprehensive guided sightseeing tour of the city before returning to the ship for another memorable evening.

ALL MINICRUISES INCLUDE:

Two nights on board accommodation in the best available air-conditioned cabin (Excluding single and Commadore). Ensuite shower and toilet facilities. Two continental breakfasts. Guided city sightseeing tour by coach of chosen destination (duration varies according to schedule).

If you would like to stay a little longer, why not take advantage of our specially priced 4 day Minibreak (Denmark and Amsterdam) available up to 14th June and from 13th September. This allows an extra night in your chosen destination, using the ship as a floating hotel and is available at a supplement of only £20 per person.

OFFER VALID

From June - September

Departure Periods:

13 July, 20 Aug - 30 Sept.
£69 per person

14 July - 19 Aug.
£79 per person

Friday supplement £10 per person

Child reduction £20 per child
(4 - 15years)

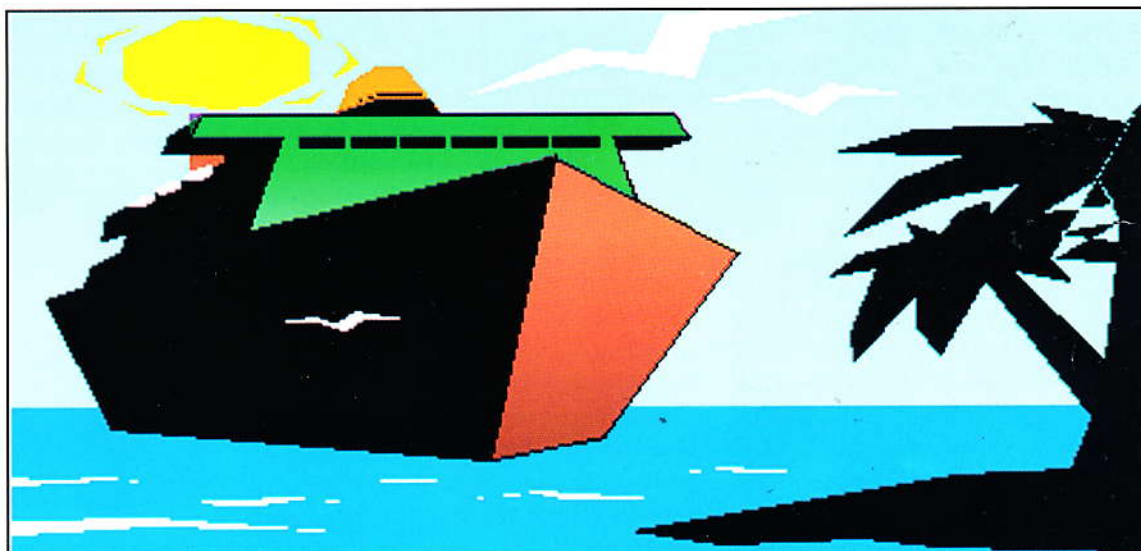
should have adequate insurance cover. If you require insurance, Scandinavian Seaways can provide comprehensive cover at a premium of only £6 per person (minicruise), £8 per person minibreak, payable at the time of booking.

TO BOOK CALL

0990 333 222 QUOTING

Code: V955 - 3 day minicruise

Code: V956 - 4 day minibreak



Courette accommodation reduction £10 per person.

Once you have decided on the period you would like to travel, call us to check availability. This offer is not valid for bank holiday sailing's and is made subject to availability and a minimum of 2 persons per booking, maximum of 2 children per adult. The offer is not valid for single or commadore cabins.

It is strongly recommended that all people travelling

This offer is subject to availability and is not combinable with any other offer or discount published in the Short Breaks brochure or elsewhere and is not applicable to new bookings. It is also subject to Scandinavian Seaways terms and conditions as printed in there short breaks brochure.

Trials and More Trials (REDS)

By Tim Wander

The first two weeks in February proved extremely busy for Telecoms & Control Division when by coincidence two major trials for very different customers all but overlapped.

The first week saw the Division providing trials equipment for the Home Office and the UK's Fire and Rescue services to demonstrate the new Radio Distress Signalling Units and the Entry Control Units, now collectively called REDS.

It's been a long haul for the specification and design team having worked closely with the Home Office and Fire & Rescue services for nearly 18 months to ensure that the product can meet its extremely challenging environment. Part of this effort has led to a new formal Home Office specification, JCDD40 that defines the functionality of fire service telemetry systems and encompasses the physical characteristics of the equipment to match including intrinsic safety, ingress protection, size, weight, display quality and alarms. JCDD40 also mandates that equipment must be compliant with the Home Office Radio Specification series MG41 and MG41A which GMCL has also significantly contributed to.

So February 10th 1997 was an extremely important date for those involved in the Fire Service Radio Telemetry Project as REDS is officially known. At long last after a lengthy period of discussion and development, this was the day when the fruits of all our labours were realised and trialing of equipment commenced.

It was entirely appropriate that the trial was facilitated and hosted by the Essex County Fire & Rescue Service Breathing Apparatus Training School at Waterhouse Lane in Chelmsford because this was where GEC-Marconi and the Essex brigade first demonstrated the concept of distress signalling by radio.



The trials required a tremendous team effort from all areas of engineering and system development who burnt much midnight oil to ensure that the kit was ready and performed well throughout the many complex and realistic Fire and Rescue scenarios undertaken.

Like any trial of this type, which involved over 40 people, a lot of information has yet to be brought together, analysed and debated. It was very reassuring to see the major technical issues all resolved even though it was recognised that operational procedure issues will inevitably need further careful consideration. However none of these were seen to be unresolvable.

It was also a great boost to hear that the independent trials team felt the trial was successful and represents a very important step to the hasten the commercial availability of these products which will significantly contribute to fire-fighter safety.

TWO EMMA TOC LIVES AGAIN

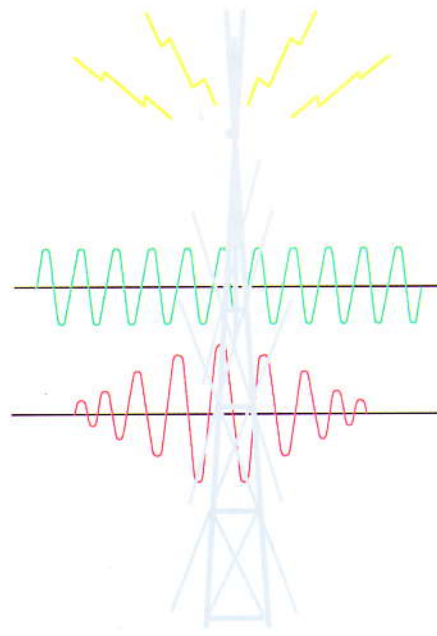
By Colin Page G0TRM

The historic writtle hut used for the early experiments in broadcasting back in 1922 was brought to life again recently for an annual event known as International Marconi Day. The Marconi hut as many people will know it, was based at Writtle as a development laboratory. It was from there the first regular entertainment broadcasts in Britain were transmitted

using the Callsign 2MT (TWO EMMA TOC).

For many years after that the hut was used as a sports pavilion at Kings School and in 1990 the hut was moved again and is now preserved at the Chelmsford Science and Industry Museum at Sandford Mill.

International Marconi Day is celebrated by members of amateur radio societies and individuals throughout the world. Each year for one day during April radio Amateurs set up temporary transmitting and receiving equipment at many of the original and existing Marconi International Wireless stations and experimental sites to commemorate Marconi's work in establishing world wide communications. Many members of the Chelmsford Amateurs Radio Society operated a transmitter from within the Writtle hut for a 24 hour period to contact and pass greetings to many other IMD stations and individual amateurs in many countries around the globe using both voice and morse code. In all some 750 stations were contacted using the Society call sign GX0MWT (Marconi Wireless Telegraph). In celebration of the 75th anniversary of the Writtle hut the Chelmsford Science and Industry Museum will be holding an open day on July 20th and Chelmsford Amateur Radio Society have been invited to set up another radio station for the day. However on this special occasion the society have been given permission to use the call sign 2MT, so on that day the call GB2MT will ring out around the world bringing back vivid memories to all those who remember the early days of broadcasting and maybe arouse new interest in others for those far off days.



JORN FRONT END RECEIVER

By Mike Steel

The development of a state of the art Digital Radar Receiver H2551 by GEC-Marconi for the Australian JORN HF Radar Project culminated this week in a highly successful First Article Test (FAT); witnessed by Telstra and Commonwealth representatives.

Although the Receiver achieved all operational performance requirements at a previous FAT the yields were not high enough to sustain production volumes of 1500 receivers. A Concurrent Engineering Team was set up in order to implement and carry out a structured Product Quality Assurance (PQA) exercise, with the assistance of the GEC-Marconi Research Centre's PQA department, which addressed all aspects of the Design and Manufacturing processes. The team comprised of personnel from the JORN Engineering, Manufacturing and Quality Assurance departments.



Thanks also to other members of Cell 3 Manufacturing for their valuable contribution to achieving FAT and the delivery of the first units.

The PQA activities involved complex mathematical modelling, associated with Stress Margin Analysis (SMA), Step Stress Testing (SST), Taguchi Tests, Root Cause Analysis and Reliability Growth Tests, the results of which were reflected as minor changes to the design baseline and production processes which eliminated or controlled elements of marginality resulting in vastly improved 1st. time pass yield rates for the Receiver and it's sub assemblies (typically 85% against an initial 35%).

These successes have pioneered a GEC Marconi initiative which now ensures that

PQA techniques are applied across the entire product range ensuring both a "Quality Product" and "Total Customer Satisfaction".

Hallo To The World

A song published by Mr Chris Jones, who has kindly given his permission to print in this issue of "Communicate".

Chris informs us that the song was written to highlight the value of some of our famous artefacts connected to GMCL. The song was first broadcast on BBC Essex in February and again in July on Marconi Day.

The transmitter's humming,
Dame Nellie's coming,
Broadcasting to the world from the great
Marconi factory.
At quarter past seven,
With a voice from heaven,
She'll sing her way through 'Home Sweet Home'
To a wood coned microphone.

With a silvery trill,
She gave such a thrill.
To a listening world.
But no one could foresee,
The adventures there would be,
In wireless-telephony.

Glass valves are glowing,
Demand keeps growing.
For new and different sounds on the
wondrous stage of radio.
Brave engineering,
Is pioneering,
Such glorious entertainment from a
packing shed in Chelmsford Town.

And the ships far away,
Tuned in today,
To listen to the songs.
All had gathered round
To appreciate the sound
Of Nelloe's nightingale voice

The world's applauding
While the 'Mail's' recording
"Art and Science joined hands
while the world listened on a crystal set"
With valves and wires
And insulated pliers
The engineers of Marconi
Brought to you 'Hallo to the World'

The transmitter's humming,
For wireless is coming,
Broadcasting to the world
from the great Marconi factory.
At quarter past seven,
An angel from heaven,
Trilled her way through
'Home Sweet Home' on that famous
wood coned microphone.

The Pit Stop

By Sandra Levey

We would like to say a big Thank you to everyone who has visited our new look "Pit Stop". Over the past few weeks we have been running several promotions to promote the new Pit Stop.

Week 1: saw our raffle tickets hidden under the plates, I am still looking for our winner who is entitled to a weeks free meals, so if the ticket holder of number 220 is around please come forward, if the prize is not claimed we will rerun the competition.

Week 2: saw our match the Mars bar halves which proved very popular with our customers and we handed out many free chocolate bars.

Week 3: saw our Tetley Tea Trail with prizes donated by Tetley's. A big badger was won by Clive Skidmore, other winners won personnel stereo, mugs, limited edition Tetley vans and many other prizes. Other winners included Brian Brundle, Roy Embley, M Brace, M Piggot, Tony Bishop and Dave Stevens so well done to you all.

We are now running a customer loyalty scheme where you collect tokens when you have spent over £2, which entitles you to discounts at the Little Chef, Trust House Forte, Granada Services and many more. This scheme will be running until October 1997.

We will as always keep you informed of any other promotions we run and if you have any comments please don't hesitate to contact me on Ext 5504.

I would like to say our first day of opening was a little confusing and we are sorry if that has put anyone off, we are now running smoothly and would urge people to come and witness this for themselves. We are also now offering a wider range of snakes and also have a Take Away Service available, look out for further details.

SOLVING THE PUZZLE

Our regular Puzzle spot has had to be cancelled this issue due to the poor health of our chief puzzler Eileen Clarke, get well soon Eileen.

However, the good news is we have a winner for the last puzzle: Mr Gary Hutley from Tech Pubs, well done Gary and a bottle of wine is on its way to you.

The correct answers for last issues puzzle were:

1T 2Y 3M 4U 5S 6H 7C 8W 9Z 10Q 11X 12R 13F
14D 15K 16V 17O 18E 19N 20A 21G 22B 23I 24J 25L 26P

WORDSEARCH

By John Polden

Try our new Puzzle this issue and try and win a bottle of wine.

Find the words (up/down/diagonal/backwards), then read the letters not circled, left to right, top to bottom, to uncover the message from our future manager:

I	T	Y	S	A	E	V	I	T	I	S	O	P
N	H	S	A	C	S	E	S	R	O	H	P	M
O	A	I	E	H	C	I	N	U	W	A	I	T
C	A	N	A	A	A	C	O	S	O	R	U	R
R	K	T	D	I	P	H	I	T	H	E	M	A
A	Y	E	S	R	E	A	N	S	N	O	O	M
M	O	R	U	P	O	N	I	S	S	L	A	S
E	U	V	O	E	E	G	P	C	O	N	T	A
L	W	I	I	R	S	E	O	D	A	T	N	H
P	E	E	X	S	U	W	O	G	X	T	A	R
O	Y	W	N	O	O	M	I	O	I	T	E	M
E	Y	E	A	N	M	N	I	R	S	C	M	A
P	T	V	L	A	G	R	U	O	I	V	A	S
D	I	R	C	A	G	N	I	N	R	A	E	L
S	R	E	D	A	R	T	I	T	K	N	W	O
Q	U	E	S	T	I	O	N	N	N	R	O	W
H	C	A	E	R	I	O	M	C	I	N	O	T
N	E	H	T	U	R	T	T	C	A	A	I	W
S	S	P	R	O	J	E	C	T	R	R	R	E
N	E	I	S	L	I	A	S	L	G	E	T	T
O	E	H	S	S	A	M	A	U	S	W	E	A
I	C	S	G	T	N	I	R	P	T	S	E	B
S	I	R	J	N	T	W	O	L	R	A	R	E
S	T	E	A	U	I	N	O	E	E	R	T	D
U	C	D	L	O	S	T	M	A	S	O	S	S
C	A	A	T	I	E	T	E	A	S	S	G	I
S	R	E	B	E	T	T	I	E	O	E	E	E
I	P	L	N	D	O	O	L	F	M	R	V	T
D	E	L	Z	Z	U	P	U	O	Y	G	R	A
E	T	S	E	U	Q	E	L	L	A	C	E	G
D	N	E	N	O	D	L	L	E	W	A	S	E
D	S	T	N	E	S	E	R	P	H	M	B	N
N	O	I	T	A	C	I	N	U	M	M	O	C

ADO ACT ARC ANXIOUS ANDROGOGICAL AXIS ANT
ACRID BEST CHANGE CHAIRPERSON COMMUNICATION
CALL CASH DISCUSSION DEBATE EASY ESCAPE END
FLOOD GRAIN HORSES HOW HELP INTERVIEW JUSTIFY

LEARNING LEADERSHIP MORALE MOSCOW MEETING
MANAGING MOUSE MASS MEANT MOONS MASLOW
MARCONI MACGREGOR NEGATE NICHE OPINIONS
OBSERVE OPIUM OWN PRESENTS PROJECT PEOPLE
PRACTICE PRINT PLEASE PUZZLED POSITIVE ROOM
QUOTES QUEST QUESTION RUN REACH RESPONSIBLE
STATUS STREET SECURITY SAVIOUR SOLD SMART
SAILS SHARE STRESS THANKYOU TRAINING TWO TONIC
TRUTH TRADERS TRUST THEM WORK WORN WAIT WE
WELLDONE YOU

The first word has been found for you **WE**.

Your message should read as follows:

----- "-----
-----"

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FlightParks Limited is one of the leading operators of airport parking in the UK. As well as FlightParks at Gatwick and Manchester, there are special reciprocal arrangements with well established car parks at 7 other regional airports.

Editor's Message

By Harvey Maule

We have been a bit quiet over the summer, but now we are back in business again. So all you budding writers out there get your quills out, and start penning some articles for the next issue planned for late **NOVEMBER 1997**.

I hope everyone had a great summer and enjoyed the holidays, now its over you wonder what all the fuss was about!!

It would I believe be improper of me if I where not to mention the tragic death of the beautiful 'Diana Princess of Wales', what a waste of a human life that had so much more to give. I am sure our readers, with me would wish to say "Rest in peace sweet lady."

All new articles in by early November 1997 please. I look forward to hearing from you.

