

PRINCE OF WALES AWARD FOR GMAV

A revolutionary new thermal imaging sensor, with wide application to emergency and security services, has won the 1993 "Prince of Wales Award for Innovation".

The Award was presented jointly to GEC-Marconi Avionics, Sensors Division, with GEC-Marconi Materials Technology and the Defence Research Agency. The ceremony took place at the UK Fire Service College at Moreton-in-Marsh, Gloucestershire, and was broadcast during the BBC1 "Tomorrow's World" programme on Wednesday, May 26th.

The "Tomorrow's World" audience saw live pictures from inside the smoke-filled engine-room of a burning mock-up of a ship. The audience was able to see a fireman as he used his thermal imaging sensor to search through the labyrinth of gangways to locate and rescue an injured colleague. Meanwhile, the handheld thermal camera provided an overall view of the scene of the fire from a helicopter flying overhead.

The winning of this prestigious Award demonstrates GMAV's innovative approach to the exploitation of high technology and its commitment to the pursuit of excellence.

The Award emblem has become synonymous with the highest standards of quality in both product design and manufacture.



Pictured (l-r): Dr Roger Whatmore (GMMT, Caswell), Peter Dennis (DRA(E), Malvern), Dr Hugh Lamberton (DRA(E), Malvern), Iain Matthews (GMAV, Sensors Division and HRH The Prince of Wales.



THE PRINCE OF WALES AWARD
For Innovation
Winner 1993

This is the second occasion on which the Company has received an Award. As one of the Finalists in the 1990 Competition, Rochester's Guidance Systems Division (part of GEC Avionics) received a 'Special Commendation' for their Solid State

Angular Rate Transducer - START.

1993's winning imager has already been ordered in very large quantities by a US manufacturer of firefighters' protective clothing for integration into its fireman's helmets. It has also been incorporated into GEC-Marconi Avionics' own handheld camera, the PYRO 2000, for which substantial orders have already been received and more are expected in the next twelve months.

The six finalists for the Award were picked two years ago, the overall winner being the Company who made the greatest commercial impact within that time. Speaking to a BBC Essex Reporter, Business Manager Iain Matthews said that his team deserved to come top.

"We've been working very hard for the last fifteen months on the contract to supply sensors to American firefighters and I was delighted when it all came through. Then, to win the Award was just icing on the cake, it was wonderful! And it was a real team effort, from everyone on the shop-floor right through the whole management structure of the Company.

continued on back page.

MASSIVE DONATION HANDED OVER TO MEDWAY SCANNER APPEAL

"The Gift is Right" - John Colston

"Some said it was 'impossible'. Others said 'extremely ambitious' ", said Dr Mohan Velamati, Chairman of the Medway Scanner Appeal, referring to the Fund's £1 million target when he came to Airport Works in April to receive a cheque for £101,445.

This spectacular contribution to the Fund has been raised during the last two years by the efforts of Rochester employees and their families taking part in, and contributing to, a host of events both serious and funny. These have included efforts ranging from individual sponsored contributions such as beard, moustache or hair (half) shaves, to raffles, quizzes, Karaoke, boot fairs, Christmas and Easter Bunny

collections, sponsored swims, sales of books and other articles, and big social and sporting events. All these - and many more - have, together, involved thousands of generous people.

Four Times Over Target !

Over 70 people representing all those who had dedicated time and effort to our fund-raising were at the ceremony hosted by Divisional Managing Director John Colston for the cheque handover. He said "When a Committee was formed to co-ordinate the Company's Appeal, we thought a target of £25,000 was ambitious. But the energy and enthusiasm of our employees for a cause that caught their imagination, together with an element of inter-Divisional rivalry, has brought in over £101,000. Ordinary - looking people maybe, but you are Superstars!"

John went on to mention some of the contributions made. Names far too numerous to mention in full, but not forgetting the participation of Peter O'Keefe from the Accounts Department who kept a tally of all the pounds and pence (and dollars) as they came in. He mentioned little Karis Walker who raised over £50 by reciting the alphabet at the tender age of 3, and introduced Di Bower who worked incredibly hard co-ordinating and motivating so many people - including persuading John Colston, himself, to join a tug-of-war team! John then invited Di to present Dr Velamati with the cheque.

continued on back page.



Dr Mohan Velamati and GMAV's Di Bower with a very large cheque....

.....and some of the GMAV employees at Rochester who made the Appeal a success.



JERRY FISHER

Jerry Fisher has been appointed Senior Vice President Marketing (USA) with effect from 6 June 1993. Based in the GEC-Marconi Washington Office, and whilst continuing to report to Brian Tucker - Director of Programmes, Jerry will be responsible for directing all GEC-Marconi Avionics' marketing activities in the United States, including the co-ordination of marketing by the UK-based Divisions and GEC-Marconi Avionics Inc. All US corporate marketing personnel will report to him.



Jerry Fisher - Snr VP Marketing (USA)

Editorial Note

As Editor I welcome contributions for VISION (and corporate GEC's magazine TOPIC) from all employees throughout GEC-Marconi Avionics.

All contributions should be addressed to the Site Coordinators/Correspondents - or in the case of Basildon, direct to the Editor - as should any comments relating to the Magazine's content etc:-

I can, of course, be contacted direct:

Colin Langlands Editorial Officer B450 Business Development Group

Sensors Division Basildon

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**NEXT COPY
DATE - Wednesday
August 4th**

HOT OFF THE PRESS!

The visit of Publicity Manager Helene Cox to Sensors Division's Business Development Group on 26 April coincided with the first copies of VISION (Issue 1) rolling off the presses at Basildon's Carter Print Limited.

A photo-call to mark the occasion had been arranged at the Print Works and the resultant photographs show:



[l-r] Colin Langlands (Editorial Officer - GMAv and Editor of VISION), Helene Cox (Publicity Manager - GMAv), Peter Jones (Machine Minder/Printer) and Peter Patterson, Director of Carter Print Limited.



Checking colour proof pages.

EDITORIAL THANKS

I wish to take this opportunity to thank EVERYONE who helped in the production of Issue 1 and made it a success. Without their support VISION would have taken much longer to 'get off the ground'.

The team spirit is clearly visible, underlined in everyone's willingness to help me in my role as Editor. I am, indeed, most grateful.

Colin Langlands Editor June 1993

Keeping The Peace

GEC-Marconi Avionics' equipment is helping the RAF patrol the skies of Bosnia as part of NATO's peace-keeping efforts in the region.

A number of Tornado F3 fighters, normally based at RAF Leeming, have been deployed to an airbase in Italy which is within range of the former Yugoslavia.

The Tornado is fitted with many GEC-Marconi Avionics products including the Foxhunter radar which is the main sensor for the aircraft. Foxhunter was designed and developed by Radar Systems Division at Milton Keynes.

Trials work on the advanced 2G variant of Foxhunter has been taking place recently at RAF Coningsby in Lincolnshire. In support of these activities, a team from Milton Keynes has been using a containerised radar test station which was built during the Gulf War. Within 48 hours of the RAF Leeming Tornados leaving for their Bosnia mission, this equipment was decommissioned, shipped to Italy and recommissioned by GEC-Marconi Avionics, staff and RAF personnel.

Phil Poole, Business Development Manager, Military Systems, said: "As in the Gulf War, the Company has been able to respond

very quickly to the customer's needs. The Tornados' role in Bosnia highlights the changing role of the UK's armed forces and their peace-keeping activities emphasise the need for equipment to operate and be supported far from home bases."

Contracts Manager Jim Driver said: "Our Foxhunter programme at Milton Keynes has been running for a number of years and the work is not over just because the radar is operational. On the contrary. It is an ongoing, developing, live radar which has unique features, making it very effective for front-line use."



RAF Tornados are keeping the peace over Bosnia with the help of GEC-Marconi Avionics.

JOINING THE ELITE

The former GEC-Ferranti Company, now part of GEC-Marconi Avionics, has gained entry to an elite group by joining the Preferred Supplier List of one of the world's leading aircraft manufacturers.

In 1987, McDonnell Douglas Aerospace of the USA decided to reduce its supplier base from 5,000 to 1,000 because of defence cuts and the more competitive world market. The American Company, known as McAir, intended to concentrate on the best suppliers, awarding 500 out of the 1,000 'preferred supplier' status. Only 165 have qualified so far and the former GEC-Ferranti Divisions of GEC-Marconi Avionics formed one of the few British concerns with quality standards high enough to merit this award.

Each applicant for preferred supplier status undergoes a critical examination in areas such as good delivery, high quality and fast responsiveness so that McAir, in turn, can satisfy its customers.

At the award presentation in Edinburgh McAir Vice President Robert Soucy congratulated the workforce. He commented on the fact that their Company has the same priorities as his for being successful in the aerospace business, by concentrating on customers, employees, shareholders and suppliers.

He said: "You're good people, we enjoy working with you and we want to take you with us into the future. Thank you all for the good work you've done for us, and for achieving this award."

The presentation was made to Peter Kenyon, Divisional Managing Director of Displays Division. Displays has a long association with McAir and the US Navy, having supplied equipment for the F-18 Hornet and the T-45

Goshawk. At the award ceremony the US Navy was represented by Captain Richard Koehler and Captain Bill Passnatt.

Peter Kenyon said that everyone had worked hard to achieve the high standards set by McAir for its suppliers. He commented: "The aim now is to do even better and to extend this recognition of excellent performance to all Divisions in GEC-Marconi Avionics."



Peter Kenyon, (left) accepts the preferred supplier award from Bob Soucy of McDonnell Douglas Aerospace.

THE RAF'S ROYAL REVIEW CORRECTION

Thanks to those who pointed out the error in the Issue 1 article relating to the 'washed-out' Royal Review at RAF Marham last April.

The cancelled 75th anniversary flypast is being included in the air display to be held at Fairford, Gloucestershire this summer, and not RAF Faringdon as reported.

Apologies for the misleading information.

TORNADO GR4 FIRST FLIGHT

GEC-Marconi Avionics Supplies Upgraded Electronics

The 29th May, 1993 saw the maiden flight of the first avionics development aircraft for the Tornado Mid-Life Update (MLU) programme.

GEC-Marconi Avionics is a major supplier to the MLU. Many of the proposed new sensors, displays and systems that will extend the capabilities of the aircraft to fulfil current and future tasks will be supplied by the Company. These include:

The pilot's Head-Up Display
The computer symbol generator

The SPARTAN passive Terrain Referenced Navigation and Terrain Following system

The digital map database generator

The terrain following display

A computer loading system

A video recorder system

An enhanced stores management system

A covert radar altimeter

The Mid-Life Update programme will also integrate the Company's Night Vision Goggles and Forward Looking Infra-Red equipment into the aircraft.

These systems will extend the performance and mission effectiveness of the Tornado GR4. In particular, they will give the aircraft a critical covert day/night and low level flying capability which was shown to be vital during the Gulf War operations.

The enhanced stores management system will bring more effective weapons delivery for a broader range of weapons, whilst the computer loading system and video recorder will enable swifter, more efficient transfer of mission planning data into the aircraft and improved mission replay and analysis.

Study Time for Milton Keynes

Radar Systems Division at Milton Keynes has won a study contract from the Ministry of Defence Procurement Executive which builds on some of the private venture work the Division has undertaken over the last few years on target recognition.

The study runs for six months and leads to a multi-phase, multi-million pound programme. Following on from the study contract, Radar Systems will be in a strong position to compete for this work.

The study itself will be supported by members of the Blue Vixen team in Edinburgh, with an element of the work sub-contracted to the GEC-Marconi Research Centre at Great Baddow.

First Boeing 777 Flight Control Computers Delivered

GEC-Marconi Avionics has delivered, on schedule, the first set of flight test standard primary flight computers for the Boeing 777 to the Boeing Flight Systems Laboratory in Seattle. The delivery marks a major milestone in the development of the advanced fly-by-wire flight controls for this aircraft.

The three computers will now be subjected to extensive and detailed laboratory testing prior to first flight of the aircraft in 1994.

Currently Boeing and GEC-Marconi Avionics are proceeding with the exhaustive test and validation programme for the system and its software.

All the primary flight control surfaces of the 777 will be controlled electrically through the three primary flight computers. Fly-by-wire technology brings the aircraft improved reliability, performance and efficiency when compared to traditional mechanical controls. The improvements gained are sufficient that GEC-Marconi Avionics predicts that the

coming decade will see a significant number of new 100 seat plus aircraft installing fly-by-wire systems.

Since it developed the pioneering Concorde flight controls in the late 1950s. GMAV has been at the forefront of fly-by-wire technology. The Company has been closely involved with Boeing since 1986 in the development of a fly-by-wire system for commercial aircraft.

Mr Brian Tucker, Director of Programmes says: "This delivery represents an impor-

tant landmark in a long and, I believe, mutually beneficial relationship between GEC-Marconi Avionics and Boeing Commercial Airplane Group. Although the contract was awarded in 1991 our relationship in flight controls has been established for many years. The smooth progress of the development of this equipment is a mark of the success of that relationship."

Boeing 777 team members with flight control boxes on the integration rig in Seattle



REWARDING QUALITY ACHIEVEMENTS

Support Division's Test Systems Department at Donibristle has celebrated its first round of quality improvement achievements with an informal presentation at the nearby Marconi Sports and Social Club.

As part of a drive to maintain and improve its standards, the former GEC-Ferranti Company had been running a Total Quality Improvement Programme. The Donibristle event marked the first cost savings to result from the venture in Test Systems.

Production Manager John Pryde explained: "Most of

our employees have been running their Quality Improvement Meeting Units (QIMUs) for about a year. They have been working on problems and solutions and ten groups had reached the point where they had submitted their first Problem Solution Benefit (PSB) forms.

"The PSB form is the formal way of reporting that a group has identified a problem, implemented a solution and achieved savings. We don't take people's efforts for granted so we awarded achievement certificates to these ten QIMUs. It was an

opportunity to say well done and keep up the good work."

More than 70 staff went along to the event at the Social Club and John said: "By their example, others will see that there is something to this system and will be encouraged by the potential mutual benefits for them and the Company."

The annual saving from the ten QIMUs is estimated at £37,000. Quality solutions ranged from common sense initiatives, like repositioning a microfilm viewer, to an important review of the quotations procedure at Test Systems.



Members of the Design Office Quality Improvement Meeting Unit look forward to further successes.

LAUNCH ORDERS WON FOR INTEGRATED SURVEILLANCE SYSTEMS -

GEC-Marconi Avionics has won launch orders for radar and electro-optical systems in an international competition to provide aerial surveillance services.

A Seaspray 2000 maritime surveillance radar and electro-optical Multirole Turret System will, together, provide comprehensive, fully integrated maritime surveillance enabling cost-effective patrol of extended Exclusive Economic Zones (EEZ) and coastal surveillance.

The sightline of the multirole turret may be steered manually or slewed to targets designated by the radar using a MIL-STD-1553 databus. Targets detected by the radar may be identified televisually day and night and in poor visibility and, once acquired, may be tracked electro-optically. This is the first application for which these two GMAV sensors have been ordered as a fully integrated system.

The orders mark an important step forward in the use of these high technology sensors in the civil or paramilitary market. In this field, operators only fly small numbers of aircraft and require highly reliable equipment on short delivery timescales.

FURTHER ORDERS - Finnish Frontier Guard

These systems have now also been selected in orders worth more than £1 million from Dornier Luftfahrt of Germany for surveillance systems for Finnish Frontier Guard aircraft.

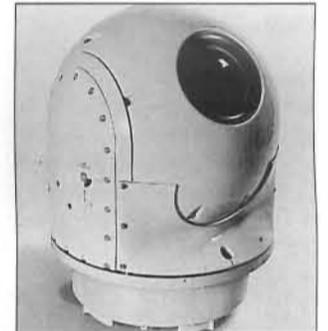
These equipments will form the heart of the sophisticated surveillance suites to be installed in two Dornier 228 maritime patrol aircraft.

The Radar Systems' Seaspray 2000 maritime surveillance radar and the Sensors'

multirole electro-optical turret system together provide a comprehensive, fully integrated maritime surveillance capability for cost-effective patrol of extended Exclusive Economic Zones (EEZ), coastal surveillance and fishery protection.

The sightline of the electro-optical turret may be steered manually or slaved to that of the radar via a MIL-STD-1553 databus. In the latter mode, targets detected by the radar may be identified televisually day and night and in poor visibility. Once acquired, they may be tracked electro-optically, allowing the radar to revert to its search mode.

This application, for which these two GMAV products have been ordered with the two sensors fully integrated, is a further breakthrough into a significant market: that of civil and paramilitary operators of small numbers of aircraft who demand highly reliable equipment on short delivery timescales.



Sensors Division's multirole turret system.

At work with SEASPRAY 2000

JOIN OUR CLUB

Company engineers may be interested in a new professional Body representing them at a pan-European level and open to all corporate members of the Institution of Electrical Engineers.

John Le Marie, Principal Product Safety Engineer at Donibristle, joined FEANI more than two years ago. He said: "FEANI is the Federation Europeenne d'Associations Nationales d'Ingenieurs or, in English, the European Federation of National Engineering Associations.

"Looking to the single European market, it seemed a good idea to join and be in at the start. The Company benefits by its increased profile when I give talks or lectures for FEANI, as I am introduced as a staff member of GEC-Marconi Avionics. It also means that the Company's name is mentioned more in a European context."

FEANI members in the UK can use the title 'Eur Ing' which derives from the French for 'European Engineer', so John's full designation is Eur Ing John Le Marie. He said: "It certainly helps improve the status of the profession and that is always important."

To find out more about FEANI, contact John at Donibristle on Ext. 3102.

PAPERS BRING AWARDS TO CHRIS

Chris Bartlett, a Consultant Engineer in the Display Systems Group at Rochester, has been winning awards for writing and presenting technical papers. Chris joined the Company in 1972 to work on the A-7 Head-Up Display (HUD), and is now a consultant on Displays, Symbol Generators and Night Vision Systems via programme management and design management.

As a member of several societies related to his work at Rochester, Chris is often asked to present papers at various conferences. Two notable events

recently were reported in the Society for Information Display (SID) newsletter of April 1993: "The next meeting, 'Display Applications in the 1990s and Beyond' was held at GEC-Marconi Avionics, Rochester. The winner of the award was Chris Bartlett from the host Company with his paper on 'Displays for the Cockpit'."

"Sixty-four people attended the most recent meeting held at Philips House in London and the topic was 'CRTs - What Now?' Some speakers dropped out at the last minute and Chris Bartlett came to the rescue and

helped to complete the programme with a contribution on 'Cathode Ray Tubes in Avionics Displays'. His efforts were well rewarded as he won the best paper award yet again."

Between 21st and 25th June, in Munich, Chris attended the International Symposium on Electronic Imaging Device Engineering. As a senior member of the European Optical Society, Chris has been elected as the Conference Chairman in addition to presenting his paper on 'Second Generation Holographic HUDs'. We wish him the best of luck.

IN FOCUS GMAV's MD & DIRECTOR OF PROGRAMMES

DEREK L DICKINSON
MA MSC CEng FIEE
MANAGING DIRECTOR



Derek Dickinson joined the British Aircraft Corporation in 1967 as a graduate engineer. In 1970 he became Electronics Design Manager for the Concorde Air Intake System.

In 1972 he moved to ITT Creed and in 1979 was appointed as their Director, New Products.

Appointed Technical Director of Cossor Electronics, a subsidiary of Raytheon, in 1980 Derek Dickinson became their Managing Director in 1985. Two years later he was appointed Vice President of Raytheon Europe and, in 1988, joined Marconi Defence Systems Limited as Assistant Managing Director.

The following year he took over the role as Managing Director of MDSL and subsequently as Assistant Managing Director of GEC-Marconi Limited in November 1991. There he had particular responsibility for avionics and aerospace businesses. In January 1993 Derek Dickinson became Managing Director of the newly formed GEC-Marconi Avionics, bringing together in one Company much of this business.

BRIAN G S TUCKER
BSc (Hons) Physics CEng
FRAeS

DIRECTOR OF PROGRAMMES



Brian Tucker joined Elliott Flight Automation in 1970 as a Systems Engineer on the BAC 1-11 project. During the next few years he was

involved in Concorde autoland systems and in the start of the work with Boeing Commercial Airplanes on the autothrottle for their 747 aircraft. As Technical Manager of the Company's Flight Controls Division he was responsible for military and civil programmes in the transport aircraft, helicopter and unmanned aircraft world.

In 1985 he was appointed Divisional Manager of Flight Controls Division and, in 1988, became Assistant General Manager of GEC Avionics. In this position he had responsibility for the anti submarine and sonar business as well as for the continuing expansion of the Company's flight controls activities, in particular in the USA.

One year later he became Assistant Managing Director of GEC Avionics, with direct responsibility for these areas of business as well as for customer and product support.

In 1990 Brian Tucker was appointed Managing Director of GEC Avionics and in 1993 became Director of Programmes for GMAV.

DREAMS INTO REALITY

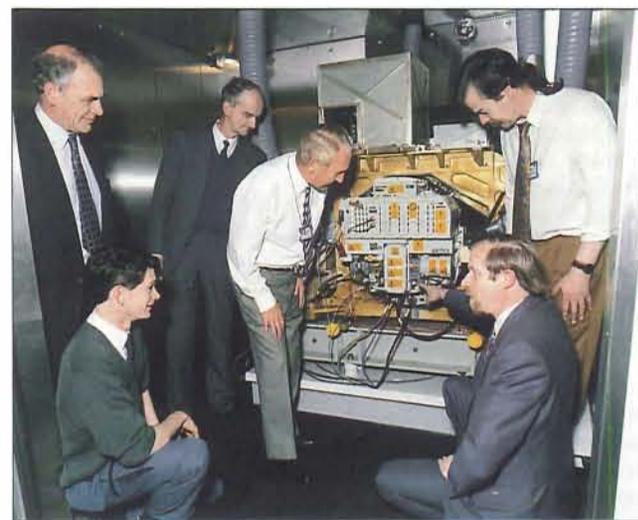
The Mechanical Engineering Department at Crewe Toll in Edinburgh has 28 engineers involved in radar projects, from pre-contract feasibility studies to installation of equipment into production aircraft.

They take part in virtually every stage of a radar's development from design to manufacture. Chief Engineer Derek Morgan said: "At the beginning, mechanical engineers will make decisions about whether different designs of radar would actually fit in the aircraft."

Systems staff make computer studies to produce a design in line with the customer's requirements. Then, electronic engineers make the circuit diagrams that are necessary to produce the actual radar. Derek said: "We take the designs and diagrams and package them into the actual product. We turn the dreams into reality."

The Department is organised into teams dealing with specific radar projects such as ECR 90 for the Eurofighter 2000, Fire Control Radar (which includes the Sea Harrier FRS2's Blue Vixen, and Blue Kestrel for the EH101 Merlin helicopter. Within this set-up, there are specific skills areas.

Derek continued: "We have a number of engineers who are experts in servo-mechanisms. Most radars have devices which can point and hold them in a certain position and



Staff from the Mechanical Engineering Department inspect a radar undergoing tests in the environmental stress screening facility.

direction. This is an interesting part of the work as it involves moving parts like motors and gearboxes as well as electronics and computer software.

"We also have expertise in high-voltage circuitry packaging, printed circuit board engineers and staff with a broad general knowledge of manufacturing problems."

Two of the larger groups in the Department are Thermal Engineering [as featured in Issue 1 of VISION] and Stress Engineering.

An aircraft is a severe environment, subject to sudden movement and vibration, and radar systems need to be examined for susceptibility to stress damage. The Stress Group

is equipped with state-of-the-art computer tools for modelling such problems.

Space is always at a premium in an aircraft. Derek commented: "Computer design tools like finite element stress analysis, can help predict how vibration will affect components, LRUs and entire systems."

Charlie Thomson, Manager of the Mechanical Engineering Department, said: "We have a broad range of expertise in electronic packaging here at Crewe Toll."

"Our skills can be applied outside the Division, Radar Systems is able to do a job for any part of the Company, thus in line with the concept of 'one team, one name, one vision'."

Internal Launch of GMAV

Whilst the official launch of the new GEC-Marconi Avionics to the outside world took the form of a Press Briefing at Rochester (see Issue 1), and a corporate stand at the Paris Air Show, internal PR has not been neglected.

With the new name firmly fixed above the portals at each

site, Managing Director Derek Dickinson, with Brian Tucker (Director of Programmes), has recently visited all four sites and briefed all levels of Management on future business strategy.

Before invited audiences the two Directors outlined the reasons for GMAV's formation, its world standing, its

current business position and product range, and plans for the future. It was also emphasised that each Division within the Organisation would be encouraged to work with each other in bidding for systems on both commercial and military programmes.



MD TAKES TIME OUT FOR FLAG RAISING

Whilst visiting Sensors Division for its Management Briefing on 5 May, Derek Dickinson took time out to raise a new flag. This marked the Basildon Division's achievement in being awarded the (1991) Royal Academy of Engineering's MacRobert Award and also provided the MD with an opportunity to meet the team involved in the 1991 success story. The accompanying photograph shows the flag about to be hoisted.

GEC-Marconi Avionics and Bell Helicopter Textron Progress on the 'VENOM'



GMAV's helicopter cockpit simulator.

GEC and Bell are progressing with their bid for the UK Attack Helicopter programme with the 'Venom'.

Developed from the US Marine Corps' AH-1 Whisky Super Cobra, the Venom will use the same GE T700-401 engines with the addition of an Auxiliary Power Unit (APU) whilst continuing to provide the unmatched performance and reliability demonstrated by the AH-1W throughout the Gulf War.

The Venom upgrade incorporates an improved cockpit layout, and weapon systems as well as a complete night fighting capability. Emphasis is being placed on crew integration, flexibility and reduced

workload, for example, the new cockpit will enable either crew member to fly the aircraft and operate the weapons system. The cockpit will incorporate colour multi-function displays, moving map displays, head-down targeting displays using Forward Looking Infra Red (FLIR) or TV Imagery, and helmet mounted displays showing flight symbology, FLIR, TV and night vision goggle imagery.

The Venom upgrade incorporates an improved cockpit layout, and weapon systems as well as a complete night fighting capability. Emphasis is being placed on crew integration, flexibility and reduced

The total night fighting capability will be provided by

integrating piloting FLIR, targeting FLIR and NVG Imagery on advanced Helmet Displays. In addition a full defensive aids suite will enhance aircraft survivability whilst a total integrated health management system will monitor systems during flight and reduce maintenance requirements on the ground.

The GEC/Bell Venom offers a practical, cost effective, highly reliable weapons platform, meeting all the British Army's major requirements in terms of operational capability, survivability and reliability, and is based on proven airframe performance and systems technology.

ON TOP OF THE WORLD

Five members of staff from Edinburgh enjoyed the trip of a lifetime when they took part in a GEC-backed expedition to Nepal.

The Management College at Dunchurch organised the visit which involved working on a tree plantation and the opportunity to climb Imja Tse, a 20,000 foot Himalayan peak.

Grant Fairley of Radar Systems, and Graeme Douglas,

Douglas McGibbon, Colin Munro and James Rhodes of Navigation and Electro-Optic Systems joined with staff from other GEC companies to form an 11-strong expedition team.

Grant said: "The aim was to go to Nepal and visit the Himalayas to inspect a tree plantation which was started in 1978 to commemorate the twenty-fifth anniversary of the first ascent of Everest by

Edmund Hillary and Sherpa Tensing".

The plantation project was initiated by the John Hunt Expedition Group (JHEG), John Hunt being the leader of that first successful assault on the world's highest mountain. Grant said: "We inspected the tree nurseries, which were blooming, and went to look at a local hospital to see if there were any other projects the JHEG could undertake.

"The pleasure side of the trip was climbing Imja Tse. From the Management College's point of view, it was a good exercise in teamwork, personnel skills and character building".

From left: Colin Munro and Graeme Douglas at the summit of Imja Tse.

Grant Fairley at the summit of Imja Tse with Lhotse towering above in the background.

Although some members of the team had undertaken hill walking and rock climbing outside Scotland, none had tackled anything like Imja Tse before. Barry Roberts, from the Management College, led the climb as he has a wealth of mountain experience from previous trips to the Himalayas, the Canadian Rockies, Mount Kenya, Kilimanjaro and others. Grant said "We couldn't have done it without Barry".

The mountain adventure was 16 days long and included time for training in ice climbing techniques and using ropes. Grant said: "We set up a base camp, a high camp, then undertook the ascent which took us three days. Only seven of us got to the top as the others had problems with altitude sickness and chest infections. Of the seven, four were from GMAV in Edinburgh.

"On the day of the summit attempt, we left camp around 4 am when it was pitch black and reached Imja Tse's glacier around 7 am. We had to put on our ice gear and rope ourselves together to get across.

"Around midday, we reached the ice face which we had to climb. On top of that, there was a hundred-yard ice ridge with drops of 6,500 feet on either side. We got to the summit around 2.30 pm and, whilst there, tried to work out the temperature. With the wind-chill factor, we reckoned this to be minus 48 degrees Centigrade.

"We had some scary moments but overall it was a successful expedition and all credit to Barry Roberts for getting us to the top".



INTO ORBIT



Ariane on the launch pad at Kourou in French Guiana.

The Navigation and Electro-Optic Systems Division in Edinburgh has won a contract to supply ten Inertial Navigation (IN) units to Matra Marconi Space France for the Ariane 4 space rocket.

Marketing Executive Helen Spoor said: "The IN system, which incorporates our innovative 162 Ring Laser Gyro, goes into the vehicle equipment bay which is the brain of the Ariane launcher. This controls the three propulsive stages and therefore gives the satellite an accurate injection point into orbit.

"This point must be very accurate as the more precise it is, the less the satellite needs to use its boosters to reach an exact geostationary position. Conservation of booster fuel can prolong the life of a satellite by years."

Each IN system has three Ring Laser Gyros and the

Order is the second that Navigation and Electro-Optic Systems Division has supplied for the Ariane programme. The Division has also supplied IN systems for Ariane launchers, from the first Ariane 1 launch in 1979 through to the present Ariane 4 series, and these launchers have used the successful mechanical 125 gyro.

Helen said: "This is important as it reaffirms our position as a major navigation systems manufacturer. The Ariane 4 launcher will be using our equipment for years to come."

Arianespace is the world's most successful commercial satellite launch organisation. It has 56 launches under its belt and another 31 satellites waiting to be launched representing \$2.6 billion of business.

REPAIR STATION APPROVAL

A Certificate of Approval to operate as a Joint Aviation Authority Approved Repair Station has been granted to the Power Systems Division by the Civil Aviation Authority (CAA), acting on behalf of the Joint Aviation Authority (JAA) - an Organisation of European Aviation

Authorities. This recognition is the first within the Group. Approval is a prerequisite for the Division to continue to maintain, repair and release to service components of non-United States registered civil aircraft and aeroengines. Recent changes in legislation mean that no Organisation

may operate as a civil repair station within Europe, after 1st January 1994, unless approved in accordance with the new JAR-145 Approved Maintenance Organisations Regulations.

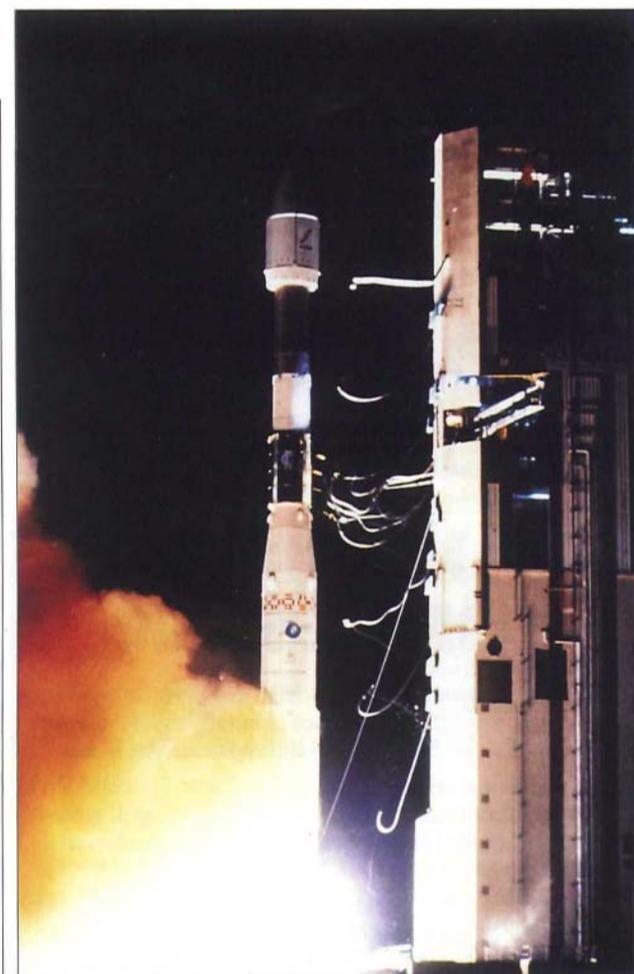
JAR-145 is one of a series of requirements, published by the JAA, specifying the

standards to be met pertaining to staff, organisation, responsibilities, resources, training, qualifications, workshop facilities, capabilities and operating procedures etc. within a repair station.

In order to gain approval, the Division had to prove to the Assessors that it complies with JAR-145, part of which is the provision of a Repair Station Exposition Manual and a site audit by the appropriate Inspectorate.

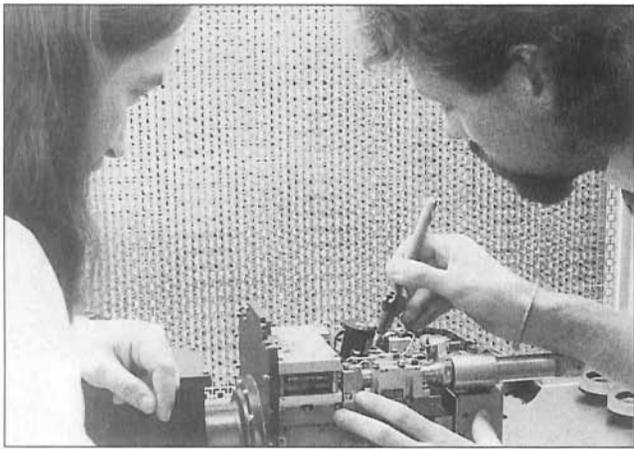
Mr A Holman, CAA Representative, as a member of the JAA, presenting the JAR Certificate to John Brian (Divisional MD - Titchfield).

Foreground (l-r): Stan Nicholson, Product Assurance Executive, John Brian, A Holman and Paul Burton, Sales Manager Repairs.



Lift-off of the Ariane 42P launcher at Kourou. (Photos by courtesy of Arianespace)

Assistance In Australia



Bi-Sensor Project Welcomes GEC Input

Early Spring 1993 saw the arrival in Australia of GMAV's TICM-2 System Engineer Richard Hartshorn. Richard was in Adelaide to train Abell engineers in the maintenance and calibration of the TICM-2 thermal imager.

The Bi-Sensor, in Brief

The thermal imaging camera is an integral component in the Bi-Sensor surveillance system being jointly developed by Abell and Thomson-CSF of France. The system includes the best features of Thomson's RB 12B Doppler radar & infra-red imaging technology to produce a better overall sensor. Sensor fusion is used to drastically reduce false alarms while maximising surveillance system range and target tracking capabilities.

The Bi-Sensor project, currently proceeding well to schedule, will commence trials at the end of 1993.

The Training Period

Richard Hartshorn spent a week instructing engineers and technicians at Abell on the various camera subsystems. The activities covered included the breakdown and re-assembly of the camera unit, servicing, maintenance and the calibration and alignment of the camera system. All these activities were conducted in the Abell optics facility and clean room.

Thanks to Richard's efforts, the camera system is now ready to be interfaced to the Bi-Sensor system modules. Duncan Groome, responsible for the infra-red subsystem of the Bi-Sensor, is pictured with Richard (left) during final camera testing.

(Article & photograph reproduced by kind permission of Roy Senini, MD of Vision Systems Limited - Australia)

£1 MILLION ORDER FOR RAF TEST EQUIPMENT

The Company has won a major contract to supply General Purpose Automatic Test Equipment (GPATE) for use in RAF second line avionic support.

The GPATE is a development of the successful, deployable Avionics Systems Test (AST) product family and this latest order further establishes its role of in-service support for the RAF's Tornado and Harrier aircraft.

Variants of the AST product family are also on order to provide a deployable and comprehensive diagnostic test capability for the Royal Navy's Sea Harrier FRS2 programme.

Project Manager Peter Armstrong said: "We believe this latest order reflects the continuing commitment of the Ministry of Defence to our Avionic Systems Testers as the solution for its present and future needs. There is now more than 40 such equipments, either in service or on order, throughout the world."

The time taken to test complex avionics can often prove vital in keeping as many aircraft as possible in operational service. Automating the testing greatly eases and speeds the task.

GMAV's Support Division, based in Edinburgh, Donibristle and Rochester, is the largest product support organisation of its kind in Europe. It provides worldwide product support services across a wide range of military and civil avionic and weapon systems.

INTERNATIONAL FANS AT ROCHESTER

On 20 and 21 May, approximately 100 delegates to the International Conference on the Future Air Navigation System (FANS) visited Rochester to attend a two day Seminar on the industrial implications of this important new technology. Predicted air traffic will outstrip ATC and airport capacity before the end of the century and nations are working through FANS to put new technology and facilities in place in key world centres. Part of the technology will involve navigation and communication via satellites. FANS involves new technology, and hence new equipment and systems opportunities on land, in the air and in space.

Last year's Conference was in Seattle and Boeing hosted the International Seminar. This year, it was the UK's turn and GEC-Marconi Avionics acted as host, assisted by sister Companies GEC-Marconi Air Traffic Systems, Canadian Marconi, Marconi Radar and Control Systems, EASAMS, Matra Marconi Space and the Electronic Systems Division of Marconi Defence Systems.

The Conference was held under the auspices of the International Co-ordinating

Council of Aerospace Industries' Associations, which is open to all countries. Among the delegates were some from the former Soviet Union, as well as the USA, Australia, Canada and countries throughout Continental Europe. Among the 25 papers read, which covered every aspect of future air navigation, were three from the GEC team. These included the keynote address by Peter Hearne, GMAV's Director of Civil Aviation; one on 'Integration of Air and Ground Procedures' by Colin Wilson of GMATS and a third on 'The Funding Implications of FANS' by John Lancaster of MRCSL.

The Rochester hosting included transporting the delegates to and from London by coach each day, lunch and refreshments each day and a dinner on the first evening, all housed in the Conference Centre. Guest speaker at the dinner was Mr David Moss, formerly the Head of the Government's International Aviation Directorate and now a Director of Railtrack. In his after-dinner speech, he said that Railtrack now seeks to develop rail capacity in the same way that air space has

been developed, ever since the beginnings of international air transport. He also paid tribute to the FANS concept, and to the dessert which the Rochester Canteen staff had named in its honour 'Apple Pie à la FANS'. After the dinner, delegates were taken on a guided tour of the City of Rochester-upon-Medway, en-route to their London hotels.

In order to promote the GEC Companies' interests in new FANS business, a combined exhibition was held in the Conference Room, for the duration of the Seminar. This covered the latest developments in radar, displays, Global Positioning Systems (by satellite), satellite communications, sensors and systems integration. Working demonstrations included the new Passenger Telephone System from Basildon's Sensors Division and an Air Traffic Controller's Work Station from Marconi Radar and Control at Chelmsford.

The comments received from the delegates (pictured with their hosts) were very favourable, even glowing, and the Company's objective of raising its profile as a total systems supplier for FANS was well accomplished.

All who took part have been congratulated for an outstanding effort, and teamwork.



FANS Delegates attend the Rochester Seminar

VISITORS FROM AMERICA

With the new Organisation now in place the Power Systems Division, which has already been successful with sales into North America, is looking for further opportunities.

To help in identifying programmes a visit was recently made to Titchfield by Muir Ainslie, VP Business Development and Scott Rettig, Director - Business Development from GEC-Marconi Avionics' Washington Office.



Muir Ainslie



Scott Rettig

FOXHUNTER FORGES ON

The first Foxhunter 2G radar has been formally handed over to the Ministry of Defence Aircraft and Armament Evaluation Establishment (A&AEE) at Boscombe Down.

Martin Woolley, General Manager of Radar Systems Division at Milton Keynes, said: "It has undertaken ground acceptance tests and is now going into flight trials prior to its release into service with the RAF."

The 2G is a development of the basic Foxhunter radar which Radar Systems has been working on for the last two to three years. Foxhunter is fitted on Tornado aircraft, in service with the RAF and Royal Saudi Air Force.

Seeking Wider Participation

Two Sensors Division ancillary Sections of its Sports and Social Club are offering the opportunity for all GMAV employees to participate in their activities:

(1) The GOLF SOCIETY is considering the possibility of playing an inter-Divisional Match between ALL Divisions. Interested parties throughout the UK should contact Richard Spong at Basildon on GNET: Access code + 344 + 7170.

(2) The London Philharmonic Orchestra's "CLASSICS FOR PLEASURE" Programme has now been set for 1993/94. Sensors Division Organisers Christine and Alan Pye can be contacted, again at Basildon, by anyone in GMAV who is interested in attending. Their 'phone numbers are: GNET: Access code + 344 + 3208 (Christine) GNET: Access code + 344 + 5149 (Alan).

Sensors Division's FLIR for Harrier Trainer

In order to provide pilot training using the Nightbird Forward Looking Infra Red (FLIR) System, British Aerospace has issued an ITP to Sensors Division to supply FLIR equipment to fit the Harrier TMk10 Trainer, a two seater variant of the Harrier GR7 night attack aircraft.

The system will be compatible with that supplied for the Harrier GR7 but will include a remote power unit to suit the configuration of the hardware in the TMk10 installation. This equipment will allow the training pilot full familiarisation with the Nightbird equipment before a solo flight in a GR7 is undertaken.

BLUE VIXEN ON TARGET CONTROLLED AMRAAM FIRING

The first look down, shoot down firing of an AMRAAM (Advanced Medium Range Air to Air Missile) from a Sea Harrier FRS2 took place on 28 April 1993 on a United States Military Range in the Gulf of Mexico. The Sea Harrier FRS2, developed by British Aerospace, was fitted with the new GEC-Marconi Avionics Blue Vixen radar.

With the Sea Harrier at medium altitude, Blue Vixen detected and tracked a low altitude target which was flying evasive manoeuvres. Targeting data was passed to the Sea Harrier Weapons System and the missile successfully engaged the target. This missile firing was the second in a series planned to exercise the capability of the system, the

first firing having been against a medium level target.

Mr Bill Morgan, of the Company's Radar Division, said: "This firing is an exciting milestone in the development of this important weapon system for the Royal Navy. It has demonstrated that Blue Vixen and AMRAAM will give the Sea Harrier the ability to destroy targets head-on, look-down and beyond visual range."

The Blue Vixen radar was designed and produced by GMAV's Radar Systems Division. Production models are currently being delivered. The ECR 90 radar for Eurofighter 2000, at present under development by the same Division, is based closely on the concepts and technology of Blue Vixen.

TEN MAJOR AIRLINES SELECT PASSENGER CABIN TELEPHONES

Since its inaugural flight aboard a Singapore International Airlines' Boeing 747-400 in the autumn of 1991, GMAv's Passenger Cabin Telephone System has proved so successful it has been selected by nine other international airlines.

Six of these: Malaysia Airlines, Air France, Air China, Korean Airlines, EVA Air and Emirates already have systems in service, whilst Air India, Kuwait Airlines and Royal Air Maroc have placed contracts. To date, GEC-Marconi Avionics has received orders for sixty-one ship-sets with options on a further thirty five. The various aircraft on which the system has been certificated include Boeing 747, Airbus A300 and A310.

The Passenger Cabin Telephone System consists of a Cabin Unit and up to 100 cordless handsets. The Cabin Unit provides the interface with the bearer radio (SATCOM or TFTS), a private branch telephone exchange (PBX) and the base radio for communication with the handsets. Should all outgoing telephone circuits be busy, the Cabin Unit places subsequent callers in a queue until external channels from the aircraft are available.



Explaining the use of the cordless telephone handset.

The handset technology is based on equipment (CT-2) developed by GEC-Plessey Telecommunications (GPT) which has been adapted by GEC-Marconi Avionics for airborne use.

It incorporates an LCD display, stored voice prompts and credit card reader making it extremely easy to use. The Company has replaced the material used to mould the original equipment case with flame-resistant material, thus satisfying Federal Aviation Administration (FAA) requirements.

CANADIAN FORCES SCHOOL OF AEROSPACE VISITS SENSORS DIVISION

The Canadian Forces School of Aerospace, led by Major-General Marc Terreau CD, visited Sensors Division on 30th April 1993 as part of their tour of European aerospace manufacturing and military facilities. The Aerospace School has been in existence for over 40 years and its aim is to provide suitable Canadian Air Force Officers with post graduate education and training that will enable them to fill appointments in the Operational Requirements and Procurement Establishment of the Canadian Defence Ministry.

The visiting party, which comprised 30 staff and students who were mainly pilots and navigation engineers, spent a full day at the Basildon site and were briefed on the wide range of electro-optical and communications products. A most friendly and informative visit, it was obvious from the comments made by General Terreau at the end of the visit that he would like the Course to return in later years. Before departing, General Terreau presented a Course plaque to Mr Tom Bradley thanking him for Sensors Division's courtesy and hospitality.



The visiting Canadian Forces party, with GMAv hosts at Basildon.

RELIABILITY BRINGS A REWARD

GEC-Marconi Avionics has won an award for the quality of its work in the field of electro-magnetic compatibility (EMC) testing.

Every year, the Fife and Tayside Quality and Reliability Group presents the Bosworth Shield to a Company or individual involved in an aspect of quality in education or industry. The award is made in recognition of the excellence and initiative of that Company or person.

This year, GEC-Marconi Avionics' EMC Test Centre at Donibristle won the Shield for the high calibre of its work. The Centre, which provides one of the most comprehensive EMC test facilities in Britain, covers European, USA and other test standards. It is approved by the National Measurement Accreditation Service across all categories of EMC testing and its facilities include six test chambers and a fully covered open-area test site.

Lindsay Craik, EMC Test Centre Manager, said: "The award reinforces customer feedback on the quality of our facility and reflects well on all the staff involved with the Centre."

Last year, the Company opened its Electro-Magnetic Compatibility (EMC) Test Centre at the Donibristle site of Support Division's Test Systems Department.

The Centre provides a one-stop service for the testing of all electronic and electrical products to ensure that, when in use, one item does not interfere with another.

Look out for a feature article on the work of the EMC Test Centre in a future issue of VISION.



Bryan Firth of the EMC Test Centre (right) receives the Bosworth Shield from Eric Stark of Hughes Microelectronics (centre), last year's winner, in the presence of Jim Paterson, Chairman of the Fife and Tayside Quality and Reliability Group.

WINNING WAYS

Support Division's Test Systems Department at Donibristle, Fife has notched up a number of successes recently, securing orders from the Royal Navy and RAF.

BULLSEYE FOR SEA DART

Test Systems has won post-design services and in-service support contracts for the Royal Navy's Sea Dart missile worth over £1 million.

There was another Sea Dart success, too, when Test Systems was awarded a further contract for the supply and installation of a new test facility at the Royal Navy Armament Depot at Gosport. This order is worth in excess of £250,000.

Customer Services Manager Sam McVicker said: "This demonstrates the Ministry of Defence's confidence in our

ability to meet its requirements." The facility at Donibristle has supplied equipment for the Sea Dart programme since 1972.

SHYSHADOW UPGRADE

Test Systems has also won a contract worth in the region of £250,000 to upgrade Factory Automatic Test Equipment for the Skyshadow Electronic Counter Measures (ECM) pod.

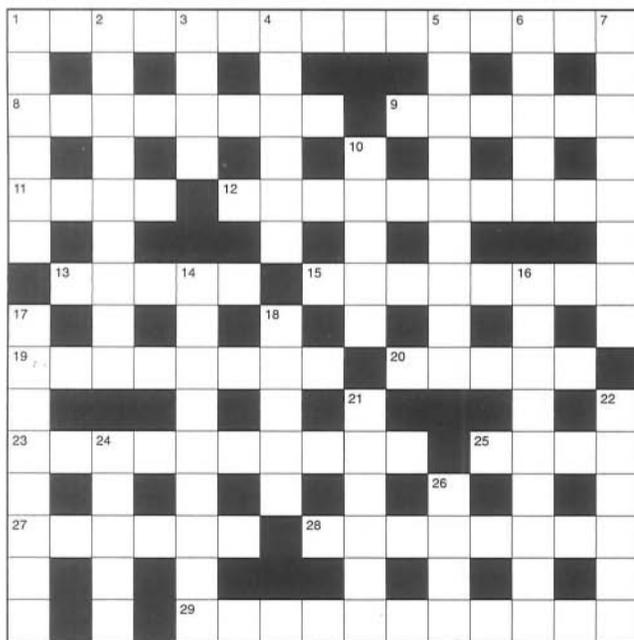
Skyshadow, popularly known as a radar jammer, is fitted to RAF Tornados.

Tom McGuire, Electronic Warfare Projects Manager, said: "This contract is for an upgrade to the Factory Automatic Test Equipment in line with a major upgrade to the Skyshadow pod itself. It follows a previous contract for a similar enhancement to the service's test equipment."

"This continues our important support work in electronic warfare for the RAF."

Skyshadow work falls under the umbrella of the Avionics Test Systems Group at Donibristle which has enjoyed a successful, budget-breaking year. Colin Dawson, Commercial Manager, Avionics, said: "We exceeded our budgeted orders within the Group by more than a third which, in the current climate, is a remarkable achievement."

Crossword No. 2 (For amusement only)



ACROSS

1. Funky state in the US, but edible (7-8)
8. Naomi would have been if she'd gone back! (8)
9. Boss-to-be on stage (6)
11. Football fault, it stinks (4)
12. Mouthful in the glass at night (5-5)
13. Needs a wash (5)
15. An island down under, down under (8)
19. Very small thing indeed (8)
20. The very front of a pig (5)
23. Needed before election (10)
25. Where wild beasts rest (4)

27. A most peculiar thing (6)
 28. Where Monday meets Tuesday (8)
 29. It's kept in the park (3-3-5).
- #### DOWN
1. For wine or water (6)
 2. An unwanted entry (9)
 3. Probably not worn to work in Edinburgh (4)
 4. By the Caribbean Sea (6)
 5. One for the British Steel Challenge (9)
 6. Not quite dead yet (5)
 7. Bargain in the pet shop (3-5)
 10. As far as you can go, due west of South Gyle (5)

14. Put them together (3-3-3)
 16. Rather a headache (9)
 17. Push or pull (4-4)
 18. Could well be line replaceable (5)
 21. An European Shine (6)
 22. Half ones - or whole ones? (6)
 24. Itchy insect (5)
 26. Glitch in production - a small tear (4).
- #### SOLUTION TO CROSSWORD NO. 1
- ##### ACROSS
- 1 John of Gaunt, 9 Oscar, 10 Pizzicato, 11 Sips, 12 Fell, 13 Parch, 15 Octopus, 16 Essayer, 17 Flounce, 20 Right off, 22 Reeve, 23 Pope, 24 Kite, 26 Electrons, 27 Crier, 28 First person.
- ##### DOWN
- 1 Jackpot, 2 Hurn, 3 Oppress, 4 Gazelle, 5 Unimposing, 6 Tea tray, 7 Job's comforter, 8 Mother of pearl, 14 Open letter, 18 Oneself, 19 Exploit, 20 Riposte, 21 Opinion, 25 ACAS.

continued from front page.



The second patient to be scanned.

Progress of the Appeal

In reply, Dr Velamati explained how, three years ago, he set out to raise an 'impossible' £1 million for a Scanner for the Medway Hospital, where he is Consultant Radiologist. Later he came to brief Personnel Director John Bradley on the importance of the project and, following just £50,000 raised in the area by local people at the time, the Company's Fund was opened with his guidance and a target of £25,000.

From then on, the efforts of employees and their enthusiasm for such a worthwhile cause acted as a catalyst to the main Fund which grew rapidly. Now Medway has one of the finest and most technically advanced scanners in the world. It caters for patients, in emergencies and by referrals, with ailments far beyond the usual concept of 'Cancer Scanning', without the trauma of waiting time and travel to London or elsewhere. With a Government grant of £300,000 and the efforts of the local

community bringing the Fund to over £700,000, the project has reached fruition but further money will be needed for maintenance.

Credit to the Organisers

Dr Velamati recalled all those involved in the money-raising among employees and their families, not forgetting those no longer with the Company in a difficult time. He wished to draw attention to the 'true driving spirit' of Di Bower, to the 'great support' of Sue Westrup and her colleagues in the Towers, and to Harry Staff - known to him since younger days - a source of strength and inspiration.

"Humble and honoured I feel when I see the results of the efforts of these and so many other people throughout GEC-Marconi Avionics, in the tradition of helping others less fortunate; a wonderful experience."

Karis Walker, now 4, sang a ditty of her alphabet. Her Mum, Jan was working in Instrument Systems Group and is now in Personnel Records - Uncle Robert Naughtin is in DSGR.

continued from front page.

THE PRINCE OF WALES AWARD FOR INNOVATION

A PROFILE

BACKGROUND

Launched in 1981 as a direct result of concern at the level of innovation in the UK and the lack of commercial exploitation of this innovation, the aim of the Award is to identify new and innovative technological ideas and to encourage the development and progression of the ideas to commercial production.

The Award is open to a wide range of people including private individuals, small or start-up firms, educational establishments, research institutions, and major companies. The subject of the entry can be at any stage of development but must not have been actually in commercial production for more than one year before entry to the competition.

ADMINISTRATION

Funded through The Prince of Wales Award Trust Fund, the Award was originally administered by the Department of Trade and Industry until management was transferred to the Engineering Council. In 1989, His Royal Highness The Prince of Wales asked Business in the Community (an association of over 400 businesses working in partnership with central and local government and other

Bodies to promote investment and involvement in local communities and inner cities) to assume responsibility for the Award, in an attempt to link the Award scheme to His Royal Highness's other business development interests.

The Award is administered under the direction of a Management Committee chaired by Harry Fitzgibbons, and which is made up of representatives from The Prince of Wales' Office, the BBC, Business in the Community, and the two judging panels. The two independent judging panels are made up of experts from the different engineering and innovation disciplines and the judges are led by Sir Mark Weinberg. The Award is funded through The Prince of Wales Award Trust Fund.



Some of the team members who helped make the Award possible.



THE COMPETITION

As one of several national award schemes for innovation and new technology the Award is re-launched each year around September, with a closing date for entry of 31 January. Entries are made by completing a simple form accompanied by any necessary supporting material and returning this by the closing date to the Awards office at Business in the Community.

The competition is run in a two-year cycle with an 'innovation stage' and a 'production stage'. All entries are screened by a panel of Preliminary Judges in February, and a shortlist of about 20 is put forward to the Final Judging panel who sit in March. Six finalists for the 'innovation stage' are chosen each year

and, over the following two years, the progress made in getting the product or process developed and into commercial production is closely monitored and an outright winner of the 'production stage' chosen.

BBC TOMORROW'S WORLD

The Prince of Wales Award is run in conjunction with the BBC Tomorrow's World, who follow the judging of the Award closely and screen a specially-extended programme in June each year giving prime-time television exposure to the winners. The Tomorrow's World team work closely with the management of the Award, and with The Prince of Wales' Office, to ensure that the association works to the best advantage.



The Award plaque and certificate.

Minister for Industry Visits GEC-Marconi Avionics, Redmond

On 6 April 1993 the Redmond, Washington facility was honoured by the visit of the British Minister of State for Industry, the Rt Hon Timothy Sainsbury, MP. He was accompanied by his Private Secretary, Malcolm Scott and the British Consul for Seattle, Stephen Turner.

Mr Sainsbury was visiting North America as part of a fact-finding tour and, for his visit to Boeing and the Seattle area, he was accompanied by a Society of British Aerospace Companies team of top managers. John Colston, Managing Director of Flight Systems Division, was included in this party. This was the

first visit to Boeing by a group representing all of UK Aerospace.

The purpose of Mr Sainsbury's visit to Redmond was to gain insights from a leading British supplier to the Boeing Company on the processes required to obtain a major programme. Flight Controls Group's Boeing 777 Primary Flight Computer was used as an example.

The accompanying photograph shows a demonstration of a prototype Primary Flight Computer being observed by (left to right) Malcolm Scott, John Colston, Timothy Sainsbury, Peter Clarke (Manager, Redmond) and Duncan Craick (Product Support Engineer, Redmond).



Sail The Seas For Charity and help give continued support to the Medway Scanner Appeal.

Dave Simon, GMAV's Displays Division winner in a TOPIC Quiz held earlier this year, has offered his prize of a free Scandinavian Seaways mini-cruise 'for auction', to benefit the Medway Scanner Appeal which is now seeking additional funding for maintenance.

The offer is for two people to travel on a three-day, two night break on board one of Scandinavian Seaways' liners and includes cabin accommodation, with facilities. However, food and drink must be paid for. The trip will involve over 700 miles of sea voyaging in style, combined with a shore excursion of your choice to either Esbjerg or Hamburg.

Esbjerg, Denmark You will visit two towns. In Esbjerg you will receive free admittance to the maritime museum, which depicts past and present day

life, as well as being home to examples of many of the sea's inhabitants from the region. In addition, you will stop off at Ribe, Denmark's former capital and oldest town, where you can admire its buildings.

Hamburg, Germany The tour of Hamburg contrasts the infamous street, the Reeperbahn with the elegant houses built around the city's two beautiful Alster lakes. Hamburg is a chic city with its sophistication evident in the shops housed in the many malls.

If anyone is interested in making an offer to aid a good cause please contact Claire Astle, Editor TOPIC, GEC, 1 Stanhope Gate, London W1A 1EH before Friday 30 July with a 'bid'. The mini cruise will be awarded to the highest bidder and must be taken by 31 December 1993.

JET FUELS THROUGH THE MILLENNIUM

Avery Hardoll Fluid Management, a business within GMAV's Power Systems Division at Titchfield, supported the Second International Symposium on Aviation Turbine Fuel Specifications held at 'The Old Ship', Brighton between 11-13th May 1993.

The Conference was organised by The Cranfield Institute of Technology-internationally recognised for its work in the field

of Turbine Engine design and operation - and was well attended by Aviation Fuel experts representing most of the world's suppliers and users.

The world of Aviation Refuelling, with the exception of the US market, is currently dominated by oil companies. However, in order to ensure quality, the airlines are becoming increasingly involved in fuel management too.



GMAV's Nick Hugh (l) introducing the new HU 4000 nozzle to BA's Andy Holden.

A NEW ERA

Workmen put the finishing touches to the GEC-Marconi Avionics' sign at Crewe Toll in Edinburgh. The factory was opened in 1943 to make gyro gunsights for RAF aircraft, for example the Spitfire, and now produces advanced radar for aircraft such as the Sea Harrier. Meanwhile, development of the radar for the Eurofighter 2000 is progressing well in the adjacent Lab. block.



BEST FEET FORWARD

Mulling over a few ideas one recent Saturday lunch-time, two members of staff from Edinburgh decided to brave the rigours of Scotland's best-known long-distance walk.

The walk, the West Highland Way, runs 95 miles from Milngavie, just north of Glasgow, to Fort William. Linda Monteith, who works at Crewe Toll, and Carol Velzian of Displays Division at South Gyle are the dynamic duo and Linda said: "We are doing it because we're mad!"

"I always liked hillwalking and Carol told me she wanted to try it. Last year she bought a pair of boots, the 'Skodas' of the boot world, and became known as 'Skoda Shoes'!"

"We decided to do the West Highland Way over lunch one weekend as we thought that if we didn't do it this year, we

never would. But we are terrible with a compass and we're always getting lost."

The pair decided that 95 miles was a long way to go for no reason, so they contacted Alzheimers Scotland for permission to raise money on the Charity's behalf. It was delighted with the offer and gave Linda and Carol T-shirts and sponsor forms. So far, they have raised a magnificent £400.

A traditional ending to the West Highland Way at Fort William includes a trip up Ben Nevis. Carol said: "Ben Nevis? We'll see how we feel!"

Look out for a report on Linda and Carol's trip in the next issue of VISION.

From left: 'Skoda Shoes' Carol Velzian and 'Mad' Linda Monteith.



The Accidental Politician

When there was a knock on his front door last August, Ron Greenham answered without giving the slightest thought to the consequences. But that knock led to his entry into the world of local government.

Ron, Quality Surveillance Supervisor with Radar Systems Division at Milton Keynes, said: "The chap at the door asked me to join the Liberal Democrats. I had been looking for some outside interest, so I joined.

"Some time later, I volunteered to deliver news bulletins, and in February this year I was asked if I would stand at the Bedfordshire County Council Election. Now I am a Councillor!"

Ron represents Luton's Wigmore Ward on the Council and



Councillor Ron Greenham.

sits on the Council Sub-Committees dealing with leisure and police. His Police Committee work draws on 17 years of service in the Special Constabulary where he rose to the rank of Inspector. But he says that the most important part of being a Councillor is when he can be of help to those who need it most.

Ron explained: "These was an instance where an elderly woman was having a housing problem and she came to me even though housing is not a County Council responsibility. All I did was chat and listen and help give her the confidence to approach the people who could do something about it. I am not a politician ... well I am, but only by accident with 57 per cent of the poll!"

The County Council is elected on a four year cycle and Ron is due to retire from GEC-Marconi Avionics in 1995. He said: "At the moment, I attend Committee Meetings on Friday afternoons when we have closed for the weekend, so my Council commitments will have no effect on my remaining career. But once I do retire, I will be able to devote more time to my Council work."

IN THE SWIM

Swimmer Norrie McKay won an amazing quartet of medals at the Scottish Masters Championships in Glasgow recently.

Norrie, an Engineering Draughtsman from Support Division's Test Systems Department at Donibristle, is a former Scottish internationalist and once held the Scottish Short Course Championship for the breaststroke.

He said: "The Scottish Masters is a veterans' competition for any swimmer over 25. It is divided into age groups and I was in the 30 to 34 group. It is supposed to be a fun event for older people, not for dedicated swimmers."

Norrie scooped a gold medal for the 50m butterfly, silver for the 50m breaststroke and bronzes for the 100m front

crawl and 100m individual medley.

He said: "The Championship is getting bigger and more people are entering." With his tongue firmly in his cheek he added: "Next year I will be in the 35 to 39 age group so I am guaranteed four wins!"



Medal man McKay

THANK YOU

The South-East Scotland Blood Transfusion Service would like to pass on its thanks to GEC-Marconi Avionics' employees who attended the recent three-day donor session at South Gyle in Edinburgh.

A total of 262 staff volunteered to give blood, with 12 attending for the first time. Regular donors who had recorded 25 or 10 visits were rewarded with silver and bronze badges respectively.

They were: Robert Allan, Gerard Malloy, Brian Davidson, Robert Brown (silver) and Derek Rafferty, Alan McIntyre, Bernard Mackle, Gordon Cumming, Robert Scott and Roy Charles (bronze).

TAKING HIS LEAVE

David Everest retired from Radar Systems Division recently after a career that spanned 32 years with the Company.

As a Flight Trials Engineer, his work took him all over the world and his final posting was in Kiel, Germany, supporting Seaspray radars in service with the German Navy.

Norman Dewar, Manager of the Trials Department, presented David with a

cheque on behalf of staff at an informal ceremony at Crewe Toll. David thanked the many friends he had made over the years for their good wishes and said that he hoped his colleagues would enjoy a secure and busy future with GEC-Marconi Avionics.

David plans to use the money to buy gardening equipment for his home in Hayling Island, Hampshire.



Norman Dewar (left), presents David with his gift.

THE DAYS OF THE £1 RISE

Jim Cleat, Chief Instructor with the Training Department at West Shore Road in Edinburgh, has retired after nearly 27 years with the Company.

As part of his work at West Shore Road, Jim was licenced by the Saville Holdworth Company to perform its psychometric tests. He also holds a BA in Science and Maths from the Open University and sat on the Board of Studies at Edinburgh's Napier University.

His colleague Bob Morrison said: "When Jim joined the Company in 1966 his wage was £22 a week, but after a year he got a rise of £1 to £23 a week!"

Jim's hobbies include photography, hillwalking and geology and as a retirement gift, his colleagues presented him with a genuine fossil.



Training Manager Ian Muir (centre right), presents Jim with his retirement gifts on behalf of colleagues and friends at West Shore Road.

CHARITY DONATIONS HELP RESEARCH

GEC-Marconi Avionics' staff north and south of the border have given a £1,000 boost to the fight against Cystic Fibrosis, a disease which involves infection of the lungs.

In Edinburgh, the Foreman's Association donated £500 to the Cystic Fibrosis Fund at the local Western General Hospital. The Association's Alex Stewart said: "One of the Company's former employees from the Silverknowes site, Gail Gladstone, suffers from the disease."

Gail, who worked as an Assembler in Inertial Navigation Platform Assembly, recently had a lung transplant at a hospital in Newcastle. Alex said: "The Foreman's Association normally gives to charity and on this occasion we decided to donate the money to the ward in the Western General that deals with Cystic Fibrosis."

Over £200 of the amount was raised through a Dance and Raffle run by the Association

with the rest being made up from its funds.

Meanwhile in Milton Keynes the Sports and Social Club (SSC) raised £250 with a Charity Raffle. This sum was matched by the Company and the local branch of Cystic Fibrosis Research found itself £500 better off.

SSC Secretary Su Kirk said: "There were two prizes in the Raffle with Harry Prosser winning £100 of John Lewis vouchers and Peter Chinn carrying off a £50 Halfords' voucher.

"We run four Charity Raffles each year and this was our first. The representative from Cystic Fibrosis Research was very pleased as he said not many people are aware of the problem. He told us there had been a small breakthrough in research recently and that our donation would help take the work further."



Making a donation (centre, from left) Sister Cathy Liddle of the Western General Hospital, Alex Stewart and Gail Gladstone.



Martin Woolley, General Manager of Radar Systems Division at Milton Keynes (right), presents the cheque for £500 to Keith Lewington of Cystic Fibrosis Research.

Forthcoming Events

The Milton Keynes Sports and Social Club (SSC) has a number of events planned for the summer months and first on the calendar is the Great Linford Raft Race on 17 July.

Held every year on the Great Linford Canal, Milton Keynes, this is an inter-site competition and teams from any GEC-Marconi Avionics Divisions are welcome. It gives staff the opportunity to don fancy dress and paddle furiously for charity. Once competitors have dried off, the day ends with a karaoke evening at the SSC bar.

Three days later on 20 July, the SSC is organising a trip to the Royal Tournament with tickets at £6.50. On 22 August, there is a traditional English summer outing to the seaside with a visit to Clacton at a bargain £6.

For more details of any of these events, contact SSC Entertainments Officer, Lin Duff on Ext. 3294 at Milton Keynes.

Avid readers of VISION will remember that the first Issue's 'Forthcoming Events' had news of a Charity Fashion Show at the SSC. Lin said: "We raised £165 for the Royal National Institute for the Blind.

"A Company called 'Zoom Fashions' came in with the clothes and eight staff from Milton Keynes did the modelling. We charged 50p entrance then received a commission from Zoom on any clothes that were sold. It was a great success."

WEEKEND WALKS

The Company's Mountaineering Club in Edinburgh continues its weekend meets over the coming months with several camping trips planned to take advantage of the summer weather. Member Keith Cocks said: "Light evenings give plenty of opportunity for long walks and climbs or, if you prefer, a barbecue."

Meets of particular note are at the Shelter Stone in the Cairngorms, which gives a base high in the mountains, and at the CIC Hut, built at an altitude of 2,000 feet on Ben Nevis. From the CIC Hut there are many climbing opportunities including Ben Nevis itself, Cam Mor Dearg and the Aonachs.

More details are available from Club Secretary Andrew Haswell at Crewe Toll on Ext. 4708. Andrew can be contacted at home on 031-336 5092.



The CIC Hut at an altitude of 2,000 feet on Ben Nevis.

Mountaineering Club Meet Dates:

Cairngorms, camping at the Shelter Stone, 16 to 18 July

Onich, Manse Barn, 6 to 8 August

Ben Nevis, CIC Hut, 27 to 29 August

ASTROTURF ACES

Marconi FC, the Company's Football Team at Milton Keynes is on the hunt for players in time for the start of the new season in August.

Secretary Scott Lee said: "We were disappointed last season that we didn't do as well as we could have done. I think we can improve but inconsistency is the problem as many of our players are not available every weekend.

"We play 11-a-side on in the Milton Keynes Sunday League and finished in the middle of our Division last season. There are five Divisions in the League and we are in the third."

The Club's performances in Cup competitions during the season are none too successful. However, Marconi FC seems to peak in the summer and last year won the seven-a-side Woughton - on - the - Green League which is played on

astroturf rather than grass. The Team has re-entered this year and Scott said he is "hopeful" of a repeat performance.

Through the Milton Keynes Sunday League, the Club is affiliated to the Berkshire and Buckinghamshire Football Association which is part of the English Football Association. This means that Marconi FC can be allocated a Wembley FA Cup Final ticket! Scott said: "You have to apply early in the season and we haven't applied for some years. When we do make the effort, we hold a prize draw for Club members so that one of our players can go."

Anyone interested in training with the Club is welcome and Scott stressed that Sunday football has more to do with enjoyment than competition. For more details contact Scott at Milton Keynes on Ext. 3449.

PITCHING FOR A GAME

Anyone for Softball?

Steve Scott, who works with Radar Systems Division at Milton Keynes, would like to hear from you if you want to try the game.

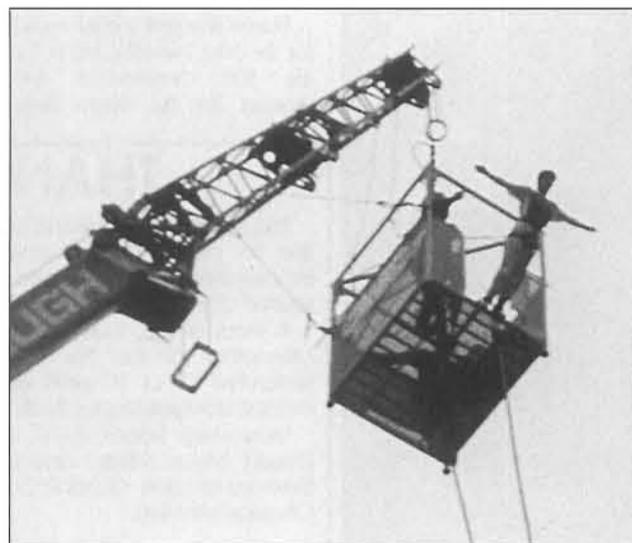
Softball is similar to American Baseball, or old-fashioned Rounders, but pitchers can only deliver the ball under-arm. Steve said: "We have around 14 players at Milton Keynes and we take part in a local League.

"We were invited to send a team to the League and I asked around. There were enough people and now we are in our second year." All games are played at Brown's Wood which is near to the Milton Keynes site. If you are interested, call Steve at Milton Keynes on Ext. 3117.

HERE WE GO.....O!

Braving the popular pastime of 'Bungee Jumping' is Secretary Jennifer Kew of Support Division's Test Systems Department at Donibristle, Fife. Jennifer's local pub, the Hope Tryst in Dalgety Bay, is having a charity events year and she said: "I always fancied bungee jumping. I had never done it before, but I would do it again."

Her leap raised £129 in sponsor money. The Hope Tryst's fundraising efforts will move into a higher gear this summer with an It's A Knockout Competition and a parachute jump. Future sponsors of Jennifer's daredevil exploits can contact her on Ext. 3198.



Eastern Promise Fulfilled

Taking the time to answer a few questions in a promotional mailshot paid off for one of the Company's secretarial staff recently when she won a trip to Hong Kong.

Shirley Lonie, who works in Displays Division at South Gyle, was looking through the Magnet World newsletter when a competition caught her eye. Magnet is GEC-Marconi Avionics' travel agent in Edinburgh.

The competition, run by Cathay Pacific Airlines,

offered two return tickets to Hong Kong for the lucky winner. Shirley said: "All you had to do was answer a few questions and send it off. I did it, then I forgot all about it." So when Magnet contacted Shirley to tell her she had won, it came as quite a surprise.

Shirley has asked her boyfriend to accompany her on the trip and they will travel from London to Hong Kong and back in October.



Shirley in the cockpit mock-up at Displays, South Gyle, checking out her destination.

For Their Services



Each year, the former GEC-Ferranti Company has honoured members of staff who have given 25 years service

by holding a celebration at Crewe Toll in Edinburgh.

At this year's event, a total of 94 were thanked for their efforts and each received a framed certificate, a commemorative brochure and a gift. In total, they had clocked up an amazing 2,350 years service with the Company!

Sites Co-ordinator
Keith Davidson
Public Relations Department
Crewe Toll

or
Compress 2/6 St Marys
Workshops
67 Giles Street
Edinburgh EH6 6DD
Tel: 031-553 6957
Fax: 031-553 3344

Correspondents:
Crewe Toll: Derek Utton,
Ex 4509.

Donibristle: Ron Fyfe,
Ex 3200.

Milton Keynes: Joanne Billings,
Ex 3302.

Silverknowes: Finlay Graham,
Ex 5763.

South Gyle (Display Systems):
Eileen Pirie, Ex 8468.

South Gyle (Logistic Systems):
Alison Littleboy, Ex 2816.

Senior Appointments at Basildon

GRAEME COOPER



Graeme Cooper has been appointed Commercial Director of Sensors Division, responsible for ensuring that the commercial function of the business operates in a consistent and effective manner.

ANGUS MACLEAN



Reporting directly to the Divisional Managing Director,

Angus Maclean has been appointed Production Director of Sensors Division.

The ability of the Production Department to provide realistic delivery and associated financial forecasts, and to subsequently achieve them, is increasingly dependent upon the availability of material at the right time and cost.

In order to more effectively achieve this objective it is essential that the Production Director is responsible for, and able to make decisions in respect of, every aspect of the production process, including materials management.

Accordingly, the Procurement Department will report to the Production Director with immediate effect.

It is also essential that our procurement activity takes full account of the requirements of our prime contracts. The Commercial Director will, therefore, continue to be responsible for the commercial aspects of the procurement function, particularly with regard to major sub-contracts.

CLASSICS FOR PLEASURE

The London Philharmonic Orchestra "Classics for Pleasure" Series Organisation had their annual meeting recently at the Festival Hall, London. The Sensors Division Organisers, Chris and Allan Pye, attended. Allan was invited by the LPO Series Organiser to join the Advisory Committee as an Audience Representative, which he accepted.

It was reported that the 1992/93 season had been a great success. As a result the 1993/94 series has been extended to 6 concerts with two and four optional bonus concerts. Next season's prices are being held as at 1992/93:

6 Series season ticket **£42.00** With two bonus concerts **£46.00** With four bonus concerts **£50.00**

Non season ticket seats **£8.00** each.

Average top seat prices are **£38.00**; thus, for any concert there is the option of saving up to **£33.00** per seat.

The first two events in the 1993/94 programme are as follows:

24th Sept/1st October
Rossini - Overture, Semiramide. **Martin** - Symphonie Concertante. **Prokofiev** - Suite: Romeo and Juliet.

22nd/29th October

Elgar - Wand of Youth. **Delius** - The Walk to the Paradise Gardens. **Rutter** - Suite Antique. **Tchaikovsky** - Symphony in B minor (Pathétique).

Full details of these, bonus and future concerts are available from:

Christine Pye Ext. 3208 A105 or Allan Pye Ext. 5149 F100

Chris and Allan would be pleased to arrange tickets for anybody working in GEC-Marconi Avionics. As bonus tickets are limited and will be allocated on a first come - first served basis, the earlier that advanced bookings can be made the better.

A coach is arranged for the second performance of each concert. This being the 40th anniversary season of the Classics for Pleasure, a party is being held after the November concerts. All Cfp ticket holders will be welcome and will have the opportunity of meeting the LPO and their Guest of Honour John Amis. If there is sufficient interest in attending, efforts will be made to arrange separate transport for those wishing to attend the party.

Long Service Awards

The Divisional Managing Director presented Long Service Awards on Friday 23rd April. A total of 10 recipients attended the Ceremony and a buffet luncheon at which the customary group photograph was taken.

The recipients were:

Back row (l-r) Robert DRUMM (OPS/155), Malcolm BAILEY (ARD/322), Nick REID (OPS/042), Derrick

CROUCH (ADM/049) and John SHIELDS (OPS/156).

Front row (l-r) Aubrey BASS (OPS/133), John VANDEPEER (ADM/016), Derek FALCON-UFF (ADM/856), Eileen BYNE (OPS/155) and Graham BOUSTRED (EOS/336).

John BARRY (ADM/830) and John WRIGHT (EOS/336) also received Awards but were unable to attend the Ceremony.



Ron's £754 For CLIC

Competitor 29228 in this year's London Marathon, Ron Barnes - QA Engineer in Operations - has raised £754 by successfully completing the 26 mile course.

Running for the Charity CLIC - The Cancer and Leukaemia in Childhood Trust, set up in the mid-70s to provide support and finance research - Ron finished in position 14,449 with a time of 4 hours 06 minutes.

Congratulations to Ron on his achievement.

SENSORS DIVISION'S CRICKET CLUB IS LOOKING FOR NEW PLAYERS IMMEDIATELY. INTERESTED IN PLAYING? IF SO CONTACT THE CLUB'S SECRETARY: RON MILLER Ext. 3948 OR RON SAVAGE Ext. 7253

ATTENTION ALL RETIRED PERSONNEL !

Many thanks to all those retirees who responded to the recent survey asking whether they wished to remain on the mailing list to receive 'VISION'.

The replies, which included many accompanying letters and additional words of encouragement, were most gratifying and it might interest you to know that, out of the 457 letters sent out, 297 persons sent positive replies.

Thanks again for your loyal support and interest.

Colin Langlands Editor

40 YEARS AGO ...

16th June 1953. Construction of Marconi's Wireless Telegraph Company premises in Christopher Martin Road, Basildon is well underway. This photograph shows the main entrance and building which came to be known as the Technical Block.



June 1993. The same building, different name. That of GEC-Marconi Avionics - a world leader in the field of electronics - is clearly visible above the entrance.

SOUTHEND'S AIR SHOW TAKES OFF AGAIN

Despite the somewhat inclement Bank Holiday weather thousands of people again flocked to Southend's sea-front to see its Airshow.

Poor weather caused the cancellation of many of the planned attractions across the two days, in what has now become an annual event, but all was not lost. The Red Arrows; the Royal Navy's Helicopter Display Team; the Army's Silver Eagles, and a

display of Sea King helicopters ensured that spectators were not disappointed.

Also flying were examples of the Dutch F-16, Starfighter, RAF Nimrod, Buccaneer and WWII vintage Swordfish aircraft to thrill the audience.

The accompanying photograph, taken by the Baddow Photographic Unit's John Carter, shows a Sea King helicopter flying low over the Thames Estuary at Southend.



Editorial Note

As Editor I continue to welcome contributions for VISION (and corporate GEC's magazine TOPIC) from all employees at Basildon.

All contributions should be addressed to the Editor, as should any comments relating to the Magazine's content etc:-

Colin Langlands Editorial Officer B450 Business Development Group



I can, of course, be contacted direct by phoning G-Net: Access Code +344+3110

RETIREMENT FROM SENSORS DIVISION

Roy Marshall, a Section Leader in OPS 192 Section, has retired after 33 years service.

The accompanying photograph shows Roy (l) with Mike

Thornton, Business Development Director at an informal 'thank you' meeting to mark Roy's departure from the Company.



£250 FOR LOCAL MRI APPEAL

As reported in VISION Issue 1, fundraising for the Southend Hospital Magnetic Resonance Imager (MRI) Appeal has been boosted by £250.

Sensors Division's donation is towards the much needed £1m imager which can help detect disease by providing minutely detailed pictures of a patient's brain, spinal cord and soft tissue.

The following is the text of a letter of thanks from Mr Roy Peacock, the Hon. Appeal Treasurer:

'The Trustees of the Magnetic Resonance Imager Appeal - and future patients at Southend General Hospital - are most grateful for the very generous donation received today through Councillor Lockhart. Many thanks for choosing this Appeal from the very many worthy causes which seem to exist at the present time.

'With a target of £1 million and a little over £19,000 in the 'kitty', it seems that there is a long way to go but we shall get there with such generous help from good people like the Staff of GEC-Marconi Avionics Sensors Division.

Yours sincerely,'



Thanks: MRI Trustee Ken Harden(l) receives the cheque from Sensors Division's Marketing Services Manager, Peter Burlong.

CLUB SECRETARIES

Amateur Radio	Mr M. Purser	D130	4013
Athletic & Training	Mr J. Wright	K310	7160
Badminton	Mr D. Cohen	K255	7211
Car maintenance	Mr W.O'Brien	B130	3291
Cricket	Mr R.M. Miller	B310	3948
Camera	Mr N. Everard	B230	3180
Darts	Mr N. Everard	B230	3180
Flying Section	Mr T. Roberts	A110	3164
Football	Mr R. Cebulski	G120	5276
Golf	Mr R. Spong	K215	7170
Ladies Leisure	Mrs L. Stevens	K130	7169
Model Cars	Mr T. Chapman	K110	7153
Pool	Mr A. Queen	C130	3869
Retired Employees	Mr W. Singfield	Bas 520175	
Sub Aqua	Mr M. Court	K330	7101
Table Tennis	Mr A. Wood	K135	7039
Wine Making/H. Brew	Mr N. Garard	B225	3290
Ex-Apprentices	Mr W.O'Brien	B130	3291
	Mr G. Panks	B130	3444

Sensors Division's Golf Society

GMAV's Sensors Division's Golf Section is now a fully registered Society within the English Golf Union (EGU) and, as such, is welcomed at most courses throughout the country. Its membership remains very strong, currently numbering 86.

The handicaps of these members are also registered with the EGU which allows individuals from the Society access to courses which, otherwise, require visitors to show evidence of current handicaps.

The Society's first outing on 31st March - the Mullin Cup at Chigwell - was very well attended with 30 members braving the elements, it rained all day! The winner, with an excellent stableford score of 77 (39 am and 38 pm) was Alan Simmons, EOSG's Financial Manager, playing off 9 handicap.

The wet weather did not deter competitors from taking part in a second competition at Letchworth on May 27. The winners of the Singles Shield (am) and the President's Cup (pm) were

Dave Pigram and Charlie Cornwell, respectively. This was the second occasion, too, on which Bob Copeland had played as a member. 'Is it he who is the cause of the wet weather?', some have asked! Those playing on 21st June at Purdis Heath - which, incidentally, is Bob's Birthday - waited with interest to find out, especially as this match was played on the longest day!

The annual Intersite Match involving Basildon, Borehamwood and Rochester was cancelled two years ago due to the difficulties experienced by Borehamwood and Rochester in raising a team. The Society will now be seeking opponents for a replacement Match, possibly within GMAV's new organisational structure nationwide.

The following are the remaining fixtures in the Society's 1993 Programme:

Wednesday 21st July Chelmsford Club Championship - 36 hole medal (scratch & handicap)

Wednesday 8th September Woodbridge Captain's Day

Tuesday 5th October Romford Pairs Trophy - 36 hole stableford AM: Fourball Betterball PM: Greensomes.

For information, contact: Richard Spong Ext. 7170 K215.

SENSORS DIVISION'S RETIREMENT CLUB SOCIAL PROGRAMME FOR 1993

Club meetings are held every Monday, except Bank Holidays and each afternoon session includes Bingo, Raffles, Card Games, Dominoes, Pool and Darts etc.

The following events are included in the Club's social calendar for 1993.

July 20th Bressingham Steam Railway and Flower Gardens

July 24th Holiday-makers to Valkenburg, Holland

August 24th Outing to Bognor Regis

Sept. 23rd Mississippi Paddle Boat luxury cruise, Norfolk Broads

October 19th Tour of Clare and Cavendish Villages, afternoon visit to Duxford Air Museum

Nov. 22nd Bring & Buy

Nov 30th Club pre-Christmas Party at the White Swan

Dec. 20th Christmas Party at the Club

THE ABOVE PROGRAMME IS SUBJECT TO ALTERATION OR CANCELLATION AT THE DISCRETION OF SOCIAL SECRETARY/COMMITTEE.

NB. All Company employees who have retired are welcome into the Club at any time, either to join as members or as visitors.

For further information please contact: Mr Bill Singfield Social Secretary Tel: Bas 520175.

GEC Scrape Home in Interclub Challenge

On Wednesday 12th May the Section hosted an Interclub Competition against the Moulsham Lodge Camera Club of Chelmsford.

In an extremely close contest the judge, Mr D. Mears, made many constructive comments and remarked on the excellent standard of work entered by both the Clubs.

To give an indication of how well matched the contest was at the halfway point, after viewing ten slides from each Club, the score stood at GEC 79, Moulsham 77, with the latter receiving the only maximum 10 points given during the first half.

After the Interval the contest 'hotted up', with Moulsham scoring another 10 points, drawing level and then taking a two point lead with only two slides from each Club still to be viewed. With their last two slides Moulsham scored 9 and then 8, making a final total of 158 and leaving GEC with the need to score 19 from its two remaining slides to force a draw.

The slides - Ken Green's "Battle of Britain Memorial Flight" and Charlie Oughton's "Frosty Morning on the Stour" - were then awarded the maximum 10 points each which meant that GEC scraped home by just 1 point!

Everyone who attended had an enjoyable evening and a rematch is to be arranged to allow Moulsham to seek revenge! So please start getting

those match winning slides taken now!

The Darkroom/Studio facility, plus all the equipment (enlargers, studio flash, colorama background etc), is available for use by Camera Club members.

The Club's programme of activities for 1993 is listed below. The Committee has hopefully included something of interest to all members and it would be nice to see a good turnout for all events.

Full details of the programme are as follows:

July 14th Practical - Model Night/Location Shoot (7.00pm)

July 24th Photographic Excursion (Saturday - All Day)

Aug. 11th A.G.M.

Sept. 8th Demonstration-Cibachrome Prints For Slides

Oct. 13th Annual Print Competition*

Nov. 10th Annual Slide Competition*

Dec. 8th Social/Presentation Evening

* Competition rules on request

All meetings commence 8.00pm, Wednesday evenings, unless otherwise stated.

Finally, please watch out for further Club news in future editions of VISION. Remember, new members are always welcome.

KEN GREEN Chairman (Ext. 3038)

FLYING SECTION

The AGM of the Flying Section was held on 8 March 1993 when the following officers were elected:

Chairman/Secretary: Hugh Waller

Treasurer: Alf Porter

Flying Co-ordinator: Tim Bushell

Social Officer: John Stratton
Mr Mike Thornton remains in office as Club President.

The Flying Section continues to function on a sound financial basis with a slightly reduced membership relative to previous years. A varied and interesting programme of activities is planned for 1993.

The AGM was followed by a fascinating presentation given by Tom Bradley concerning the Gulf War, the part played by RAF aircraft in general and in particular the use made of the TIALD weapons system with which GEC-Marconi Avionics is actively involved.

Flying Section members recently spent an evening on a conducted tour of Stansted Airport. Following a general introduction given by an airport official in the Passenger Terminal, the party was taken by coach into the airport restricted areas to see the considerable night freight movements which form a large part of the airport's business. Also seen were the immense Russian Antonov transport

aircraft which are now used by a UK operator.

Another event attended by members was the annual, and very popular, Fighter Meet at the North Weald airfield. This year several "new" vintage aircraft made an appearance for the first time, including the Lockheed P38 Lightning of WW2 fame. Another elderly aircraft present was the well known De Havilland Dragon Rapide which was piloted by Paul Street, a member of the Flying Section. This airplane was the mainstay of commercial aviation for more than twenty years from the mid 1930s onwards. This example is operated by Classic Wings, based at Duxford.

The summer programme includes visits to the Laindon airstrip to see some further flying by vintage aircraft, to the Shuttleworth Collection at Old Warden and to, that old favourite, the RAF Museum at

Hendon. Active participation in microflight flying is also planned.

The winter programme of aviation video screenings will continue as usual.

Company staff wishing to join this successful and active Flying Section should contact Trevor Roberts at Basildon on Ext. 3164 or Alf Porter on Ext. 3455, both of whom will be pleased to give full details of membership.

Special Note: Hugh Waller has reluctantly relinquished the office of Chairman/Secretary for personal reasons. His place is taken by Trevor Roberts who will hold the office until the AGM at the end of the year.

The Classic Wings de Havilland Dragon Rapide is seen taxiing out at North Weald Airfield prior to take off with Paul Street at the controls.



Forecast For The Future

Derek Dickinson, recently appointed Managing Director of the newly formed GEC-Marconi Avionics visited Titchfield on Wednesday 19th May. Talking to all levels of management he outlined coming plans for the business.

In the discussion he pointed to the many opportunities that this Company, with over \$1 billion sales, could expect to be involved with. He also emphasized that each Division in the Organisation would be encouraged to work

with each other in bidding for systems on both Commercial and Military Programmes.

The Managing Director predicted that, in the future, there could be three major roles in any programme, the traditional Airframe and Engine players plus Avionics, co-ordinating all the black boxes. In this GMAV, being the largest Avionics Company in Europe, would have the edge. Derek Dickinson was introduced by John Brian, Divisional Managing Director, Power Systems Division, who expressed his own commitment to the Corporate Plan.

MD Derek Dickenson outlines forthcoming business plans to the Management.



New Appointments

Commercial Director

Peter Stein has been appointed Commercial Director of Power Systems Division and brings with him many years of commercial experience from companies like Northern Telecom Europe, Ferranti and Smiths Industries. In addition to the task of Commercial operations he will be responsible for commercial initiatives to improve the profitability of the business at Titchfield. Peter said: "I look forward to working with a team of professionals offering a successful range of products. In the current climate margins are being driven hard and successful Companies are



Peter Stein

those who are preferred by their customers as a reliable partner with whom they can do business." Peter is married and lists his interests as marathon running, sailing, scuba diving and exercising two large English Setters.

Welcome to the Business

Brian Griffin joined the Product Assurance Dept on April 19th as a Senior Product Assurance Engineer.

On May 10th, "**Ski**" **Hiscox** joined the Electronic Assembly area as a Calibration Technician.

Nigel Cousins started with the Company as a Maintenance Fitter on Site on 13th May.

On 17th May **Ian Hoyle** joined the Customer Support Department as a Logistic Engineer.

BOEING VISITS TEST FACILITY

Brian Neal, Chief Engineer-P propulsion for the Boeing 777, visited Titchfield on May 25th for an update on progress in the development of the Boost, Override & Jettison, and APU pumps. His visit coincided with shipment of the first rig units to Boeing, and the accompanying photograph shows him with some of the Titchfield team outside the high altitude test facility, which is currently being used in the qualification programme for the pumps. Titchfield has the most advanced test facilities of any



of the world's pump manufacturers, and this particular rig was an addition to cope with

the altitude testing at the very high flows required for this new aircraft.

Industrial Engineering Manager

After the first few exciting weeks in the position as Industrial Engineering Manager, Dr Elfed Roberts can see that one of his roles will be the introduction of key new technologies (CAD/CAM) to reduce costs and improve product quality. As some of you may be aware Elfed also

chairs an Electric Motor Design CAT team. Through the work of this Team numerous improvements are being identified, including cast copper rotors, the implementation of which has now commenced in the business.

Dr Elfed Roberts



Paul Burton received his award for 21 years service on 14th May.

Congratulations!

Tracey Stevens, who joined as youth trainee in September 1987, and transferred to the Print Room a year later as an Admin. Support Clerk, married Paul Ibbetson on March 29th. Congratulations to them both.

AQS Manager



Alan Coles

At the beginning of May Alan Coles took up the new position of AQS Manager. In this role he will be responsible for introducing the new techniques of Advanced Quality Systems, such as Statistical Process Control and Design of Experiments into the day-to-day working of the Company. These are an essential part in the process of designing products 'right first time', and being able to manufacture them consistently to schedule.

Visitors from Indonesia

Support Engineering has recently hosted four visitors from Garuda Indonesia. They attended a course of instruction on the PDU 100 Mk5, which is installed on the A300 aircraft currently operated by Garuda. The PDU 100 has not been repaired at Titchfield for at least 10 years and, there-

fore, the Course presented quite a challenge for all those involved. It was very much a re-learning exercise for Bill Rowe and Gordon Stone from the Repairs Section, who did a sterling job coming back up to speed and imparting their re-honed know-how to the Indonesians.



Bill and Gordon can be seen here with the Garuda engineers, together with Robbie Martin from Support Engineering who co-ordinated the whole exercise.

Happy Retirement

Doug Nias, who was employed as an Industrial Engineer, retired on 4th June. Doug joined the Company as a Work Study Engineer in 1981 and took on industrial engineering responsibilities a few years later.

"WHEN I'M CALLING YOU"

Getting the post through on time and in all weathers to every part of the Company is just part of the job for Pat Carter and Jacqui Robinson whose cheery faces are well know across the site. Jean Dunn is the "voice behind the tannoy". Her clear messages will have summoned many of us to the telephone. Pat, Jacqui and Jean form the nucleus of the Communications Room located in the Site Services Department.



LONG SERVICE

Dennis Hawkrige recently completed 42 years service with the Company. He was presented with his Long Service Award cheque by Barry Capp, Manufacturing Executive, and a luncheon was served in his honour on

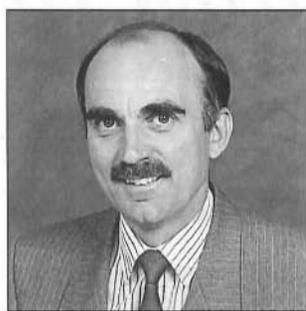
April 23rd attended by his wife and close colleagues. Dennis, who is employed as a Working Supervisor in the Machine Shop, joined the Company at Ilford in 1951 and transferred to Titchfield in 1968.



TEAM NEWS

'World Class Business'

Many in the business have undergone training to prepare them for continuous improvement. This training will assist the formation and progress of Continuous Improvement Teams or CITs. These are Teams that have established their own ways of increasing the efficiency of the business. As part of the training, employees in each department estimated the cost of inefficiency for their department which was called the 'cost of non-conformance.' When these costs were analysed and summed major sources of waste were identified. It is vital for the business to reduce this waste if it is to become a 'World Class Business'. The potential benefits to the business are so large and so vital if we are to compete in global markets that three formally appointed teams, known as Corrective



John Moore

Action Teams, or CATs, were established. The three teams will each tackle

1. Inventory
2. Scrap
3. Engineering Change

The teams are drawn from a wide cross-section in order to analyse the processes involved. The opportunity for the business to improve is enormous. We have started the process, it must continue.

John Moore

ACHIEVEMENTS TO BE REWARDED

It is a fact that the collective experience and job knowledge of employees can be of enormous benefit to an Organisation when they are applied to the Continuous Improvement process.

There is now an attitude and commitment to quality within the Business and, to



Bob Fry

date, there are 47 active Continuous Improvement Teams running projects and some 8 objectives have now been completed.

Employees are participating in virtually all departments within the Organisation and this certainly reflects that we all want to be a world class Company and benefit from all that goes with being amongst the best.

In recognition of the effort and commitment being demonstrated by individuals who have organised themselves into Continuous Improve-

ment Teams the Company will, on an annual basis, make an award to the three best CIT team projects undertaken during the year. A panel will be selected from the Top Team to review and judge the completed CIT projects. Team projects will be judged on value to the business in terms of cost savings, improvements in working practices and processes. Each of the winning CIT teams will receive an award, to be shared equally amongst the team members. The awards will be presented by the Divisional Managing Director during October each year.

Entry submission procedure will be made available to CIT team leaders on the completion of their project. It is also the Company's wish to give some recognition to all employees who have participated in a Continuous Improvement Team (CIT) that has completed a project. This will be a tie for the male team members and a scarf square for the female members. These items are intended to signify individual commitment and it is hoped that, gradually, all employees in the Business will have received such an award in recognition of their involvement.

Bob Fry

QUALITY & C.I.

C.I., T.Q.M. etc and Product Assurance are no strangers. As concepts there is nothing new, merely the repackaging of common sense and good practice ideals. The association with quality, Product Assurance and these concepts is long standing, originating from viewpoints that Product Assurance were responsible for quality and hence only they had a role to play. However, from education initiatives and over time, better understanding has been developed where everyone now knows quality is meeting agreed requirements, it is recognised that all activities



Mark Underhill

undertaken can, and do, affect quality and therefore, responsibility is shared by all. Therein, where opportunities for improvement can be made, all can positively improve quality.

Mark Underhill

Avery Hardoll Service Support

Continuous Improvement has, and continues to, benefit the Avery Hardoll Service Support and Commercial Repair Business.

Since the integration from Solihull to Titchfield, which presented many problems, Continuous Improvement has been useful in overcoming communication and procedural changes which arose from the move.

Working away from the factory has its difficulties. The Field Engineers are now informed of all business changes and the progress

being made. This improves morale and enables them to feel part of the team. In turn, this has a beneficial effect on the customer base, with whom our Engineers are in close contact.

The Commercial Repair Business, due to C.I. methodology, has now improved the turnaround time by 100%. Excellent liaison with Manufacturing has led to less frustrating situations, thus enabling costs and time-wasting to be substantially reduced.

Ken Taylor

"IS IT WORKING?"



Mark Barrie, Pat Dytor, Dave Farr, Carol Smith and Tony Sullivan

"Is Continuous Improvement really working?" is probably the question I am asked the most during my travels around the Business. This is, I know, because generally no one Team is aware of the other Teams' efforts and progress. I intend, therefore, over the next few months to dedicate this column to updating you on individual Team successes.

CITs continue to grow in number with 47 teams now in operation, addressing 73 Continuous Improvement projects. These numbers continue to confirm your commitment to C.I.

In deciding the selection of the individual Team to report on, I am sure it will come as no surprise to

anyone that I have selected one of the Manufacturing teams, namely Coilwinding. One of the Continuous Improvement objectives identified by Dave Farr and his team was the reduction and then elimination of scrap and rework within the Department. A philosophy of "right first time" manufacture was agreed within the whole Department, their progress was measured by published reports stating the scrap costs and rework hours incurred by the Department weekly. The results to date, I believe, have proved the Continuous Improvement process, and that a collective decision within a departmental problem does work.

Paul Burton

Coilwinding results:

- Scrap costs Apr 92 to Dec 92 = £724 average per month
- Scrap costs Jan 93 to Mar 93 = £Nil average per month
- Rework hours Apr 92 to Dec 92 = 45 hours average per month
- Rework hours Jan 93 to Mar 93 = 7 hours average per month

WELL TRAINED !

Training associated with Continuous Improvement continues to take place.

CONTINUOUS IMPROVEMENT TRAINING

In the early summer the remaining one-day Continuous Improvement Workshops will take place. These will complete the programme (started last November) to train the whole Workforce in an awareness of continuous improvement and the requirements of customers such as Boeing and McDonnell Douglas.

Continuous Improvement activity is now well established in many areas of the Business. To further enhance the effectiveness of CIT teams a number of CIT team leaders have attended Workshops held by David Walker of PERA aimed at consolidating improvements to make them permanent.



STATISTICAL PROCESS CONTROL

Since early April a programme of training in Statistical Process Control (SPC) has commenced. SPC is a method for measuring the variability within a process to enable the causes of the variation to be identified. This allows action to be taken to reduce the amount of variation and so improve quality. Around fifty people will be trained in the detail of how SPC works and how it can be implemented. The training is

carried out by John Hill of Warwick University who is a Boeing approved instructor. SPC is being introduced into the Manufacturing areas of the Business on a phased basis. To ensure a successful introduction a team of internal instructors has been appointed who have been trained in SPC and instructional techniques. Their role will be to train manufacturing personnel in these new methods.

DESIGNED EXPERIMENTS

Another method for improving quality by reducing variation is that of Designed Experiments. This technique, recommended by our customers, can be used to identify process parameters and settings that lead to an improved quality of product

by decreasing variability within Engineering tolerances. A core of people (mainly from Engineering) will be developed to look at how Designed Experiments can be carried out in the Company. The tutor, John Hill, can be seen conducting the first Course in this topic last March.

A Continuous Improvement Workshop in progress.

George Batho

RAY REESE - A Man of Many Roles

Names of Companies, Divisions, projects and the Organisation as a whole have changed so many times since Ray Reese joined the Company at Borehamwood in 1955 that a coherent picture is difficult to draw. To track Ray's career over his 38 years - 31 of which were here at Rochester - several almost-forgotten names are brought to mind. Aviation Division at Borehamwood, which he joined as Development Engineer, moved in due course to Kent but Ray's own move here was to Military Aircraft Controls, as Development Project Leader. Later that same year, in 1962, he became Chief Engineer. In 1967 he was appointed Divisional Manager of Aircraft Engine Instruments Division which, at the end of 1970, merged with Flight Instruments to become Instrument Systems Division with Ray as Joint Divisional Manager (together with Chris Frost).

The next move was to Automatic Test Equipment in 1972 as DM, but in 1975 Ray relinquished that task in order to carry out special assignments on programmes related to the MRCA project, EAP, European Fighter Aircraft and Eurofighter 2000. He next acted as Staff Executive, responsible for Senior Management Development for a couple of years, and in 1979 returned to ISD as Divisional Manager. Early 1983 brought a move to Combat Aircraft Controls as DM, and a year later he was promoted Assistant General Manager with responsibility for CACD, FCD, ISD and PSD (Power Plant Systems).

In March 1987 the Dynamics Group of Divisions was formed and Ray became General

Manager and Deputy to the Group Managing Director Ron Howard; later that year he was appointed Assistant Managing Director, Controls and Instrument Systems Group. To this, in early '88, he added responsibility as Quality Director, and in 1991 became Quality Director for the Company when Bill Alexander retired.

Throughout all these years Ray has kept up many interests, including flying and rugby football; more recently he became involved in aspects of the Sports and Social Club, particularly with the development of the Sports Day Inter-Divisional Trophy Competition. For the last two years he has also been President of the GEC Avionics Athletics Club.

He has also become a familiar sight in the Veterans' Race on Sports Day over the last few years, with an ever-reducing handicap. We shall miss him there!

We shall miss him even more as he retires with his wife Frances who has been so supportive over the years.



Ray Reese is presented with a memento of his career with aircraft, by Brian Tucker.

From GEC-Marconi Avionics Inc. in Atlanta, we hear of the retirement of Chris Lewis.

Chris joined Elliott Flight Automation in Rochester as a Mechanical Engineer in September 1963. His first project, an electromechanical head-up landing display for the VC-10, convinced him of the limitations of these mechanical devices, and made him highly receptive, in 1966, to accepting an invitation from Robin Sleight to join the Airborne Display Division and work on electronic displays (HUDs). This decision found him serving as project leader for the Concorde take-off-and-overshoot director development programme. Chris' subsequent close association with the development of civil

30 Years in Rochester and Atlanta

HUDs brought him to the United States as Flight Trials Manager on the DC-9 HUD programme in 1986; the ensuing four years of international technical HUD sales effort for ADD took him to the Far East, Middle East, and most of Europe.

The proliferation of ADD HUD projects in the US resulted in Chris' transfer to Atlanta in 1973, initially for two years. Those two years were extended to permit his establishing the Dayton office where he served as Director of

SPECIAL PERFORMANCE FOR A SPECIAL BOY

Early in May Neil Wallace, aged five years old, was taken to the Cannon Cinema in Sittingbourne to see the Disney film "The Jungle Book". Not so unusual at a glance, but this was a special private showing for Neil, with his sister Karen, mum Tina and dad Nigel. For Neil was diagnosed last August as suffering from an extremely rare spine cancer - Neuroblastoma - which is found in only about 80 cases a year. The intensive chemotherapy treatment means that children like Neil have to be strictly kept away from even the simplest infections which could have a serious effect on them, and family outings are rare. So the local East Kent Gazette arranged the visit with the generosity of the cinema's Manager.

Neil's bravery throughout his treatment at Great Ormond Street Children's Hospital and a big operation in January, when the tumour was removed, has been a great support to Nigel and Tina. Their strong Christian faith and the love of friends and relatives have been so important. Now, the chance discovery by a close family friend while on



A front-row seat for Neil, who is joined by Jungle Book characters in the persons of cinema manager Arthur Frost and his assistant Rose. (Photo by courtesy of Associated Kent Newspapers Limited)

holiday in Cornwall of 'CLIC UK' has led to a new initiative in Kent.

CLIC, the Cancer and Leukaemia in Childhood Trust, set up in the mid-70s, provides support and finances research and facilities including holiday homes for families. As a result of this contact, a North Kent Branch of CLIC UK has just been set up, bringing new help to sufferers in the area.

For Neil, the outlook is now far brighter. He is already back at school, and is swimming, playing football and cycling once again with all his friends.

Nigel - who, incidentally, is the man who does the phototypesetting and page layout for VISION - says "Now that Neil has finished his treatment we can look back as a family and say that, although it's not a road we would have chosen, we have learnt a lot from the experience and now hope to help others with the same burden. Neil isn't

out of the woods yet, we still have many years of check-ups to come. We just have to keep hoping and praying that the future stays bright."

If you would like to know more about CLIC or help with fund raising in some way please contact Nigel on Ext. 3599 or 0795 422880. Also, if you have any unwanted petrol coupons or gift stamps he would be pleased to receive them.

MARATHON MEN FROM ROCHESTER

Sunday April 18th saw the running of the 13th London Marathon, when five Rochester employees set off with 27,000 other runners to tackle the 26 mile, 285 yard course from Greenwich to Westminster Bridge. All five crossed the finishing line, although some suffered cramp, aches and pains!

The weather was not ideal for long distance running, with a wind blowing all the way around. The runners seemed to be turning into the wind, which caused problems in the later stages of the run. Once again there was tremendous support all round the course to cheer the thousands of runners.

Ken Rains (FSD), who was competing in his 6th Marathon, was the first of the five across the finishing line, in a time of 3 hours 05.27, position 2,446th despite the windy conditions. Ken was over 7 minutes faster than last year and improved his finishing position by 1244 places.



Alan Hindlett - nearly there! Here he is on the final stretch along the Victoria Embankment.

His Worship the Mayor of Gillingham



Ken Webber of DSGR has now been installed as Mayor, as foretold in the final issue of GEC Avionics News (No. 112). Here he is with his wife Anita as Lady Mayoress - their marriage took place recently. Cllr Webber is now embarking on his busy year as Chairman of Gillingham Borough Council, where he is also Chairman of the Planning and Development Committee. Here he will be responsible for overseeing the redevelopment of a large part of the former Dockyard, arguably Europe's biggest building site. He and Anita will also make the round of civic and social occasions.

Ben Mathews (CACG) was competing in his first Marathon and was pleased to record a time of 3 hours 37.54 to finish in position 8,993. John Jones (CACG) was also competing in his first Marathon and was hoping to break the four-hour barrier; he finished just short of this to record a time of 4 hours 05.07, position 13,223.

Alan Hindlett (DSGR), competing in his 13th Marathon, was also hoping to finish in under four hours but, having suffered cramp at 22 miles, finished in position 14,734 in a time of 4 hours 06.41. Paul Holt (CACG) was also a newcomer to the Marathon distance and completed the course in 4 hours 09.00 in position 15,419.

The total number of finishers was 24,604 and, despite the blustery conditions, all five runners praised the organisation and hoped to run again next year.

25 Years Service



Colin Wallsgrove, Quality Technician in Support Division, was originally in Gyro but moved over in '76, continuing his work on Rate Gyros for which he has covered many contracts from Buccaneer onwards.



Chris Speiser, Project Leader now in DSGR, has been involved with many of ADD's big projects - in the late 70s, he was resident representative in Norway. Most recently Chris has worked in Reliability and Maintainability areas.



Austen Sturla, Production Technician, has been in FCD, ISD, Fuze, IND/GSD, and since last year in ADD/DSGR, always in Electrical Inspection. His wife Sue, now an Auxiliary Nurse in the Surgery, still has many years to go to equal Austen's service record.



Ralph Smyth, Senior Production Engineer now in Flight Systems Production, has always been in the variously named 'Flight Systems' Divisions. Originally an Inspector in TACD, Ralph moved into Production Engineering in the early days of CACD.



Graham Sage, Production Technician in Support Division, was at first in ATED which became SESD, which became; he has also been on loan to various other Divisions but is now back in PSD, Support Division. In spite of all these moves and changes he still has an ambition to make a parachute jump.



'Pat' Phillips was originally in ADD as a Telex Operator, but after 11 years she moved into secretarial work in the days of Gyro at New Road. She stayed through the mergers of that Division with IND/GSD/GDD, and is now Confidential Secretary in DSGR.



Andy Gibson, ex-Student Apprentice, has become a specialist in Air Data systems; back in '72 he was involved in the first such digital system, and has worked since on Cobra and SCADC projects. Now Andy is a Principal Systems Engineer in the Business Development Group in ISG.



Derek Leaver has been with the GEC Group since 1968 but has only been permanently at Rochester for 3 years. As a travelling engineer he was 'on the move' all over the

country with GEC Reliance Telephones, carrying out work on their many types of communication systems. Derek decided to settle down here when the chance came, having first been involved with our old internal phone system.



John Mills, Senior Software Engineer, started in IND as a Laboratory Technician, spending his early years on Jaguar test equipment before changing to software in 1975. For some of his time John was on loan to MASD, but is now with FCG where he has recently joined the Boeing 777 team.



John Seabrook is now working with the Attack Helicopter project team, but for most of his 25 years he has been with ADD, playing a major part in the success of their big HUD contracts from F-16 onwards, and of the Nimrod displays and F-4 and F-6 trials. Later, John has been a key man in a number of company-funded R&D projects, and has worked with FCG's Boeing 777 team before taking up his present post with the AH Group.

Often seen 'churning' his bike up Bluebell Hill, John is seen here "off duty" in last year's London to Brighton Charity Bike Ride.



Fred Westcott at one time helped to build Brompton Barracks, but he then came to the Company as Carpenter and Joiner. Ten years later he was made Leading Hand, and was promoted to Foreman, Building Maintenance in Works Engineering, following Cyril Cawley's retirement in '86.

ATHLETICS CLUB UPDATE

GEC Avionics AC continued to progress in the British Athletics League with a marvellous team performance at Sheffield on 5th June, with their first win after promotion to Division 4.

The Club won the match by 5 points from Cardiff, helped by convincing performances from sprinters Nigel Stickings and Norman Ellis, and excellent hurdling and jumping from Andrew Gill, Gary Gallagher, Paul Ralph and Stuart Richmond. Good points were scored in the middle distance events, and a few surprising points - such as 3rd in the hammer in a Club record by Mark Roy - meant that GEC achieved their highest ever position. Several good point scorers were missing from the team at Sheffield which made the result even more satisfying.

"A supreme team effort" said team manager Len Murphy (DSGR).

One of the day's absentees, Spencer Barden, had an excellent excuse; he has been selected for events at National level.

THE BRIDGEWOOD ROUNDABOUT

A marked improvement indeed! Years of delays and frustration have nearly gone. Now the plans to widen the M2 have been announced and public consultation is under way. Many employees will again be affected by this, both during reconstruction of the motorway and the building of the Bridgewood flyover and new Junction 3, and possibly by long-term implications on their properties.

To help awareness of the preliminary plans, we have placed a display in our Main Canteen showing the Department of Transport's proposals.

For your Divisional, Group or Departmental special occasion, additional weekday evening opening can be arranged.



Geoff Barling first joined the Company in 1964, as a Development Engineer in TACD on Concorde. After a short spell elsewhere, he returned in '86 to work on software for the A-7 HUD in ADD. There he stayed till April this year, becoming Systems Integration Manager, but he is now with the Attack Helicopter Group, as Systems Performance Consultant.

Retirements

Janet Harbord, just retired from Flight Systems Production, had been at Rochester for 32 years. Way back in TSR2 days she worked as Secretary to Don Emmett, and later with Derek Jackson in the Towers until the Phase 3 building opened, when she moved there. In recent years she was Doug Webster's Secretary helping to run FCD Production.

Val Fennell, formerly with Fishers, has retired after 21 years service in Personnel Records where, for much of the time, she was Section Leader keeping all the paper and computer records in order.

Joyce Ambrose, one of the few people to have been with CQD since it was formed in 1969, also served with the

former FARL for 3 years prior to joining the Quality Department. Joyce has been the DM's Secretary since 1975.

Brian Herring has taken early retirement, 30 years almost to the day after joining the Company as a Draughtsman in Gyro Division. Moving to Production, he was promoted through the Department to become Production Manager in 1975. With the merger with IND in 1984 he became Deputy Production Manager of the far larger organisation, and 3 years later he took up a similar post in CACD, where he became much liked and well respected especially for his great assistance during the subsequent Production mergers of MASD and FCD with the Division.

LSA - 10th AGM

Wednesday 16th June saw this year's Annual General Meeting of the GEC Avionics Long Service Association. Chairman Harry Staff started his Report by saying that for the time being, for constitutional reasons, the Association's name would remain unchanged.

Membership is now 912 - with 39 more due to enter this year. Now he wonders, can we reach 1000?

Introduction of the additional 40-year Service Award had been much appreciated as a token of the Company's support. Sixteen members, including the 'backlog' qualified for this Award in 1992, with 6 more to follow this year.

The Dinner Dance had been very successful; among the economies the cut-back of speeches was well received as it gave a good half-hour extra for the social and dancing highlights of the evening. This year's event will be on **Saturday 23rd October**, in the same format.

The Committee now comprises Harry Staff, President; John Goodhand, Chairman; Roy Beevis, Vice President; Brian Rogers, Secretary. Members are Velma Gooch (DSGR), Malcolm Ainsley (CACG), Irvin Gray (ISG), Ted Herbert (Reapers Club). Ron Masters (ISD) was voted on, having been co-opted on the retirement of Ted Farbrace. Tony Rye retired at the AGM and will be replaced in due course by a co-opted member.

APPEAL FOR BOSNIAN/CROATIAN REFUGEES

The Appeal for the above has now been closed. Any outstanding items of clothing etc. will be sold and the cash donated to the refugees.

Geoff Barling would like to thank all those who contributed and/or helped in other ways.

Reaper Club's Social Round

Secretary Lorna Hosmer's latest report tells us of a busy and enjoyable series of meetings in the Canteen since the New Year.

"We are flourishing, and have had visits by two very contrasting organists - Roger Williams and Cyril Mapley. The latter took us right down memory lane, and we can't wait for return visits! Other meetings have enjoyed the United Singers, the vivacious Jacky Linn Dancers, and the GEC Band who have given this year's first concert - two more are in the pipeline.

"To keep our feet tapping, we are looking forward to a return of the Medway Caledonian Association Dancers, and a first visit of 'Laverlock Lea'. Mrs Daw's over 60s Concert Party is also eagerly awaited again.

"Beside the seaside - Portsmouth and Southsea, Bognor and Eastbourne, are on our itinerary and really, before we know where we are, we shall be finalising plans for the Dinner-Dance - and for collecting subs!"

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